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CAPACITY BUILDING ON WATER AND NATURAL RESOURCES IN SOUTH-EAST ASIA - BENEFITS FROM THE WANASEA PROJECT

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1. INTRODUCTION

The project "Strengthen the production, management and outreach capacities of research in the field of WAter and NAtural resources in South-East Asia" granted by Erasmus+ Programme (EU) for the period of 2018 - 2020.

The WANASEA consortium lead by University of Nantes and having other 14 partners from Denmark, France, Spain, Cambodia, Thailand, Vietnam.

The main purpose of the project is improve the cooperation between these states on Water and Natural Resources Management (WNRM) with details:

- Promote the multidisciplinary research;
- Foster an institutionally-supported research practice, which goes beyond pure academic research and contributes to the creation of new knowledge and to the understanding and treatment of contemporary problems as well;
- Help position universities as places for the production and transmission of knowledge, which are open to the world and interact regularly with public and private actors involved in any process of change.

The 3rd work package of the project aims to build the research capacity of students and young researchers on Water and Natural Resources Management $(WNRM) \rightarrow launching the annual ASEAN Water Platform (AWP).$

AWP is a 2-weeks research seminar and training event which brought together young researchers from all partners. Its main objective is increasing research capacity by learning new innovative methodologies, multi-disciplinary approach to solve complex problems, and by creating durable links between each other.

With same title of "Water and Its Many Issues - Methods and Cross-Cutting Analysis", AWP was organized in Vietnam (2018), Cambodia (2019), ASEAN partners (2021, online form).

2. ASEAN WATER PLATFORM (AWP)

AWP Structure & Supports

In structure, all AWP was organized along two complementary axes: Plenary sessions (the first 2 days), Thematic workshops (3 to 5 topics), and Workshop restitution at the last day.

- Plenary sessions: speakers from outside of project were invited to present their experiences, their point of view, or their project results which related to WNRM. The sessions were wound up with a round table that was open to organizations outside of the WANASEA consortium.
- Thematic workshops: putting together the team of trainers through the calls for candidates within the consortium so as to mix ASEAN and European. The training was wound up by a workshop summary session presented. In supports:
- All participants received the AWP files: the program; reading texts; trainers' biographies; a contact list of the trainees in order to enable networking, etc.
- All the trainees and trainers participating were distributed by AWP labeled Tshirts (2018, 2019) and water bottles (2019).
- A certificate signed by the representative of host institute and Uni of Nantes.
- The plenary sessions were all captured on film. The filmed presentations in extenso for viewing on the WANASEA website with English subtitle.
- Filmed interviews were conducted with the speakers and those responsible for each workshop in order to present the goals and methodological tools used in the course. The video-clips are available on the WANASEA website.
- At AWP 2018, the IRD presentation in Vietnam placed at the disposal of the AWP a photographic exhibition about pollution by plastics in Vietnam

AWP trainees & trainers profiles

The profile of the trainees:

- A female majority: 62% in 2018, 60% in 2019, 53% in 2021 of the trainees.
- A diversity of statuses and levels of education: master, master and teacher/ development, doctor/doctoral student and teacher, researcher, researcher and teacher, teacher and development, development practitioner. High multi-disciplinarily fields of research: economics, RS&GIS, hydraulics -
- hydrology, environment, geography, urban planning; development studies. Institutional opening out in Vietnam and Myanmar made possible through
- AUF, IRD, UN, and CTU co-financing model.

Annual AWP Program

AWP	Plenary sessions	Thematic workshops
Year	Session 1: Water resources changes - A great threat for sustainable development in the	Workshop 1: Risk management
2018	Mekong Basin	Workshop 2: Water management in an urban
	Session 2: Global challenges for fisheries management & South-East Asia perspective	environment
	Session 3: Holistic urban water resources management	Workshop 3: Inputs of modeling for the analysis
	Session 4: An inquiry into the implementation of Phuoc Hoa Water project, Vietnam	of saline intrusion in the Mekong Delta
	(video presentation)	Workshop 4: Field research - Usage and
	Session 5: Some examples about environmental and social challenges: Solid waste	management of the water resources in the
	management and human impacts on deltas (video presentation)	context of change
Year	Session 1: What role for a development bank in the improvement of the urban water	Workshop 1: Transboundary river management
2019	supply and sanitation services? The case of AFD in Asean	/ water governance
	Session 2: Using simulations to design evacuation strategies in case of flooding	Workshop 2: Development of maritime policy
	Session 3: Knowing and governing water	in ASEAN and comparisons with the EU
	Session 4: Valuation of ecosystem services of mangrove forests in Cambodia	Workshop 3: Urban water risks: designing
	Session 5: Equitable, reasonable and sustainable use of water resources in Cambodia	evacuation strategies in case of flooding with
	Session 6: Inland commercial fishing lot and mobile gear fishing in Tonle Sap lake	Agent-Based modeling and GAMA
	Session 7: Evaluating the success and sustainability of community fisheries in Tonle	Workshop 4: Non-conventional water resources Wastewater reclamation and reuse
	Sap lake after fisheries reforms Session 8: Knowledge and development - From principles to practice	Workshop 5: Field research - Irrigation & agri-
	Session 6. Knowledge and development - From principles to practice	cultural management in Kandal Stueng system
Year	Session 1: Qualitative methodologies in social sciences	Workshop: Modeling and simulation of water
2021	Session 2: Sustainability of small-scale fisheries - Community based resource	basin integrated management
	management approach in Cambodia, Vietnam and Bangladesh	Workshop: Qualitative methodologies in social
	Session 3: Technology adoption in agriculture: Theory and application to irrigation	science - Covid-19 as case study"
	technology	Workshop: Overview of Mekong river ecology
	Session 4: Water resources in the Mekong Delta	and its relationships with people livelihood
	Session 5: Bio-diversity versus climate change in the Mekong Delta	Workshop: Role of Mekong River Commission
	Session 6: Restitution of inequalities and environmental changes Nexus project	and research on transboundary water
	Key: Innovative Research Competition	governance

