

University Curricula and Research on Water Management and Agriculture for Climate Change Responses.

A regional NUFFIC-NICHE science conference

Venue: Vietnam National University of Agriculture, Gia Lam campus, Hanoi

24 to 26 August 2016.

The **goals** of the conference are to disseminate:

1. Approaches of developing competency oriented learning in BSc and MSc curricula related to Agriculture and Water Management considering Gender and Climate Change in SE Asia.
2. Methods for developing national strategies of Integrated Water Resources Management, Coastal Engineering and Management and Disaster Management, in view of Climate Change.
3. Approaches to, and results of, assessment and planning for Climate Change responses of agriculture and water management at local level.

The **expected outcomes** of the conference are to acquire:

- Broader insights of institutional and structural conditions, advantages and methods of professional competency oriented and student centred learning based upon the market demand, in particular of Vietnamese Universities and in general at Asian Universities.
- Increased know-how on developing curricula and plans for climate smart agriculture and water related disaster prevention and management, at national and local level.

The **targeted audiences** of the conference are, next to the partners* of the organising projects, staff of universities, ministries, agencies and projects aiming at curriculum innovation and climate change responses. To be invited are agencies such ADB, AUSAID, DED, EU and USAID, projects focussing on academic education, ministries of Higher Education, Science & Technology, Agriculture and Rural Development, and Vietnamese universities in the field agriculture and water management.

Program:

24-08 afternoon: Interactive learning workshops (both in Vietnamese and English) with keynote speakers and submitted cases to discuss the methods of (1) curriculum development, (2) course programming and (3) student centred teaching, and (4) the constraints of the implementation of student centred curricula.

Targeted participants: partners and other SEA universities, and other Niche projects.

25-08 morning: Opening of the Niche Viet Nam symposium:

8:30 Welcome by VNUA and ACCCU

8:40 General introduction of the Niche program in Vietnam (MOET & NUFFIC);

9:00 Results of the Niche/VNM projects at the three partner universities at the level of institutions, strategies, education, research and technologies transfer;

10:00 Break

10:30 Keynote of Dr. Arjen Wals, Professor at Universities of Stockholm, UNESCO and Wageningen, government advisor and author on education for sustainability;

11:00 Overview of results from POHE and other Vietnamese Niche projects

11:20 General discussion.

11:50 Closing of Niche Viet Nam Symposium by NL embassy and other VNM ministry.

12:15 Lunch

25-08 afternoon: (14:00 to 17:00 with break at 15:15). Parallel sessions to present research on:

- Coastal engineering and management of disasters related to water and CC;
- Assessment of climate change impact on safety and food production;
- Research on and planning for responses to climate change.

26-08 morning: Know-how Exchange on Innovation and Business Incubation at Universities.

CALL FOR PAPERS – DEADLINE: May 16, 2016

The scientific committee of the regional NUFFIC-NICHE science conference *University Curricula and Research on Water Management and Agriculture for Climate Change Responses* calls for the submission of abstracts for oral presentations. A limited number of abstracts may be published in a special issues of *Tropicultura* and/or writing a full paper.

Deadlines:

- **Submit abstracts before 26 May 2016 to.** Please see below for the format
 - Communication of selection for oral presentation and full-paper: **20 June 2016**
 - Deadline for submission of registration form: **30 June 2016.**
 - Submission deadline of selected full-papers: **18 July 2016**
 - Please download the Registration form **here** and sent to NicheVNM105-conference@vnu.edu.vn or click <http://cares.org.vn/caresRegister> to register online.
- Each oral presenter shall be entitled to 15 minutes for presenting, plus 5 minutes for questions.
 - Oral presentations should use Power Point type of files; no other projectors will be allowed.
 - Presenters and other participants are required to pay their own travel and hotel costs.

All abstracts must be in English - the official language of the conference.

A Book of abstracts will be printed by VNUA's publication office. A limited number of full papers and abstracts can be published in a special issue of *Tropicultura*. Please indicate your interest in the latter when submitting the abstract.

INSTRUCTIONS FOR PREPARATION OF ABSTRACTS

Expanded Abstract Format - Please refer to the sample at the right-hand side.

1. **TITLE OF PAPER:** The paper title is printed in bold (see sample), with the exception of scientific names which should be italicized. Scientific names should not be preceded or followed by commas or parentheses or other markings.
2. **AUTHOR(S):** The first name should be the presenting author. Use * after the presenting author. Type in upper/lower case.
3. **ADDRESS AND EMAIL:** Type only the presenting author's institution, address and email.
4. **MAXIMUM LENGTH:** One Page.
5. **PAGE SIZE:** Standard A4, orientation portrait (210mm x 297mm = 8.27" x 11.69").
6. **MARGINS:** Top and bottom: 2.5 cm, Left and right 3 cm.
7. **SPACING:** Single spaced.
8. **PARAGRAPHS:** Paragraphs should be separated by a blank line and should not be indented.
9. **FONTS:** Character fonts should be 12 point type Times New Roman.
10. **PHOTOS, FIGURES & TABLES:** Photo, figures and tables are recommended. Make sure that the graph formats match a black & white printing also. They should be reduced to a size fitting the one page abstract (see example at the right) and still be clearly readable.

A-4 2,5 cm

Cost-benefit analysis of removable rain protection for shrimp ponds.

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Shrimp farmers experience outbreaks of white spot syndrome virus (WSSV) among others because of heavy rain causing changes in salinity and temperature of the water. Therefore in the Philippines many farmers stock only once a year, while 1.5 times on average can be reached, considering time needed for pond preparation. Protection against rainwater falling in the ponds might enable this increased harvest frequency. In this study we investigated the profitable of investing in a removable rain screen for shrimp ponds.

Economic indicators were collected from 9 farms in the Philippines in 2009. Average shrimp yield was 6,650 kg ha⁻¹ with an average market price of about 6.4 US\$ kg⁻¹ and a profit of close to 0.4 US\$ kg⁻¹. The benefit-cost analyses (CBA) of the rain screen was computed for a baseline scenario considering a lifespan of 15 years, a one hectare pond, 1.5 harvest per year, and the 2009 shrimp market. We also calculated benefits for a 10% higher price. We considered an annual interest rate of 5% and a discount factor of 3.5.

Total investment cost were estimated at 63,000 US\$ ha⁻¹. The pay-off period for the 2009 market price of shrimp was 14 years. Net Present Value (NPV) of total benefit of investing in a rain screen was positive for the 2009 shrimp market price but doubles if shrimp price increases with 10% (see Table). Considering the given parameters, the maximum affordable costs of the rain screen varied from 6.9 to 10.6 US\$ m⁻². Investing in a removable rain screen is cost effective for the considered values, but will depend on the shrimp market price, on the realized increase in the number of harvests, and on the realized decrease in the mortality due to the disease. The interest of enterprises to invest in a rain screen to increase harvest frequency will also depend on the cost of land.

Table: Undiscounted and discounted cost and benefits, NPV, Benefit Cost Ratio (BCR) and Internal Rate of Return (IRR) of investing in a removable rainscreen for a one hectare pond considering 15 year pay-off for two shrimp prices (US\$).

Shrimp price kg ⁻¹	Undiscounted		Discounted		NPV	BCR	IRR
	costs	benefits	costs	benefits			
6.4	86,881	130,764	69,175	93,451	24,276	1.35	25
7.1	80,711	169,980	67,892	120,791	52,899	1.78	37

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