Arctic Human Development Report

Community Viability

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In the Arctic, many local communities experience population declines as people leave to find jobs elsewhere, while few if any others move in. Some places, however, are exceptions to this trend. This chapter focuses on processes that allow communities to survive and even to prosper, the factors that underpin community viability.

Four key themes are presented. In short they are principal strategies for human development by people in the Arctic. The first is to form partnerships with outside actors in developing natural resources. A second is to combine subsistence activities with government employment and welfare. Policies on regional development can be used to create jobs, and our third strategy is to negotiate with governments for such initiatives. A fourth strategy, which has been successful for many fishing villages, is to use business and political networks to ensure access to international markets. Common trends in all these themes are the increasing connections to global economic processes and the key role that local governments play in finding modern ways to cope.

Arctic communities in context

Small communities still play a key role in the Arctic: in terms of their numbers, in maintaining ties to traditions, and in the economy of the region. Arctic communities, however, face a number of challenges connected to their rapid transition from pre-industrial isolation to being part of a global market economy. This section defines the concept of community viability and presents a context for the rest of the chapter.

Defining community viability

The word "community," or "local community," is often used to describe smaller settlements,

villages, and towns. We use the word community in this way – a geographically delimited, small or medium-sized settlement located outside the urban regions of the Arctic. Arctic communities vary in size from less than a hundred to some thousands inhabitants. There are also substantial differences with respect to their economic foundations and public services.

There are many criteria that can be used to assess community viability and it is hard to find universal indices, except for the simple measure of population development. Although it is a crude measure, it is easy to understand and makes sense to people discussing this theme, including people living in those communities. A viable community can thus be understood as one in which people feel that they can stay as inhabitants for a period of their lives, where they find sources of income and meaningful lives. In some cases, community viability is based on continuous activities of specific peoples, families, and groups, but most often viability will depend on the creativities and links generated through emigration and immigration. More comprehensive definitions of viability differ with the varying natural, societal, and cultural contexts for humans in the Arctic.

Local places with global connections

Most people in the Arctic live in rather large urban areas, like Murmansk in northwest Russia, Reykjavik in Iceland, or Anchorage in Alaska. These urban areas are centers of advanced public services, commerce, and scientific research. Most inhabited places in the Arctic, however, are rather small. These small communities are of vital importance for the use and protection of natural resources, for market-based production, and for the informal subsistence economy. And not unimportantly, some of these places are attractive to a growing number of tourists. The smaller communities are also places in which traditional and indigenous life styles and cultural traits typical of the Arctic can have a space. Compared to the urban centers, they offer far better possibilities of accessing, and living in close connection with the natural environment. As to social relations, communities vary from socially well-integrated to socially fragmented.

In any community in the modern world, social life will reflect ongoing interactions between market-directed production and commerce, welfare arrangements, and informal but stable person-to-person relations based on ties of both kinship and friendship. In smaller communities, market-based production, the public sector, and daily-life processes tend to be highly interrelated, and these relations are increasingly going on also at a distance via information and communication technologies.

Andenes in Northern Norway



Arctic communities are no longer isolated from the rest of the world. Community viability is closely linked to what power the local level has when it becomes involved in processes of a potentially global scope. Therefore any analysis of the situation has to include systems that are larger than the communities themselves. This is not only true for market and central authority relations. Even kinship and friendship relations connect over long distances, and such informal relations can be important to local business, politics, or cultural life.

A journey in time

Since the 19th century, Arctic communities have moved rapidly away from a pre-industrial stage, in which the emphasis was on harvesting biological resources and people lived in scattered household units, frontier settlements, and nomadic and semi-nomadic settlements. The indigenous populations of the Arctic were in the majority and links to the central political authorities were weak. Trading links with the outside world were present in many of the Arctic regions, however.

Industrialization, with organized manufacturing in forestry, mining, and fisheries, reached its apex in the middle of the 20th century and changed the living conditions in many places. "Company towns" were the typical communities of that period. Beginning in the 1970s, oil and gas development has gradually come to dominate the industrial sector in the Arctic. The Kola Peninsula in Russia has been an industrial stronghold of the Arctic.

Since the middle of the 20th century, much of the Arctic has been in the process of entering a post-industrial stage. Typical for this period has been a growth of the information and service sectors, including telecommunications, education, and tourism. State welfare institutions have played a major role in many Arctic communities. For some of the regions, this transition has also been marked with de-industrialization, when old manufacturing industries closed down or departed.

The post-industrial era differs from earlier eras by its multitude of organizational forms. While the household was the dominant institution of the pre-industrial era, and the factory of the industrial era, the communities of the post-industrial era lack any one dominant organization.

Challenges facing Arctic communities

Communities of the circumpolar North are facing several global trends that find their specific expressions in the Arctic regions. They include urbanization, competition over declining natural resources, welfare state retrenchment, and a transfer of authority from central to local governments.

The dominance of city regions over the rural settlements has been profound in the Arctic. In the Murmansk oblast in northwest Russia, the urban population today makes up 92% of the total population. Urbanization has also been very strong in the northern regions of the Nordic countries. Moreover, many inhabitants of small communities commute to jobs in northern cities. Younger people, women in particular, tend to move south or to centers in the North that can offer advanced education and

employment. These processes leave smaller places with an aging population, often with a majority of male inhabitants. However, the demographic situation is mixed within regions as well as between regions of the Arctic.

Resource depletion in most of the fishing areas and in some of the reindeer herding districts in the Arctic has had a negative effect on local development. In addition, liberalization of national economies has led to the commercialization of herding and fishing rights, sometimes blocking access for local people. On the other hand, regulations aimed at securing access to resources for indigenous peoples have led to conflicts with non-indigenous community inhabitants. There are also conflicts between full-time and leisure-time users of the same resources. Local community institutions for regulating access to and utilization of natural resources have been suggested as a partial answer to this problem (1).

