









Second Announcement of an International Conference<sup>1</sup>

DELTA 2007 MANAGING THE COASTAL LAND-WATER INTERFACE IN TROPICAL DELTA SYSTEMS

> 07-09 November 2007 Bang Sean, Thailand

Organized and sponsored by International Water Management Institute (IWMI) International Rice Research Institute (IRRI) WorldFish Center (WorldFish) Challenge Program for Water and Food (CPWF) FAO – Regional Office for Asia and the Pacific (FAO-RAP) Burapha University, Bang Sean, Thailand

(Deadline of abstract submission is extended to 15 April 2007. New information is in red color)

# BACKGROUND

Tropical coastal deltas represent one of the most diverse and rapidly changing biophysical regions in the developing world. These deltas are home to large population centers such as Dhaka, Yangon and Bangkok, and are significant centers of agricultural production and industrial development. Coastal deltas also contain critical ecosystems such as mangrove and seagrass, and a rich collection of historical and cultural resources. Human communities in coastal deltas are equally diverse, with the economic circumstances of the technologically-advanced urban centres contrasting sharply against the impoverished conditions that exist in many rural villages.

Historically, land and water management within many coastal deltas has focused on the exclusion of saline water flows that move upstream from the coast during the dry season. Management strategies have included the construction of embankments and sluice gates to ensure freshwater availability for agricultural production throughout the

<sup>&</sup>lt;sup>1</sup> Please check http://delta07.iwmi.org/ for more information.

year. However, this approach fails to recognize the diversity of rural livelihoods and ecosystems in coastal deltaic areas, the environmental consequences of altering natural saline water flows, and the emergence of new activities such as shrimp farming that require brackish water. Driven by market forces, the development of coastal aquaculture has been extremely rapid and produced significant social and environmental degradation, but it has also challenged our assumptions regarding land and water management objectives at the brackish water interface in coastal deltas

Coastal hazards are another issue that has challenged the existing land and water management paradigm in Asia's coastal deltas. Hazards can range from slow incremental events such as shoreline erosion and sea-level rise, to dramatic and highly destructive phenomena such as typhoons and tsunami. Impacts associated with the December 2004 tsunami in the Indian Ocean and Hurricane Katrina in US have created a strong need for more in-depth knowledge about planning for coastal hazards, and how to protect coastal communities that are least able to shield themselves from these events.

In March 2005, a conference on Environment and Livelihoods in Coastal Zones: Managing Agriculture-Fishery-Aquaculture Conflicts was held in Bac Lieu, Vietnam. The conference supported the Comprehensive Assessment of Water Management in Agriculture that is being prepared by the Consultative Group of International Agricultural Research (CGIAR). Participants from 19 countries recognized that this type of conference provided a very useful forum for exchanging knowledge on delta management and creating a bridge between researchers and decision makers. Therefore, a biennial conference series that focuses on natural resource management issues specific to coastal deltas in tropical regions was proposed.

*Delta 2007* will examine the state of tropical coastal deltas with a particular focus on agriculture-fishery-aquaculture-environment conflicts and coastal hazards experienced in developing countries. The conference is forward-looking and will identify both research priorities and planning, management and governance strategies that promote environmental sustainability and improve the socio-economic conditions of marginalized rural communities.

*Delta 2007* will be of interest to a wide range of individuals such as land and water resource researchers, coastal resource managers, and decision-makers involved in coastal planning initiatives. Selected papers presented at the conference will be published as refereed proceedings.

1	10 November 2006	1 <sup>st</sup> announcement posted on web
2	15 March 2007	2 <sup>nd</sup> announcement posted on web
3	15 April 2007 (new)	Deadlines for abstract submission by potential participants
4	15 May 2007 (new)	Selected papers announced by organizing committee and guidelines for paper preparation sent to potential speakers
5	01 July 2007	Reminder for paper submission sent to authors

## IMPORTANT DATES

6	15 August 2007 (new)	Deadline for paper submission 3 <sup>rd</sup> announcement – Detailed conference program - Registration form posted on the web
7	August to November 07	Peer review of selected papers and revision by authors
8	07-09 November 2007	Conference
9	November 2007 to June 2008	Editing, typesetting of proceedings
10	Autumn of 2008	Publication of conference proceedings

### CONFERENCE PROGRAM

Wednesday and Thursday 7-8 November 2007: presentation and discussion Friday 9 November 2007: field trip to selected sites in coastal areas in Thailand

### **Call for Papers**

We welcome your contributions. These should be relevant to the objectives of the conference and address issues described in the conference sessions below. Initial selection of papers will be based on:

- (i) new and innovative scientific contributions; and
- (ii) relevance and impact of studies as they are presented in the submitted abstract

Please use the abstract template attached to this announcement and provide adequate information on rationale, methodologies, results and contribution to the subject matter of the Conference that will allow the Scientific Advisory Committee to assess eligibility and relevance.

