

Resources, Well-Being and Sustainable Development in the Arctic: International Geographic Union (IGU) Conference Report (Moscow, August 17-21, 2015)

Andrey Petrov (USA), Tatiana Vlasova (Russia)

The International Geographic Union (IGU) is a worldwide association of geographers, which embodies 41 Commissions and one Task Force. The IGU facilitates the participation of geographers in the global community of scientists through its formal affiliation as a Member Union within both the International Council for Science (ICSU) and the International Social Science Council (ISSC). The IGU usually meets once a year in a designated location at regional conferences and once during four years for the Congress. The IGU 2015 regional conference took place in Moscow on 17-21 of August. This is the first time since 1976 that the IGU Congress was held in Moscow or anywhere in Russia. As a result, this was a unique opportunity to engage more Russian scholars and ensure considerable participation and interest from Russian scientists.

Key Messages from the Session:

1. Sustainable development in the Arctic must be understood and addressed from interdisciplinary perspectives that incorporate approaches, methodologies and data from natural and social sciences.
2. Comparative studies (in over space and time) are of high importance and relevance in the Arctic.
3. Urban issues in the Arctic, including urban sustainability, are of high importance and need for further examination across the Circumpolar Region.
4. There is a need for knowledge synthesis about sustainable development in the Arctic.
5. Development of sustainable development indicators is one of the research priorities for the near future.

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The conference theme was “Geography, Culture and Society for Our Future Earth.”

Polar studies were among five key themes of this IGU 2015 conference. That is why the IGU Cold Region Environments (IGU CRE) Commission was one of the main commissions that attracted most attention from the international geographical community, especially those representatives who are engaged in the Arctic, Antarctic and high mountains studies.

In 2015, IASC, notably its Social and Human Working Group (SHWG), has provided partial support for the Special Session “*Resources, Well-Being and Sustainable Development in the Arctic*” organized by the IGU CRE Commission at the Regional Conference in Moscow. Both IASC and the IGU are strongly interested in such kind of cooperation. A key IASC priority area is developing international connections and interdisciplinary approaches, while the IGU CRE also looks to strengthen international cooperation with other organizations and projects in interdisciplinary and transdisciplinary research, observations and assessments. This geographical-oriented commission is interested in many aspects of the physical environment with the social and economic realms cross-cutting.

Based on these priorities, the papers invited to this Special Session focused on the connection between the use of natural resources and quality of life in the Arctic in the context of sustainable development. We strived to ensure methodological and regional diversity, as well as to achieve a combination of conceptual papers and case studies that represent community-based and community-relevant approaches.

The session attracted both social geographers and natural scientists, as well as those who work on cross-cutting issues of sustainability or human security, for example food security. Theory of sustainable development, resilience assessment and sustainability science was also of special concern in presentations and during the discussion. In addition to geographers, presenters included representatives of various other disciplines, such as architecture, tourism, business, and education. According to Yulia Loginova (Ph.D student, University of Melbourne): “*this was a valuable learning experience, since the specific features of the Arctic make it important to address sustainable development from various angles, establishing and stimulating dialogue between disciplines*”. This can enhance future Arctic research and she hopes to contribute to this process.

The sessions covered a diverse range of topics from various disciplines, including geography, architecture, planning, political and social science. It stimulated cross- and trans-disciplinary discussion over the issues of sustainable development in the North. Most papers were presented by socio-economic geographers, although sessions included physical geographers, and an architect.

During the discussion following Evgeny Antonov's (Russia) presentation, it was demonstrated that comparative studies are of high importance in geography and that during the session, as he wrote in his summary report, he had received some advice, not only on the demographic topic of his

research, but add important subjects based on comparisons between the demographic situations between Chukotka and Alaska. Evgeny Denisov (Russia) highlighted population and demographic gradients and trends in the Russian North, and indicated that the trends were quite variable and favored regional capitals and larger communities. Yulia Loginova (Australia) focused on the importance of community resilience thinking and on how formal and informal institutions and their interplay across scales impact community resilience. The study examined communities and livelihoods along the Pechora River in northern Russia and their response to environmental changes associated with natural resource development in the area. Their experiences may offer important lessons for understanding sustainability and resilience of northern communities in general. Tatiana Vlasova's (Russia) presentation addressed the problem of food security, which has become one of the most urgent issues in the Arctic. It was noted that the multidisciplinary integrated indicators system for food and water monitoring in different regions of the Arctic states, such as Canada, the USA and Russia has started to be developed within the international "ASUS: Arctic sustainability: synthesis of knowledge" project. Finally, Vlad Lyakhov (Norway) presented an interesting paper on the relationship between climate and architecture as manifested in Greenlandic traditional and modern house construction.

Andrey Petrov (USA) introduced the content of the IASC White Paper on Arctic Sustainability Research. This paper summarized the findings and opens the discussion of opportunities to develop an Arctic/cold/remote regions-oriented sustainability science conceptual framework. It was argued that despite advancements of research in recent years, our understanding of the complex structures, functions and interactions within or among socio-ecological systems across this region is still incomplete as it lacks synthesis. In other words, the patchwork of sustainability knowledge in the Arctic has yet to evolve into the framework that provides a comprehensive understanding of Arctic social-ecological systems.

In the following discussion, while recognizing the importance of disciplinary approaches, socio-economic and physical geographers pointed to the need for integration of such professional disciplinary research. As Evgeny Denisov noted: "*it was an opportunity to discuss important issues with Arctic researchers from different fields*".

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