EwF Country Team Updates
October 2016
2nd Newsletter

KAZAKHSTAN

The Earthquake Science and Hazard in Central Asia International Conference was held in Almaty, 7-11 September 2016. The conference was sponsored by the Yessenov Foundation and co-hosted by the Kazakhstan Institute of Seismology of the Academy of Sciences, the National Technical University of Kazakhstan and Earthquakes without Frontiers Project.

The conference convened earthquake scientists from China, Germany, Kazakhstan, Kyrgyzstan, India, Iran, Italy, Nepal and the UK, and had three aims:

- to highlight modern techniques used to understand earthquakes in Central Asia
- to provide a forum to discuss and share strategies for the mitigation of earthquake risk
- to promote effective communication of science to policy-makers and the public.

Participants heard about the exciting methods and technologies being used around the world to understand seismic hazard, and about the role of this modern science in minimising damage and death when – and not if – the next earthquake occurs.

In bringing together international experts in earthquake science to share their different and, more often than not, similar experiences in earthquake science and in disaster risk-reduction policy and practice, the conference showed that earthquakes are, truly, without frontiers, and that collaboration and learning is essential if we are to save lives and livelihoods.

With this in mind, the third day of the conference drew together key messages that had emerged over the three days and considered how they could inform earthquake science, policy and practice in the host country.

The full conference programme and presentations can be found, in full, on the Yessenov Foundation website http://eng.yessenovfoundation.org/science/research/

The experiences and learning shared during the conference have broad applicability and will be written up in a report, produced by hosts Yessenov Foundation and EwF partners the Overseas Development institute, to be released in November.

Wording from the conclusions of a similar meeting in Tabriz hosted by the Geological Survey of Iran in 2014[1] was used to frame discussions, and was then modified after comments from a panel of international experts including Kazakh delegates, and from international and Kazakh audience members, to produce a series of concluding statements and lessons for Kazakhstan. The full text of these will be shared in the forthcoming report.

[1] http://earthquake.conference.gsi.ir/en/contents/Closing-statements/Closing.statements.htm

PARTNERSHIPS IN RESEARCH

The 2016 International Disaster and Risk Conference in Davos brought together researchers from the physical and social sciences, UN representatives, NGO staff, DRR practitioners, representatives from national and local government, and the private sector worldwide.

Presentations included many examples of multi-stakeholder approaches to risk management and building resilience. The great value of cooperation and partnership between stakeholders, and the need for more, was a recurring theme. The importance of platforms for sharing knowledge was also emphasised.

Ajoy Datta (ODI) and Susanne Sargeant (BGS) gave a joint presentation ('Increasing Resilience to Earthquakes: the EwF experience') at the 2016 International Disaster and Risk Conference on some of the learning emerging from EwF. After giving a short introduction to EwF, Sargeant presented an overview of the main themes that have emerged from discussions at EwF meetings (e.g. working across disciplinary boundaries, engaging with stakeholders, understanding how science is used and viewed by stakeholders, undertaking research with and for stakeholders in developing countries, sharing learning across the consortium). Sargeant then spoke in more detail about building a research partnership with the Institute of Seismology in Kazakhstan and presented her personal reflections on this process.

Datta highlighted the role of engagement specialists in each of the three country teams and how the different country teams could work better as a group. He argued that if groups of scientists, practitioners and policymakers come together from different countries to work collaboratively–it sounds obvious but they'll need to spend time together and deliberate. Groups need to cohere, but they also need to experiment, evolve and change – this is only possible through exploration of differences between people - which may include conflict. Space needs to be made for political processes to unfold and for ideas and approaches to be contested and challenged and grievances brought to bear formally.

Reflecting jointly on how the group is working together and thus paying attention to people's experiences on a regular basis can help group members become better at working together. These things don't always come naturally and take practice. And rather than getting an engagement specialist to promote engagement amongst researchers, Datta asked whether we might be better off getting a researcher who is supportive of stakeholder engagement to be a role model, whom people can copy and imitate. So rather than leadership, he talked about 'followership'.

