SAON Workshop

Sustaining Arctic Observing Networks Stockholm, Nov 12-14

User Needs: Data and Information

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Multiple Stressors/Challenges



- Environmental processes
- Economic changes
- Industrial development
- Cultural developments
- Constraints on adaptive capacity









Changing needs in Arctic Social Science research.

New demands on access to data. Increase in range of disciplines, topics, geographical areas covered, and collaboration.

Analysis of impacts of change on social system at various scales.





User needs

- Data to enable research and analysis at various scales, across disciplines, across the Arctic
- Access to relevant, accurate and timely data and information (translation russian/english)
- Data appropriate for Arctic context
- Continuity in data collection method/definitions
- Data for comparisons/contrasts
- Data for tracking, monitoring
- Demographic data
- Physical science data
- Disaggregated data

User Needs Disaggregated data Data appropriate to arctic context

Circumarctic coverage

Social science data bases, networks

- AHDR Arctic Human Development Report
- SLiCA Survey of Living Conditions in the Arctic
- ASI Arctic Social Indicators
- ECONOR Economy of the North
- ArcticStat
- POENORD Political Economy of Northern Development
- SEARCH-HD Study of Environmental Arctic Change
- AON Arctic Observation Network Human Dimensions
- AHHI Arctic Human Health Initiative
- Arctic-RIMS Arctic-Rapid Integrated Monitoring System
- ICARP
- Arctic Portal
- Statistical offices (official data)

Arctic Human Development Report

AHDR provides a snapshot – a baseline of human development in the Arctic.

HUMAN DEVELOPMENT REPORT

AHDR does not present a suite of quantifiable indicators to monitor and track changes.

Arctic Social Indicators (ASI) Project Long-term monitoring of human development Project duration: 2006-2008

Objective: To devise a limited set of indicators, reflecting key aspects of human development, tractable in terms of measurement, and monitoring at reasonable cost.



- Moving beyond AHDR baseline.
- First step in long-term effort to monitor/track human development in the Arctic.
- Collaborators: SLiCA, Arctic Stat, ECONOR, POENORD and others.



ASI:

- Need for indicators appropriate to Arctic context.
- AHDR proposed three elements of human development that are particularly prominent in the Arctic.
- ASI builds on this.





Six domains chosen for selection of Arctic social indicators (ASI)

- Fate control and or the ability to guide one's own destiny
- 2) Cultural integrity or belonging to a viable local culture
- 3) Contact with nature or interacting closely with the natural world
- 4) Education
- 5) Health/demography
- 6) Material well-being

ASI

Target group: science community, northern colleges and universities, residents of the North, policy makers, Arctic Council.

- Monitoring system how?
- Data needs (e.g. disaggregated data, geographical coverage, data continuity, standards etc)







User needs: Observing System/Network

- Meeting needs for spatial, temporal, and disciplinary integration
- Common data protocols, data standards, continuity
- Methods for data archiving, sharing and use
- Timely data
- Database: descriptions; analysis; quantitative and qualitative data; translations
- Effective data management system to ensure legacy
- International coordination and cooperation
- Integration with Arctic stakeholders, local and indigenous communities
- Interdisciplinary collaboration: increased accessibility to policy makers
- Scientific access (e.g. Russia)

Proposed Network on Arctic Rapid Social Ecological Change (NARSEC) – ICARP II

- Social-ecological system is unit of analysis.
- Goals of network to link field studies: go beyond isolated ethnographies and case studies.
- Take advantage of intensive data collection associated with IPY.
- Investigators conduct field studies of change to understand driving factors and internal processes in case study of socialecological systems.
- Use NARSEC to link and compare case studies to understand diverse change pathways and their implications for resilience and vulnerability.
- Develop a set of stylized facts generalized propositions or rules – to understand and explain determinants of observed patterns of change.

Opportunities for collaboration and integration among existing groups:

- Current collaboration: ASI, SLiCA, ArcticStat, POENORD, ECONOR
- Collaboration could be broadened, perhaps via NARSEC (Network on Arctic Rapid Social-Ecological Change); an ICARP II proposal
- Gaps: Geographic coverage, integration of local and traditional knowledge, access to data, physical science collaboration



Arctic/Indigenous communities

- Expanding research impacts
- Strengthening communication and partnerships with local and arctic communities
- Research collaboration
- Integrating local and traditional knowledge; a critical link



Support issues:

- Infrastructure and support.
- Resources for logistics and data collection.
- Resources for organizing, and connecting system.
- Communication, data transmission, and management.
- Building interface between existing and future arctic research and infrastructure.
- Improving communication and coordination between agencies.



Improved access to disaggregated, timely, appropriate data for more accurate projections and assessment of impacts. Research and data to enable monitoring of human development.

