

The 2014 Second Resilience Academy focused on Livelihoods amidst Forced and Managed Transitions

The second Resilience Academy (RA) in August 2014 was arranged in a quiet monastery on Fraueninsel (Women's Island) in Lake Chiemsee (located in southern Bavaria, Germany). A perfect place for brainstorming and some last efforts to finish up the working papers that the RA participants started writing during the Resilience Academy in Bangladesh 2013. We organizers were very happy to see that almost all participants from the 2013 academy decided to come back.

The conference is a yearly event organized by the United Nations University Institute for Environment and Human Security (UNU-EHS), Munich Re Foundation (MRF) and the International Center for Climate Change and Development (ICCCAD). Moving from the first Resilience Academy (in Savar-Dhaka, Bangladesh in September 2013) focusing on *Exploring Livelihood Resilience*, to the second RA addressing



transformations, forced- and managed transitions and abrupt changes of livelihoods. The topic was well in line with the approaching action phase of the Gibika research-to-action project. The attending part of the Gibika team (Sonja Ayeb-Karlsson and Kees van der Geest) shared field experiences focusing on similar research questions and gave examples of restrictions, turning- and tipping points from the seven study sites visited just before the Academy.



"When I return to my home country I pledge to put on a Third Resilience Academy, I pledge to you to be more self-reflexive in my own work, I pledge to connect my students with some of the issues we have been discussing here."

Ryan Alanzis (California Polytechnic State University, USA)

The 2014 Resilience Academy Participants: A unique combination of academics, practitioners and policy makers

The world is entering an important year with exceptional possibilities to make a difference due to the upcoming international policy windows for climate

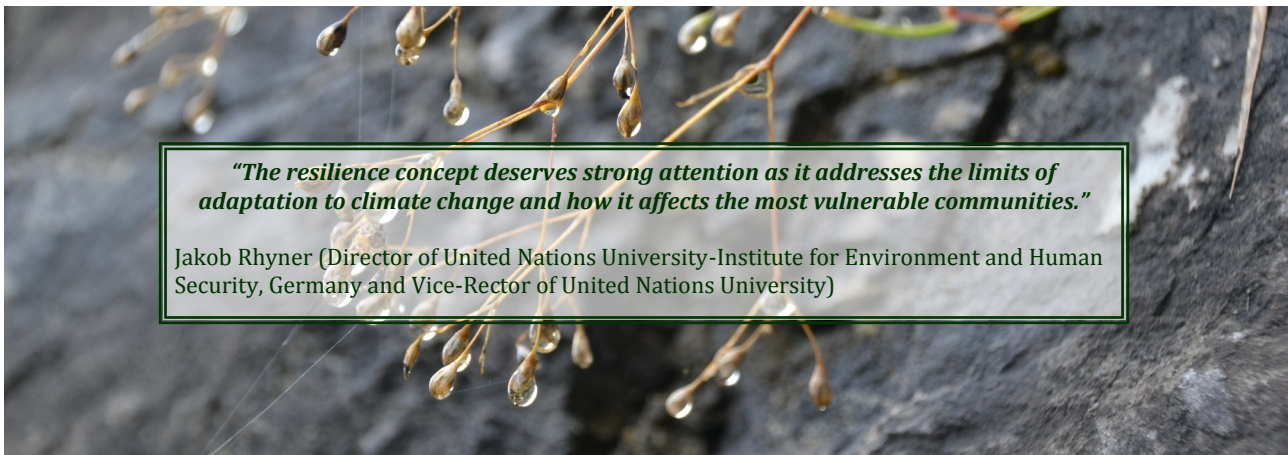


change and development such as the *Second Hyogo Framework for Action*, the *2015 Paris Climate Agreement* and the *Post-2015 Sustainable Development Goals*.



The Resilience Academy provides a unique platform where practitioners, researchers and policy makers are brought together to learn from each other and exchange ideas and experiences. The concept of 'resilience' have received more and more attention lately, as for example in the UNDP 2014 Human Development Report which was released under the name '*Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience*'. Lately, the 'resilience' concept is increasingly getting better understood.