CHINA

'Research without Frontiers', an in-depth study of a transdisciplinary research project involving cross-disciplinary, cross-cultural and cross-border collaboration has been conducted. While outputs of the Earthquakes without Frontiers (EwF) partnership are significant in contributing to increasing resilience to earthquake hazard in different parts of the world by taking an approach closely tailored to the specific context,

the fact that it applies a trans-disciplinary approach to achieve its goals has rendered itself a valuable topic for research.

The project 'Research without Frontiers' was thus dedicated to investigate the applicability of transdisciplinary research collaboration in China since January 2015. Between 16th December 2015 and 3rd February 2016, the project distributed a self-administered questionnaire to members and collaborators of the EwF-China team to reflect their opinions on EwF as well as the administration of the Myers-Briggs Type Indicator (an introspective self-report questionnaire designed to indicate psychological preferences in how people perceive the world and make decisions).

The content of data collected from the questionnaires were then analysed thematically by using Nvivo. Although some of the factors identified in the study could relate to the literature of transdisciplinary study, others are more tied to the EwF project and the context of China.

In general, we found that

- Heterogeneities of team members, in terms of differences in culture, language, and discipline, were regarded as challenges to the EwF China team formation.
- Political constraints in China was as an impediment for the EwF China team to be formed.
- While some participants indicated that doing fieldtrips helped them to learn better of other members, some specifically mentioned the Writeshop event had particularly enabled them to learn from one another.
- Some participants indicated that there is an existence of a facilitating environment for the adoption of transdisciplinary approach in China. They are confident that transdisciplinarity could mitigate gaps and get to focus more on local level in the country.
- 50% of the participants showed no or little involvement with the demonstration project.

Further analysis is underway and thus far, the findings shed light on the usefulness of transdisciplinary collaboration in China, and further investigations are necessary in order to be able to systematically summarize lessons to be learnt for the development of relevant research practices and other administrative behaviours.

A Trip of the EwF China Social Sciences Group – July 2016

Lena Dominelli, Jocelyn Lau and Tim Sim undertook a trip to a small village in China in July. China is one of the most disaster-prone countries in the world, and is working hard to educate its large population in earthquake preparedness, especially at community level. This was not the group's first visit to the area. They were welcomed to the village by the village leader. Once in the village, they talked to local residents about earthquake preparedness and their understanding of the issues they might have to address. Villagers were excited to talk to these visitors who were with community workers in a local organisation. These workers were well-known to them and were helping the villagers to develop eco-tourism as a strand for diversifying the agricultural

base of the community. The community's main crops were apples, walnuts and sweet corn. Lena was intrigued to learn that the bags villagers wrapped around apples were to prevent them from hailstone damage and being eaten by birds and bats. Local restauranteurs used local produce to create an enjoyable lunch for us (photo).

The villagers were well-informed about what to do in the event of an earthquake and trusted the government to look after them during such a disaster. They had experienced 'shaking' during the Mw 8.3Wenchuan earthquake of 12 May 2008. It occurred along the Longmenshan Fault in Sichuan, China, killing 90,000 people, injuring 350,000 and destroying homes, hospitals, schools, power supplies, transportation, and communication systems for millions. Some had also been involved in the tragic 1976 Tangshan earthquake that wiped out 240,000 lives.

Among the interesting features of the village were the cave dwellings which have an ancient lineage as habitations. Some of these had been cement rendered and modernised. Caves proved to be extremely vulnerable dwellings during the 1556 Xi'an earthquake because, made of loess, they can liquefy during the seismic ground motion or 'shaking' that occurs during an earthquake. The Social Sciences Group learnt that villagers were familiar with the drill of going outside and staying in tents during periods of sustained 'shaking' that they had encountered in the past.

However, earthquakes were not the major natural hazard worrying villagers. Hailstorms, heavy rain and snow were more serious concerns (in that order) because these impinged directly on their livelihoods and financial security. Plastic tents used to protect the crops got torn regularly by the wind and could collapse during severe hailstorms. The interaction between people and the environment was a complex dance movement forward and backwards.