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# Earth System Governance: Local Cases, Global Options

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**SUMMARY:** The "Scale in Earth System Governance: Local Case Studies and Global Sustainability" Summer School, held at the Siberian Federal University in Krasnoyarsk, Russian Federation from 15–29 July 2013, addressed challenges of scale in Earth system governance. It served as means for capacity building, and cross continental network development of early career researchers from the Asia-Pacific region and Central and Eastern Europe while undertaking research into local sustainability in the city of Krasnoyarsk and the beautiful nature of the Krasnoyarsk region. Participants brought case studies and experience from their own localities and context into the design and implementation of the studies in Siberia.

## Introduction

Environmental researchers from neighbouring countries seldom meet, although field research and analysis are important to any regional collaboration. Summer schools offer a great opportunity to close this gap, helping researchers develop skills and build networks on one hand, and potentially benefiting local governance on the other.

A group of young researchers from Belarus India, Japan, Nepal, Russia, South Africa, Thailand and Ukraine made use of their vacation time to participate in the research Summer School "Scale in Earth System Governance: Local Case Studies and Global Sustainability" organised under APN CAPaBLE programme, in Krasnoyarsk, Russia, 15-29 July 2013.

The Summer School was held at the Siberian Federal University in Krasnoyarsk and started with lectures on theories and research methodology, presentations of case study projects and the preparation of field trips. The research groups then travelled to their respective case study locations and looked at the issues of sustainable urban planning and energy efficiency in Krasnoyarsk, development of minihydropower energy in the Krasnoyarsk Region, and human-wildlife conflicts and sustainable tourism in Southern Siberia. The case study reports were presented on the last day on the research seminar of the Department of Ecology and Natural Resource Management.

#### Developing Skills and Network in a New Setting

The most important outcomes of the Summer School were, of course, new research and analytical skills developed by the participants as became clear during the presentations and discussion of the field-work results at the end of the Summer School. For the participants from outside Russia, it was also an experience in an entirely new biophysical and governance setting. This School was as a great opportunity for researchers from the Asia-Pacific countries and former USSR to socialise and discuss their research and teaching—unfortunately environmental researchers from these regions do not meet often, especially for field research and analysis, and this APN School contributed to bridging this gap.

## Impacts on Environmental Governance at the Local Level

The case study research also had an impact on environmental management in Krasnoyarsk and its region—long discussions with local architects and city planners gave them a new perspective on their work, and some of the echoes of those talks can be found in local media and blogs (e.g. http://krskdaily.ru/2014/03/architecture/ downtown-unconscious, in Russian). The interactions between Summer School participants and practitioners could also have positive impacts on the new city master plan. Likewise, stakeholder

## HIGHLIGHTS

- » Implementation of local sustainability case studies on urban planning and energy efficiency, mini-hydropower energy, and human-wildlife conflicts and sustainable tourism that could be analysed in the context of the problem of scale in Earth System Governance.
- » Bringing together a community of researchers and linking existing networks of early-career governance researchers in the Asia-Pacific region with such in Central and Eastern Europe working on governance for sustainable development and environmental management to jointly learn, stimulate dialogue and initiate new research endeavours.

talks organised by case study groups in natural protected areas are contributing to some positive moves, e.g. broader and more structured involvement of stakeholders to parks management, and new methods for evaluation of management efficiency piloted by regional biodiversity conservation authorities.

#### **Tangible Outcomes of the Summer School**

Case study reports were prepared by the school participants for publication and two case studies, one on city-planning issues and green areas in Krasnoyarsk, and on the efficiency of biodiversity conservation in natural protected areas in Eastern Siberia, will feature in publications in preparation by participants. Many participants teach in under- and postgraduate students, and case study materials were used in their joint courses, a few of those already offered in the winter semester 2013/2014 in their home universities (including the course on Communication and Information Tool for Natural Resource Management offered at Siberian Federal University).

Some workshop participants especially from the Asia-Pacific region, who generally were more social science oriented than those from the other countries, have become Research Fellows in the Earth System Governance Project and thereby remain engaged in this field of research in a more structural way. This contributes to our conclusion that, despite rather fragmented future directions, this Summer School built well on existing programmes and has evolved from a one-off successful event to the start of many long-term research contacts and networks with a strong (and growing) regional presence in Asia and the Pacific.

## Conclusion

The Scale in Earth System Governance: Local Case Studies and Global Sustainability brought together two distinct groups of early career researchers: One from Russia, Ukraine, and Belarus, and one from the Asia-Pacific region – two communities usually not interacting much but each working on the various dimensions of local sustainability, and each including researchers from various disciplines. With lectures on theory and methodology, the Summer School provided them with a common language and understanding, and the field work connected all participants and built networks for future collaboration—while even providing useful research-based policy options to local stakeholders.

# **Future Directions**

The field-work, embedded in theoretical lectures and methodology tutoring has resulted in a significantly increased capacity for local environmental governance research by all participants. They have brought home these strengthened skills, the experience from the international and interdisciplinary work during the Summer School and will use this beneficially for the many courses they teach (as most participants are active teachers at universities). In case of the ReSET participants, the findings from the Summer School will, in line with the aims of that programme, also feed into their ongoing efforts to develop new and reform existing curricula in their home institutions and between their home institutions.

## References

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## Acknowledgements

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Figure 1. Scale in Earth System Governance Summer School.

PROJECT INFORMATION	
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	and Global Sustainability
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