The discussions which took place during the two first Resilience Academies resulted in solid outputs such as a Working Paper Series, a journal article 'Livelihood Resilience in the face of Climate Change' published in 'Nature Climate Change' in December 2014 (<http://ehs.unu.edu/gibika>), a Policy Brief (to be published in 2015) and a spin-off seminar on "*Disaster by Drought: Livelihood Resilience under Conditions of Climate Uncertainty*" which will take place in US California between the 4th and 9th of October later this year.



The Resilience Academy balances research and practitioner focused participants with decision-making attendants. The aim for the three groups is the following:

Researchers: pick up the language and views of practitioners, decision makers and other relevant stakeholders in the context of adaptation and risk management to be able to influence, share ideas and knowledge. They are also given examples on which practices are effective on the ground and within the communities, and which methods/approaches have proven to work and not.

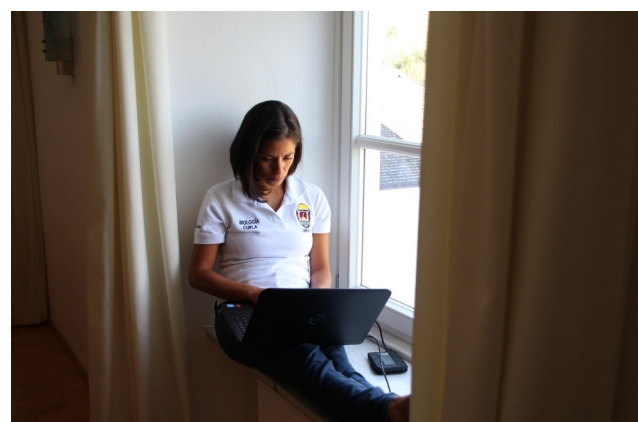


Practitioners: also get an insight into the latest research findings and have the possibility to share their practical examples and experiences with decision makers so that they can form part in creating better policy documents.

The objective is to minimize the space and create a stronger inter-linkage between the three different worlds of these working groups.



Decision makers: get an idea and insight on how research can support and be included in their work, strategies and political processes e.g. how processes make their way into 'real life', where the gaps are and how to formulate better policies to avoid such gaps when reaching implementation level.



"The capacity of all people across generations to sustain and improve their livelihood opportunities and well-being despite environmental, economic, social and political disturbances."

Thomas Tanner (Overseas Development Institute, UK)

Resilience definition, Lead-author `Livelihood resilience in the face of climate change` Published in Nature Climate Change (December 18, 2015)

Meet the RA 2013/2014 organizers: David J Wrathall (UNU-EHS)

David was the lead organizer of the RA2013/2014 and is an Associate Academic Officer at UNU-EHS. David holds a Doctorate in Geography from King's College London. Researches social-ecological resilience and climate change adaptation. His research focus is the changing habitability of environmentally disturbed areas and human migration away from those spaces, but he also studies narco-trafficking and deforestation in Central America.

David is currently investigating the impact of tropical cyclones on human mobility in the south of Bangladesh using massive sets of anonymised mobile phone data. Previously, David was a research fellow at the University of California Santa Cruz, Department of Environmental Studies, where he was studying glacier recession and the effect of shifting water resources on migration in the Cordillera Blanca, Peru, and piloted the use of mobile phone data. His doctoral research focused on catastrophic flooding and migration from Garifuna villages along the North Coast of Honduras. His work and research on these topics began in Honduras with Peace Corps and Habitat for Humanity in the aftermath of the Hurricane Mitch.