Authors will be notified if they are presenting an oral or poster presentation at the conference. Final selection of papers for publication will be based on a peer-review process.

#### **Conference Sessions (Tentative)**

### Session 1: Sustainability at the Land Water Interface

Questions of sustainability surrounding land and water use practices have a direct influence on policy formulation. The objective of this session is to understand dependencies between rural coastal communities and the dynamic land-water interface in tropical deltas. Papers in this session will analyze these issues and present strategies that both promote environmental sustainability and address the socio-economic circumstances of marginalized rural communities that have direct applicability to policy.

#### Session 2: Planning and Management of Coastal Resources

This session focuses on the approaches and tools for effectively planning, managing and monitoring sustainable use of coastal deltaic eco-zones where the agriculturefishery-aquaculture conflicts occur due to the saline intrusion during some part of the year. Papers in this session will address the current state of tropical coastal deltas in developing countries through the presentation of case studies, and will highlight the experiences in putting into practice integrated planning and management for improving rural livelihoods and managing the land-water interface common to these regions.

## Session 3: Coastal Hazards and tropical delta systems

This session focuses on the nature of coastal hazards as they affect rural coastal communities in the coastal zone of tropical deltas. Papers in this session will address the type and impact of coastal hazards, the perceived risk of these events, disaster preparedness, and frameworks for planning and managing these events.

## Session 4: Synthesis and Research Collaborating Opportunities

This session will comprise a series of workshops/discussions to identify lessons learnt and major research issues, and will also identify planning, management and governance strategies that could support more effective management action and direct future applied research.

## GENERAL INFORMATION

Language: English

## **Co-Sponsors**

- Challenge Program for Water and Food (CPWF, http://www.waterandfood.org/)
- FAO Regional Office for Asia and the Pacific (FAO-RAP, http://www.fao.org/world/regional/rap/)
- International Water Management Institute (IWMI, http://www.iwmi.cgiar.org)
- International Rice Research Institute (IRRI, http://www.irri.cgiar.org)
- WorldFish Center (WorldFish, http://www.worldfishcenter.org/)
- Burapha University, Thailand (http://www.buu.ac.th/)

## International organizing committee

- Dr. Andrew Noble, Head, IWMI Southeast Asia Regional Office (IWMI-SEA), Malaysia
- Dr. Suan Pheng Kam, Senior Scientist (GIS), WorldFish, Malaysia
- Mr. Thierry Facon, Senior Water Management Officer, FAO-RAP, Thailand
- Dr. Chu Thai Hoanh, Senior Water Resources Specialist, IWMI-SEA, Malaysia
- Dr Patricia Ocampo-Thomason, Researcher, Developing Areas Research Network (D.A.R.N), University of Newcastle, UK

# Local organizing committee

- Dr. Brian Szuster, Assistant Professor, University of Hawai'i at Manoa, USA
- Dr. Kashane Chalermwat, Dean of Science, Burapha University, Thailand
- Dr. Pichan Sawangwong, Vice-President International Relations, Burapha University, Thailand

### Scientific advisory committee

- Dr. To Phuc Tuong, Head of Crop and Environmental Sciences Division, IRRI, Philippines
- Dr. David Molden, Comprehensive Assessment Coordinator, IWMI, Sri Lanka
- Dr. John Gowing, Reader in Agricultural Water Management, University of Newcastle, UK
- Dr. Ian White, Professor of Water Resources, Centre for Resource and Environmental Studies, Australian National University, Australia
- Dr. Edward Barbier, Professor of Economics, University of Wyoming, USA
- Dr. Martin Le Tissier, Deputy Executive Officer, LOICZ International Project, Germany

### Venue and accommodation

The conference will be held in Bang Saen which is a coastal town located approximately 100 kilometers southeast of Bangkok and 40 kilometers north of Pattaya in Thailand's Eastern Region. Bang Saen is a well known beach resort that is only 40 minutes from the new Bangkok International Airport. Bang Saen is also home to Burapha University.

The conference venue will be:

The Tide Resort 44/1 Bangsaen Beach 1 Road, Saensuk Muang, Cholburi 20130, Thailand Reservation center: +66(0)2 2553109 http://www.thetide-resort.com

The hotel has landscaped gardens and is only a few metres away from Bang Saen Beach with its lively promenade and access to all of Bang Saen's major attractions. The hotel has 154 luxury rooms, a pleasant shaded swimming pool, and restaurant serving a variety of Thai and international cuisine. The hotel also contains 14 meeting rooms and banquet facilities that can cater to groups of between 30 and 1,000 persons for international conferences and exhibitions.

