TRANSFORMATIVE LAND AND WATER GOVERNANCE CONFERENCE

21 – 23 May 2014, Malaybalay City, Philippines

CALL FOR ABSTRACTS

Contents

1. Rationale

Humanity is using resources faster than the Earth can replace them. The Global Footprint Network estimates that it would currently take one and a half Earths to renew the resources humanity consumes as of 2013.[1] Scientific and technical research presented during the World Water Week in Stockholm confirms that the world is living beyond its means and faces us with the need for action now from a far broader populace than government or economic regulation can bring about.[2] The 67th Session of the UN General Assembly (UNGA) that closed last 16 September 2013 stressed the urgency of agreeing on a post-2015 development agenda that will set the world on course towards "a more secure, prosperous and sustainable future".[3] This can only happen through sustainable development goals that take into account the water-food-energy nexus in ways that provide equal values to economy, ecology and equity.

State of Land and Water Use Change in Asia Pacific

Asia-Pacific, representing 60% of the world's population[4], has the lowest per capita availability of freshwater[5]. Agriculture in Asia accounts for 79% of annual average water withdrawals[6], and demand for food and animal feed crops is predicted to grow by 70% to 100% over the next 50 years. Enhancing yield is estimated to meet 70% of food needs, but this could hasten water depletion and downstream impacts. The fastest increase in water demand now comes from industry and cities. Asia is home to more than half of the world's slum population.[7] Globally, informal settlements are growing at a much faster pace than cities themselves. Wastewater is often released untreated or partially treated into rivers, lakes and groundwater. Eighty per cent of Asia's rivers are in poor health, jeopardizing economies and the quality of life.[8] Ecosystem services, valued at $1.75 trillion per year, are threatened.

State of Disaster Risks in Asia Pacific

Floods, droughts, hurricanes, storm surges and landslides represent 90% of the world's disasters, and 90% of the people affected by these water-related disasters live in Asia.[9] Asia is home to 75% of vulnerable urban populations in coastal zones.[10] While improved forecasting has reduced the number of deaths from water-related disasters, the costs of flood disasters have increased over time, with damages estimated to be over $61 billion in 2011.[11]

Countries are recognizing the need to find the interface between disaster risk reduction, climate change adaptation, and migration policies and programs. Several estimates have been made about the impacts of climate change on migration, varying between 50 million and 1 billion. An individual's decision to move always has a number of causes including economic, political and social factors, and the impacts of climate change could be an additional factor among these. Climate change may also play a role in changing some of these other influences, as seen in the dynamic playing out in the Philippines wherein efforts to move people out of critical waterways is underway as government's strategy for adapting to the increasing frequency of extreme weather events.

State of Governance

Fragmentation in leadership, cultural identity, and socio-economic priorities has fragmented land use. In upland Mindanao, for example, land use change is driven by the history of commercial logging, the disregard for indigenous communities, the lack of tenure for migrants, and the limited

development of sustainable resource management strategies. The area's climate, forest hydrology, and nutrient balances are a source of sustainability. Yet, with land use change that prompts erosion and loss of the limited nutrient base, broader environmental degradation is rapidly growing without greater accountability and better options. To provide the basis for moving from compartmentalized and piecemeal planning options to integrated holistic planning, a sound biophysical understanding of land and water resources and their interaction with cultures, societies and economies is necessary.

Search for Transformation

The need for fundamental change is evident in the way various sectors are searching for transformation in the way things are done. Transformative education, for example, seeks teaching and learning methods that prompt a deep structural shift in the basic premises of thought, feelings and actions so as to alter our way of being in the world.[12] The Bologna process[13] that started in 1999 has sought this transformation for higher education in Europe. With 47 country signatories to the Bologna Accord, the process paved the way for convergence of higher education systems in Europe to meet new societal demands. Transformative research is also being sought among members of the scientific community, to challenge our current comprehension of an important existing scientific or engineering concept or educational practice in search of pathways to new frontiers.[14] In responding to climate change, values play a huge role as we search for a collective understanding of how we need to respond – for humanity's collective common sense[15]. While awareness is growing about the impacts of land and water use change on human security, discernment on values, behaviours and attitudes that drive these changes is still limited. The search for transformation is about the search for values that can help us take on the responsibility for sustaining the one earth we have, and this cannot be done solely through acquiring information or knowledge. The search for transformation entails finding a secular language that can be understood in a diversity of life situations to encourage dialogue on values and bring out the wisdom from local contexts to address global challenges.