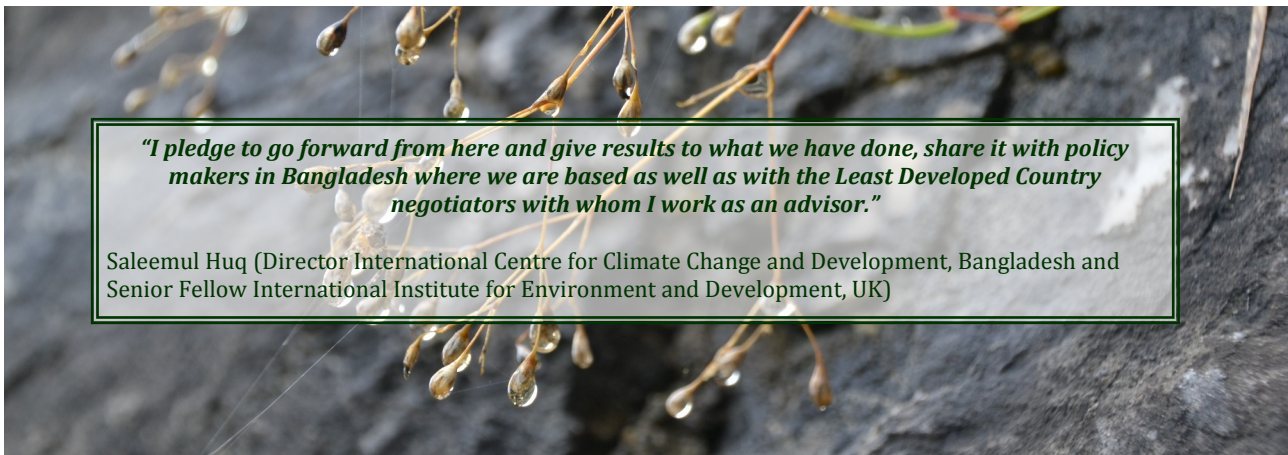
Co-authored RA2013/2014 Livelihood Resilience article published in Nature Climate Change (December 2014)

David is one of the co-authors of the academic paper "Livelihood resilience in the face of climate change" developed as part of the 2013-2014 Resilience Academy is published by Nature Climate Change:

"Climate change will inevitably make certain livelihoods impossible, but the idea of livelihood resilience is that people can have the supports necessary to earn a living despite the most severe climate change impacts" says David.

Read the full article published in here <http://nature.com/nclimate/journal/v5/n1/full/nclimate2431.html>

In addition to the Nature Climate Change article, UNU-EHS published a series of working papers written by the 2013/2014 Resilience Academy participants in support of the core argument of the paper, which can be found here <http://ehs.unu.edu/gibika>



2014 Field Trip to the Austrian Alps and Eisriesenwelt ice/ glacier-cave

From riverbank erosion affected livelihoods in the tropical delta regions of Bangladesh to livelihood resilience in the European Alpine area. The field excursion this year took the group over the border from Germany to Austria. The Bavarian Alps stretch out from the southwestern part of Germany about 1,200 kilometers through seven countries including Austria, Slovenia, Switzerland, Liechtenstein, France, Italy and



Monaco. Vice-Rector of United Nations University and Director of United Nations University Institute for Environment and Human Security Jakob Rhyner introduced the Resilience Academy participants to the long-term and short-term effects climate change have



on livelihoods in Alp- areas based on research findings from Switzerland. The idea of the fieldtrip is to provide the participants with a direct contact to a climate change effected ecosystem and to illustrate the consequences on livelihoods.

The visit included the Eisriesenwelt (German for "World of the Ice Giants") cave which is a natural ice cave located in Werfen, Austria, approximately 40 km south of Salzburg.





"What I am taking away from the Resilience Academy is a fantastic network of scholars and people that are able to influence decision-making so I pledge to promote the work of the Academy within my organization Stockholm Environment Institute and our researching boundary partners, and to create opportunities to work together on publications and project proposals in the future."

Frank Thomalla (Stockholm Environment Institute)

The cave is located inside the Hochkogel Mountain in the Tennengebirge section of the Alps. It is the largest ice cave in the world, extending over 42km and visited by about 200,000 tourists every year. It was discovered in 1879, by nature scientist Anton von Posselt-Czorich from Salzburg, even though he only explored the first two hundred meters of the cave. Before his discovery, the cave was known only to locals, who refused to enter the cave as they believed that it was the entrance to Hell.



During the last hundred years the glaciers of the European Alpine area have changed significantly. These ecosystem changes are affecting the drinking water resources in the eight countries. According to the European Environment Agency (EEA), for every 1°C rise of temperature, the snowline decreases by about 150 meters. A big challenge will be to protect the ecosystems, habitats and populations across Europe.