## Location and weather

Thailand's climate is tropical with high temperatures and humidity and dominated by the monsoons. April and May are the hottest months of the year when even locals are moved to complain about the heat. June sees the beginning of the southwest monsoon that brings increasing rainfall and somewhat cooler temperatures. The rainy season builds in intensity until September but usually ends by the end of October. From November to the end of February the climate is pleasant with cool dry northeast winds and more comfortable temperatures.

Climatic for Central Thailand												
Average Daytime Temperature (°C)												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
30	31	34	36	35	33	32	33	32	32	31	30	
Average Rainfall (cm)												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1.0	2.5	3.5	6.0	8.0	14.5	16.5	17.5	30.0	21.0	7.0	0.5	

#### Contact address

- Dr. Chu Thai Hoanh, IWMI-SEA, c.hoanh@cgiar.org
- Dr. Brian Szuster, University of Hawai'i, szuster@hawaii.edu
- Ms. Florine Lim, IWMI-SEA, f.lim@cgiar.org

#### Visa and airport transportation

Citizens of many countries can enter Thailand without a visa in accordance with intergovernmental agreements for a maximum stay of 30 days as a tourist or for undertaking business activities. Other foreign nationals must obtain a visa to enter Thailand prior to their departure. Please check with the Thai Embassy in your home country to determined the need for a visa to visit Thailand at least 90 days prior to your departure date.

Pickup and transportation to Bang Saen from the new Bangkok International Airport will be provided to all registered conference participants.

## **REGISTRATION AND CONFERENCE FEE**

Participants must fill in a *registration form*, which will be posted on the web by 1 August 2007.

A Conference Fee tentatively estimated to be 400 US\$ charged for overseas International participants and will cover the following:

- 1. Transport from Bangkok airport to Bang Saen and return
- 2. Accommodation for four nights in Bang Saen during the Conference
- 3. Field trip in Bang Saen
- 4. Meals and reception during the Conference and the field trip in Bang Saen
- 5. Stationary support at the Conference.

For persons who are resident in Thailand and may require all of the aforementioned services please contact the Florine Lim (email: f.lim@cgiar.org) to receive cost estimates.

The Conference Fee is required to be paid on registration at the venue.

# SAMPLE TEMPLATE FOR ABSTRACT SUBMISSION Title: [Times Roman 16pt; bold; centre] Degradation in the Chemical Status of Soils: Are there management solutions?

Authors: [Times Roman 10pt; Capitals; Underline corresponding author; centre] <u>NOBLE</u>, A. D.<sup>1</sup>; GILLMAN, G. P.<sup>2</sup>

[Affiliation of all authors; Times Roman 10pt; left justify]

<sup>1</sup>IWMI, c/o WorldFish Center, Jalan Batu Maung, Batu Maung 11960 Bayan Lepas, Penang Malaysia. Email address: <u>a.noble@cgiar.org</u> <sup>2</sup>CSIRO Land and Water, Davies Laboratory, Townsville, Queensland, Australia.

## ABSTRACT: [Times Roman 12pt; capitals; centre] ABSTRACT

Text: [Times Roman 12pt; Justify; maximum **400** words; MUST contain adequate information on rationale, methodologies, results and contribution to the subject matter of the Conference that will allow the Scientific Advisory Committee to assess eligibility and relevance]

Soil and land degradation can be identified and described in terms of physical, chemical, and biological changes from some ideal state brought about by natural or man-made influences. This paper deals with sub-optimal levels in soil chemical properties often encountered in natural and disturbed ecosystems, and especially focuses on soil cation exchange properties.

Soils in their undisturbed state maintain highly productive and functional ecosystems. A characteristic of these ecosystems is their capacity to recycle nutrients through soil organic matter (SOM). Following disturbance SOM is rapidly mineralized and there is a corresponding decline in fertility and the variable charge component of the cation ion exchange capacity. The concept of the Charge Fingerprint is proposed as a unifying concept enabling inter-soil comparisons as well as within-soil quantification of departure from some 'ideal' state. By measuring the actual content of base cations in a soil, and using values taken from the fingerprint of an undisturbed soil, an index that indicates the degree of degradation from 'ideality' can be calculated.

The focus of research into remediating this degradation has been on restoring SOM to levels approximating those of the 'ideal' state. This is a transient solution since to sustain changes in surface charge continual additions of SOM are required. Management strategies that attempt to reverse degradative trends or improve poor quality soils in their natural condition are discussed, such as the addition of natural clays and ground rocks. Results are present to show the effect of each of the aforementioned strategies on surface charge characteristics and associated increases in plant productivity.

**Keywords:** Land degradation; Soil chemical properties; Soil organic matter; Charge Fingerprint.

Required Information: (Please tick the appropriate Session)Session 1 [ ]Session 2 [ ]Session 3 [ ]Session 4 [ ]