2. Objectives and Results

Knowledge from across the natural and social sciences is needed to develop a thorough understanding of our ecological challenges. These challenges include:

- Learning how to develop a comprehensive and integrated point of view, through linking academic disciplines, that enables us to transform our governance of land and water resources;
- Creating capacities that enable us to build safe and secure societies that are resilient to disaster risks
- Accompanying the youth as they prepare to inherit the responsibility of building a sustainable future for our community and society.

The main objective of this conference is to encourage exchange of knowledge and experience among participants in how they are learning from, creating with, and accompanying different stakeholders to transform land and water governance.

Specifically, the conference aims to explore land and water governance concerns in the context of the following themes:

- Theme 1: Sustainability Science
- Theme 2: Local Wisdom, Risk Resilience and Adaptation
- Theme 3: Youth and Values

Sharing knowledge across disciplines requires a process that allows for diverse responses, and not just one response that fits all. As such, this conference will invite participants who use interdisciplinary scientific approaches to solve urgent local and national challenges.

This conference expects to generate the following results:

- More critical understanding about transformative land and water governance generated through knowledge and experience shared from Mindanao, the Philippines and beyond;
- Conference sparks collaborative proposals for further action and follow-up exchanges among participants on topics that promote sustainability science, disaster risk reduction and youth.

3. Target Participants

The conference welcomes participants who work towards environmental and social sustainability using approaches that value the rootedness of research in an area's context: the landscape, the people, and their socio-economic realities. The conference targets to bring together 50 – 75 participants composed of:

- university researchers that explore interactions between natural and social systems, and how these interactions affect land and water management
- local government representatives in charge of environment and natural resources, disaster risk reduction and management, and/or alliances that use watershed approaches to inform land and water management
- civil society organizations and development institutions with programs or projects contributing to land and water management, disaster risk reduction or youth capacity building
- private sector representatives from agri-business, crop insurance, rural development banks
- Youth groups with initiatives in building capacities for interfacing culture and environment
- Young professionals who are involved in movements that address socio-environmental concerns

Participants are invited to share how they are learning to discover and communicate the science for sustaining both people and planet, creating capacities with different stakeholders, accompanying various partners, and supporting the emergence of 'centres of living and learning'.

4. Conference Themes

The conference will focus on themes that feature initiatives which provide knowledge needed for societal transformation. Sessions will be dedicated to each theme. Thematic sessions are designed to challenge us to strengthen further our local, national, and international collaboration.

4.1 Sustainability Science

Sustainability science is an emerging field of research dealing with the interactions between natural and social systems, and with how those interactions affect the challenge of sustainability. The challenge is to meet the needs of present and future generations while substantially reducing poverty and conserving the planet's life support systems. Sustainability science is a kind of science that is primarily use-inspired, with significant fundamental and applied knowledge components, and commitment to moving such knowledge into societal action.[16] Sustainability science is science with ethics.[17]

Sustainability Science is rooted in being human and being authentic in its service to human development and environmental interaction.[18] Before, state and industry used to define science.

Now, human need is increasingly defining science. Science is now giving attention to basic needs, beyond sustaining just the average, by moving towards achieving impact on the bottom. Many institutions recognize the importance of including Sustainability Science in the solutions of sustainability challenges we face, including disaster risk reduction and youth engagement.[19]

Guide Questions: Sustainability Science

a. What are the contexts in which we want to do research about sustainability science?
b. What concepts, tools and analytical methods are used in sustainability science?
c. Where can cases be found which promote better understanding of biophysical and social processes necessary for land and water management planning at different levels (community, municipal, provincial, regional, national)?
d. How can we improve the linkages among people coming from various research and academic disciplines to mainstream sustainability science?
e. How can we mainstream the concepts, tools and analytical methods for sustainability science in local governance?

4.2 Local Wisdom, Risk Resilience, and Adaptation

More than 1.6 billion people have been affected by disasters in East Asia and Pacific since 2000 (EM-DAT 2012). In 2011, disaster losses amounted to $380 billion. East Asia sustained 80% of these losses in the first nine months. Disasters can push affected households further into debt, with the poor carrying the greatest debt burden. A study found that every $1 spent on mitigation saved countries $3 - $4.1.[20] Hazard mitigation is most effective when based on inclusive, long-term planning developed before a disaster strikes. Restoring natural ecosystems can be more cost-effective than engineered solutions.

A science that responds to need and sustainability is required to reduce disaster risks. As 75% of vulnerable populations in coastal zones come from Asia, disaster risk reduction initiatives tend to be focused usually on urban non-dispersed populations along flood ways. Little is known about how climatic meteorological events are affecting the rural context. Small-scale landslides in rural areas are becoming commonplace along the path of meteorological events. This concern warrants urgent especially since it raises questions of food security, especially given existing land use patterns and agricultural practices on the ground.