Higher temperatures will degrade the permafrost layers which can cause glacier instability, rock falls and landslides. The melting glaciers are not just one of the most important European tourism attractions but also act as a natural irrigation system and freshwater storage for the people living in this area.



"I pledge that after returning from the Resilience Academy here in Germany I will speak to colleagues from different universities from around Australia and those who have observer status at the UNFCCC COPs, so that we will come together and work on a draft text to submit [at Cop21]."

Karen McNamara (University of Queensland, Australia)

Meet the RA2013/2014 participants: Zinta Zommers (UNEP)

Zinta Zommers is a PhD zoologist and Fellow in Global Journalism at the University of Toronto, currently working with the United Nations Environment Programme, Division of Early Warning and Assessment (DEWA). As leader of the DEWA's Climate Change Early Warning Project (CLIMWARN), Zinta is working to improve the delivery of hazard warnings to the most vulnerable. She recently edited the book, "Preventing Disaster: Early Warning Systems for Climate Change" (Springer 2014).




Zinta has also authored newspaper articles in the "Globe and Mail" and "Dallas Morning News". Prior to joining UNEP, Zinta was based at the Wildlife Conservation Research Unit at the University of Oxford. A Rhodes Scholar who also completed a MPhil in Development Studies. Having conducted research in Uganda, Cameroon, India, Indonesia, Zinta has extensive experience studying and working with vulnerable human communities and ecosystems.

Lead-author RA2013/2014 Working paper No 2: 'Loss and Damage to Ecosystem Services'

Loss and damage has risen to global attention with the establishment of the "Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts". While much of the discussion has focused on loss and damage to human livelihoods, climate change is also having a significant impact on ecosystems and threatens the continued provision of ecosystem services. As such services underpin livelihoods it is critical to better understand how to quantify loss and damage to ecosystems. According to the IPCC Fifth Assessment Report, adaptation options for ecosystems may be more limited than for human systems. Thus, loss and damage to ecosystem services are expected to be significant. This paper reviews the ways ecosystems are responding to climate change –through phenological changes, range shifts, community reorganization and adaptation. It then examines the possible impact on ecosystem services, using a case study of glacial loss in Peru's Cordillera Blanca. Four different phases of hydrological shift will occur as glaciers melt, some of which will bring increased services before long term decline of systems. Greater focus is needed on the feedbacks between climate change, ecosystem services and human well-being. Further the impact of other threats, such as land use change, need to be evaluated. In order to build resilience, loss and damage mechanisms should work to reduce a broad range of risks across human and environmental system.

Would you like to know more about the RA 2015 topic "Enhancing Livelihood Resilience to minimize Loss and Damage" have a look at Zinta's working paper produced during the RA2013/2014: www.ehs.unu.edu/file/get/11944



"Whatever we are doing in terms of thinking, writing and communicating it should be translated down to the ground. So that is my pledge, once I leave the Resilience Academy I want to see my work reflected on the ground through implementation of a certain type of projects and activities."

Vivek Prasad (George Mason University, USA)

What is next?

The Resilience Academy will continue to provide a platform for connecting communities of expertise (early phase practitioners, academics and policy analysts), examining livelihood resilience in the face of extreme weather events and slow-onset environmental changes. During 2015 a new set of Resilience Academy participants will be selected for the overlapping 2015-2016 Academies, and in 2017 the two Resilience Academy groups (2013/2014 and 2015/2016) will be brought together during a fifth final Academy.



The upcoming Resilience Academy in Bangladesh will take place between the 6th and 12th of September 2015 with the topic *"Enhancing Livelihood Resilience to minimize Loss and Damage – Providing knowledge for the UNFCCC"*. To have a mix of participants, it is essential for them to come from different parts of the world and different

thematic backgrounds is crucial. Different perspectives are important to foster a common understanding since the goal of the Resilience Academy is to: Produce scientific papers for publication in international peer-reviewed journals; develop strategies to disseminate outputs of the Academies in the UNFCCC decision making process and other strategic policy processes and to produce policy-relevant research including policy briefs.



We very much look forward to welcoming a new set of participants to the Third Resilience Academy later this year in Bangladesh!

