The Master’s Programme in Agricultural Education

For Sustainable Rural Development

at The University of Tsukuba

Tajima A 1,2), Takigawa T 1,2), Nomura N 1), Taylor D 1,2), Gemma H 1).

1) Graduate School of Life and Environmental Sciences
   University of Tsukuba, Japan
2) Agricultural and Forestry Research Center,
   University of Tsukuba, Japan
Operation of the program

A program operated in corporation

with JICA and the Kasetsart University-
Background

Necessity to Develop a Graduates Level Capacity Development Program toward Alleviating Poverty in the Rural Area of Their Home Countries

* Post Participatory Approach
Objective:

To Develop Graduate Level ESD Program in Agriculture (Ag-ESD) for Stable Food Production and Supply.
**Characteristics of the program:**

1. Combination of
   1) **6 months on site e-Learning program**  
      (From Aug. 2006 to Jan. 2007 for the class of 2007)
   2) **10 months intensive schooling in Japan**  
      (From Feb. 2007 to Nov. 2007 for the class of 2007)

2. **Graduate level program** carried out with  
   JICA Tsukuba Center and Kasetsart University

3. **M.S. degree** is granted **without traditional M.S. thesis.**

4. **Full scholarship** is provided through JICA
**Qualification of the Applicants**

1) At least **5 years of experience** to serve as agricultural extension specialist

2) **Less than 45 years old** at the time of admission

3) To be able to take **leave of absence** from the affiliating organization

4) Detailed information is listed in *General Information (GI)* distributed through local JICA office in Feb-March
Class of 2007

Application report

Entrance Exam (July)

JICA (Preparation)

Univ. Tsukuba Graduate School

Inception report

Univ. Tsukuba

On site e-Learning Program

Progress report

Schooling in Japan

Practice report

Internship at Kasetsart Univ.

Final report

M.S

Monitoring report

JICA (Follow up)

On site Follow up Program

Aug 2006

Aug 2007

Nov 2007

Dec 2007

Apr 2006

Feb 2007
**MS degree without traditional MS thesis**

1) Completion of the **course work** (30 cr) on the relevant topics.

2) Acceptance of the **Final report** to be published at

   **J. Developments in Sustainable Agriculture**

   (substitute for traditional M.S. thesis)
Announcement from J-STAGE

- Next System Maintenance Break
  J-STAGE will not be available during the hours below due to the regular system maintenance (normally scheduled on the last Saturday of the month).

  August 26 (Sat), 10:00 (JST) to August 26 (Sat), 14:00 (JST)

http://www.jstage.jst.go.jp/browse/jdsa
J. Developments in Sustainable Agriculture

1) J-Stage based on peer reviewed line journal in English
2) Published by Agricultural and Forestry Research center, University of Tsukuba
3) PDF of the full papers can be downloaded free of charge

See abstract 1.B.2 by Taylor et al. for detail

http://www.jstage.jst.go.jp/browse/jdsa
Contents of the Final report (Example):

1) Description on the current rural situation
   (Based on numerical / documented data on local situation)

2) List up problems and their backgrounds

3) List up the available local technology which might be useful

4) Proposal on the modern use of the local technology
   (post-participatory approach)

5) Future prospectus
Journal of Developments in Sustainable Agriculture
Vol. 2 (2007), No. 1

Water Value and Sustainable Use in the American SW
Mark E. Grismer
Release Date: June 29, 2007
[Abstract] [PDF (188K)]

Nutchanart Sitvongtanan, Kritsanat Surakit, Peter R. Hawkins and Nimai Chandrasena
Release Date: June 29, 2007
[Abstract] [PDF (1957K)]

Water Resources in Relation to Major Agro-Environmental Issues in Japan
Kingshuk Roy
Release Date: June 29, 2007
[Abstract] [PDF (1041K)]

Utilization and Conservation of Water Resources in Bangladesh
Abu Musa Md. Motaher Ahmed and Kingshuk Roy
Release Date: July 13, 2007
[Abstract] [PDF (1490K)]

http://www.jstage.jst.go.jp/browse/jdsa/2/1/_contents
Utilization and Conservation of Water Resources in Bangladesh

Alia Mann Md. Motahar Ahmed and Kingkab Roi

1: Senior Scientific Officer, Water Research Institute, Dhaka 7201, Bangladesh
2: Associate Professor, College of Environmental Science, North University, 1866 Karshi, Fujimura, Kanagawa 252-8530, Japan

Utilization of water resources in Bangladesh depends on their availability and conservation depends on sustainability to protect the additional resources of water. Bangladesh is landlocked and has a lower density of water sources compared to the other countries. Management and development of the water resources of the country is completely dependent on the availability and the utilization of water resources. Agro-environmental measures now should focus on these issues with the perspective of Bangladesh as well as the global society. This paper describes the problems of water resources management and development, utilization and conservation of water systems based on available data and information in the context of Bangladesh and provides potential measures to address and overcome the problems.

Key words: water demand, water supply, conservation, utilization, agro-environmental

1. Introduction

In agro-environmental practices, water resources play a key role as other variables. Agricultural activities and most of the environmental issues are related to water. So water availability and its proper utilization is a major concern for sustainable development of agriculture. Agriculture and environment are always inter-related and those broad areas should be the priority considered in planning and evaluation of any agricultural projects. Water resources management and their proper utilization improve the agro-environmental conditions of a country. Compliance with policies is intended to ensure that the development and management of the nation’s water resources include the protection, maintenance and preservation of natural habitats and their dependent biodiversity with specific provisions for wetlands, marshes, other forms, emergent areas and water quality. Utilization of water resources in Bangladesh depends on their availability and conservation depends on sustainability due to upstream conditions of the lower riparian countries. Water conservation consists of actions that reduce the demands for water, improve efficiency in use, reduce losses and waste, and improve management practices to conserve water. The natural subsoil of water resources include (1) an interconnected system of rivers, streams, canals, kind (smaller than rivers in size), etc., (2) the floodplain (3) wetlands (4) coastal areas, (5) lakes, floodplains, and rivers, (6) intertidal areas and water quality in ground water aquifers. However, natural resources are scarce and therefore water conservation during the rainy season for dry season use is limited.

Water resources management is now a global concern, the main purpose of which is to provide adequate water for humans and the natural environment.
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Final Presentation Nov 26, 2007

Ms. A (Malaysia)
Enhancing the Capacity of Livelihood Improvement Extension Workers to Empower Rural Women Entrepreneurs in Sabah, Malaysia

Mr. B (Zambia)
Empowerment of Rural Households in Zambia: A study of the Project for Participatory Village Development in Isolated Areas (PaViDIA) in Chongwe District, Lusaka Province

Mr. C (Bangladesh)
Empowering Community Organization (ECO): A Village Perspective in Bangladesh
Conclusion

Agricultural ESD in progress !!!
The End