Guide Questions: Local Wisdom, Risk Resilience and Adaptation

a. What research questions are the academic and research community formulating to improve our critical understanding of disaster risk reduction?
b. What knowledge, capacities, values and experiences do hazard-exposed populations need to reduce their vulnerability and build their risk resilience?
c. How can we mainstream the concepts, tools and analytical methods for disaster risk reduction in local governance?
d. How can land and water governance be improved to respond to disaster risks?
e. How can civil society help line agencies and local governments improve coordination for disaster risk reduction?
f. Where are cases that: (i) feature downscaled methods for identifying hazards, exposure, vulnerability and risks; (ii) invest in emergency preparedness (e.g. weather, climate, hydromet services) and other risk reduction measures (e.g. green and grey infrastructure)?

4.3 Youth and Values

Asia Pacific is home to 45% of the world's youth, amounting to around 700 million young people.[21] Significant numbers of youth across the region face a variety of obstacles in their access to employment, education, health care, and other resources. Transition between education and employment is one of the main obstacles facing youth of the region, especially those from Southeast Asia and Pacific. Youth often remain at the margins with regard to participation in the creation of development policies.

The most significant challenge facing the region is the transition from education to the labour market. While formal education is important, in Asia, traditional apprenticeships and on-the-job training appear to be the more prevalent routes toward workforce skills development among the majority of youth. Young people account for almost half of the jobless population in Asia and the Pacific, in spite of the fact that merely one in five workers is between the ages of 15 and 24. In Southeast Asia and Pacific, the unemployment rate among young people is up to five times the adult rate. As a consequence of such limited opportunities and widespread poverty, growing numbers of disaffected youth are being associated with issues of human insecurity, including an escalation in urban crime, outbursts of ethnic violence, and political unrest.

Sustainability science calls us to bring in people who will face the impacts of climate change, and these are the youth. Youth have a contribution to make and they need to be engaged now. This is necessary for us to build a science that is relevant for the next generation, i.e. coming from human relationships and not just simply coming from how the economy is organized. The challenge now is how to engage and communicate with youth so that they can experience a calling and not just a career.[22]

Guide Questions: Youth and Values

a. Where are cases that that feature youth engagement, communication and leadership?
b. What research questions should be formulated that can enable youth to face the challenges of social and environmental sustainability?
c. What sense of identity do institutions offer youth today as sources of values?
d. How can we improve youth communications and linkages for greater socio-environmental understanding?
e. How can we mainstream youth engagement in land and water governance?

5. Conference Format

	21 May 2014, Tue (Day 1)	22 May 2014, Wed (Day 2)	23 May 2014, Thu (Day 3)
AM	Opening Ceremony and Key Note Presentations (20 min. * 2-3 keynotes)	Disaster Risk Reduction (15 min * 12-15 pres.)	Parallel Workshops
PM	Sustainability Science Session (15 min. *8-10 pres.)	Youth and Values Session (15 min * 8-10 pres.)	Wrap up: Workshop Presentations
Reception	Knowledge Fair	Knowledge Fair	Knowledge Fair

6. Conference Organization

This conference is organized under the project: Towards greater human security in Mindanao by **E**stablishing strategic research **Pa**rtnerships to strengthen local governance in land and water **M**anagement (EPaM).[23] This is the third annual conference under the project supported by the Belgian Commission Universitaire pour le Devélopment (CUD).

The **Environmental Science for Social Change (ESSC)** is responsible for leading the organization of this conference. ESSC is a Jesuit research institute that promotes environmental sustainability and social justice through the integration of scientific methodologies and social processes.

The conference is co-organized with five research partners in the EPaM project:
Gembloux Agro Bio Tech, University of Liège, Soil Science Unit
Université catholique de Louvain (UCL), Geomatics/Soil Science
Université de Namur, Departments of Geography and Geology
Xavier University, College of Agriculture
Ateneo de Davao University, School of Arts and Sciences

7. Timing and Venue

The conference is proposed to be held from 21 – 23 May 2014 in Malaybalay City, Philippines.

8. Calendar

Dec 2013:	call for abstracts
20 Jan 2014:	submission of abstracts (max 500 words)
Feb 2014:	review of abstracts for classification into thematic presentations
21 Apr 2014:	submission of papers (max 5 pages, A4, Font 11)
20 May 2014:	arrival in Malaybalay City, Philippines
21-23 May 2014:	conference proper

24-25 May 2014: optional field visits for interested participants

9. Endnotes

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