

Rasmus Ole Rasmussen

Nordregio – Nordic Centre for Spatial Development, Stockholm
NORS – North Atlantic Regional Studies, Roskilde University

Observing and managing economic and social change

Introduction

The Arctic has experienced several major socio-economic shifts during time, and is presently in the midst of a period characterized by new change. In most cases the changes have been markedly influenced by the interactions between the natural system of climate change, and the socio-economic and socio-technical system of resource exploitation. Similarly, the interaction between the Arctic and the South has shown similarities, primarily based on the southern interests in the renewable and non-renewable resources in the North. Even characterized by similarities in the overall environmental and geopolitical conditions, however, the socio-economic changes have been remarkably varied. Not only seen in a circumpolar or global perspective, but also in a regional and local perspective the response to changes has been characterized by a rich variation. Understanding these changes, and being proactive in relation to the present processes, is very demanding regarding access to data, and the presentation will, through selected cases, focus on the relation between data access and data demand, and the understanding of the dynamics of society emphasizing the interaction between the economic and social systems.

Time series data

With access to short term data it is very easy to misinterpret ongoing changes as unique, determined by special conditions in time and space. By establishing time series data on long term changes in economic, demographic and social conditions, however, opportunities to analyze the individual events in this perspective enables an understanding of differences in short term and long term processes, and eventually differences between event driven and underlying processes of change.

Active data access

One and two dimensional data (simple lists and tables) are generally considered to be better than no data. But interpreting data at this level very often limits the opportunities to go beyond the paradigms used in establishing the data lists and tables. In order to enable new approaches the data should be *active*, i.e. enable interpretation across different lists and tables. And to do that requires data accessible in non-preformatted structures, first of all in the form of relational databases.

Scale problems

Similarly to the previous example, data at a highly aggregated level, for instance national data, may give decisive limitations in relation to interpretation. National income data hides the fact that a high national income level may only be valid for a certain part of the population, while poverty may be characterizing other parts of the population. Similarly, national data may hide important regional differences. And even data at the regional level may disguise the fact that communities or individuals are living under conditions that would be considered unacceptable by everybody, but not visible due to lack of data. Averages do not account for real world changes. So access to detailed data in both time and space is central in understanding both economic and social processes.

Interaction between data quantities and qualities

There is an intimate relation between the quantitative and qualitative side of data. Basically, they can be considered the two sides of the coin needed in order to give real world understanding. In spite of many attempts to eliminate or down-value one or the other side, only the application of both sides gives the means of developing durable and insightful understanding of the social and economic processes.

Contemporary dynamics

Biased focus on analysis of contemporary development characteristics easily overlook important issues needed in order to understand the ongoing processes. Such biased approaches are for example based on what is accessible (data driven) and what has been identified as key characteristics (paradigm driven) approaches. As an example: Social and economic analysis in the North tend to focus on the perspectives of ¼ of the Arctic inhabitants, namely the small group of mid aged males, by emphasizing traditions and economic activities such as hunting, herding, fishing, or mineral extraction etc. as key components in the process. They are, however, totally overlooking both the gender and the generation perspectives of the ongoing changes, where the last 20 years has resulted in a shift in the economies in the North, moving into transfer, information, and knowledge societies with marked demographic, economic and social changes totally missed by the traditional approaches.