AWP Feedback

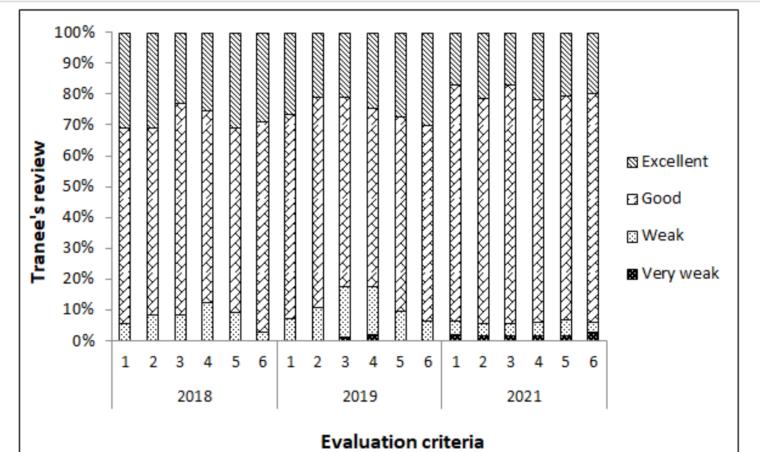


Fig 1. Feedback on plenary sessions (average record from all sessions) Criteria: (1) Relevance of subjects treated to general thematic of AWP, (2) Overall quality of presentations, (3) How enlightening was the presentation in terms of multi -disciplinary approach, (4) New scientific / methodological perspectives, (5) Quality of the interactions to speaker, (6) Quality of the organization of the plenary sessions

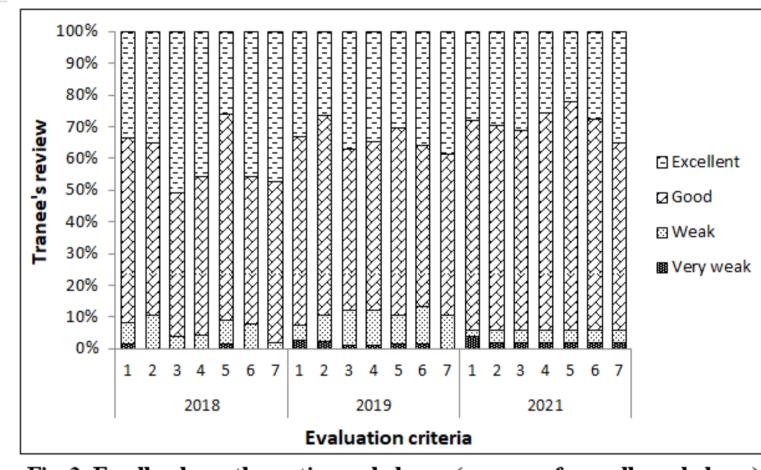


Fig 2. Feedback on thematic workshops (average from all workshops) Criteria: (1) Clarity of the program and objectives of workshop, (2) Consistence between the program and its objectives, (3) Dedication and availability of trainers, (4) Collective and participatory approach of the teaching, (5) Amount of personal work required, (6) Improve skills and abilities, (7) Relevant and useful knowledge

AWP Finding

Principal benefits

- · Shared expertise;
- Disciplinary diversity; open-
- mindedness; · Gain in self-confidence
- (possibility of speaking in group/public);
- Input of methodological tools
- (quantitative and qualitative); International, regional and
- personal networking,
- Linguistic enrichment.
- Noticeable criticisms
- · Lack of balance between theory and practice, better to integrate field visits to each workshop;
- · Limited space for opportunities to meet and network; Should have sent PowerPoint presentations before the beginning of the training;
- Speakers should deliver presentations slower for plenary sessions;
- Weak quality of the catering;
- Strengthening the selection by prioritizing the level of English for both trainees and trainers; · A stricter educational approach and greater open-mindedness from some of the trainers;
- Too technical an approach;
- Strengthening group work for the restitution;
- Strengthening (trainers') knowledge about South-East Asia and develop case studies in Asia; A better qualitative/quantitative balance;
- Improving quality of Internet connection; Better collaboration between trainers during the training.

AWP co-financing model

Support the mobility and cost of stay for AWP participants: AUF 16 trainees, IRD 10 trainees, UN 3 trainees, CTU 4 trainees.

Support for awards to AWP 2021's Innovative Research Competition: IRD.

4. CONCLUSIONS

Within the WANASEA framework, the training sessions and seminars AWPs gathered researchers, PhD candidates, professors and experts from various fields around the topics of WNRM. This rise awareness about the current transboundary issues in the Greater Mekong Sub-region regarding WNRM. In parallel, the project generated and disseminated new knowledge which goes beyond methodological exchange. Participants on these events had chance to develop their research skills and learn how to work together on complex issues such as WNRM. AWP offered an excellent opportunity to connect ASEAN and European students with ASEAN and European professors.

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