Arctic communities have limited home markets and have traditionally depended on income from the export of natural resources, governmental transfers for service provisions, and traditional subsistence activities. In addition to increasing global competition for work and market shares, many Arctic communities are expected to lower their level of welfare provisions. As an increasing part of local employment has been dependent on public sector jobs, particularly for women, central level policies have thus been less supportive to smaller communities. On the other hand, the central level's commitment to indigenous peoples' welfare has been growing, which has led to improved services in some communities.

Within the countries of the Arctic, transfers of power to the local level have taken place, as discussed in *Chapter 5. Political Systems.* However, there are differences both in the average size of municipalities and in what mandates are placed at the local level.

Local cultures, often based on the heritage of indigenous peoples, have been challenged by both national cultures and by a global entertainment culture. Within this context, a reassertion of indigenous culture has taken place, but also a redefinition of local identities in the wake of deindustrialization and with increasing awareness of ecological and cultural values. The development of hybrid or complex identities (2), in which individuals see themselves as a mix of traditional and modern elements, is a process that may lead to innovations in the business and public sectors, to individual mobility, and to new forms of political self-assertion. On the other hand, local communities in which the complexities of identity are not acknowledged may experience social fragmentation as a result of the tension between modern and ethnic identities.

These challenges reflect influences coming into the Arctic from outside. The four ways Arctic communities have tried to respond to them, with a focus on factors that promote community viability, will be the topic of the remainder of this chapter.

Partnerships with outside actors

Several Arctic communities utilize oil and gas resources in partnership with large corporations. The challenges of this path include how to convert the economic compensation for use of these resources to productive and innovative local activities.

Russia

Generally, the situation in the Russian Arctic is one of population decline and out-migration due to economic decline since the collapse of the Soviet Union (see box below). In the past three years, however, there has been a trend of economic growth connected with the extraction of mineral resources. Some towns profit from these developments. The brightest exam-

Russian Arctic

Russia's Arctic communities have all experienced a loss of population since the collapse of the Soviet Union in 1991. Reasons behind the loss include migration to southern regions due to the closure of unprofitable enterprises and a general economic decline coupled with a dramatic increase in mortality and a decrease in birth rates. Unemployment rates are generally higher in the Arctic localities. In the settlements of the Murmansk region it was 13.4% in 2002, compared to a Russian average of 7.1% (4). In smaller communities that depend on fisheries and forestry, the unemployment rates are much higher. For example, the coastal villages of the Murmansk region - places in which people for ages have relied on fisheries - have all experienced a severe loss of jobs during the crisis of the 1990s. The unemployment rate has reached as high as 40% in some communities.



Pipeline in Montsegorsk, Murmansk Region, Russia ple is Chanty-Mansiysk in western Siberia, which builds its wealth on oil and gas revenues. Oil and gas development in most Arctic regions is in its initial stage, but it is progressing fast and starting to influence northern communities in both positive and negative ways. On the one hand, it creates prospects for an increase in income and number of jobs. On the other hand, it brings the risk of negative environmental impacts such as oil spills – the losses from which corporations often fail to compensate.

The extent to which local communities can benefit from industrial development can be highly influenced by the level of local entrepreneurship. A case study of Erv and Kharp illustrates the differences between two communities that share many other circumstances.

Case study: Erv and Kharp

Erv and Kharp are reindeer herding cooperatives located in Nenets Autonomous Okrug in the Arkhangelsk region of the Russian Federation. This area is referred to as the Arctic Kuwait because of its rich oil and gas resources. Both cooperatives have their management and herders dwellings in the village of Krasnoe. They are both cooperatives but their structures are rather different. Erv is a cooperative of *obschinas* (family based communities of herders that relate to indigenous tradition) with private property. Kharp is a cooperative with collective ownership.

In the late 1990s, both cooperatives had to cope with continuous economic difficulties, such as lack of funds, and with oil and gas development in their area causing problems with pastures. In 1996-97, herders in both Kharp and Erv were lacking cash; they could afford only basic food, and had difficulties in buying clothes and other things. Several years later in the village of Krasnoe, it was evident that the members of Erv were much better off than their fellows in Kharp. This noticeable improvement of Erv's well-being was based on contracts with the oil companies working in its territory. These agreements were initiated by Erv's management and had two parts: first, material help from the companies (financial help, use of company helicopters, food supplies,

etc.) and, second, the participation of herders in the planning of land use.

Kharp's contracts with the oil companies differed from Erv's: they were initiated by the oil companies, which provided some equipment and occasional technical help. Workers in Kharp questioned why herders of Erv lived so much better than they did. On one hand they claimed that "everyone helps Erv, local administration, foreigners, oil companies and everyone." On the other hand, they blamed their own management for not being able to make such contracts (3).

Obviously, ability to cope with economic crises and oil development depended on the cooperatives' ability to negotiate with oil companies. Erv's success was based on actions by its management, and also on the use of outside links such as assistance from the ex-president of Yasavei, the political organization of the Nenets people, and the help of a juridical bureau from Moscow specializing in issues related to indigenous people.

Erv is a case of development where local business entrepreneurship managed to secure a share of the resource rent from the oil companies as well as the possibility of influencing industrial decision-making in order to minimize the disadvantages of oil extraction for reindeer herding. Current Russian legislation is not very comprehensive in regard to compensation for land use to local populations or in tools for securing the needs of indigenous peoples. Combining local and non-local networking with local expressions of identity that include an indigenous component related to obschinas thus became a coping strategy. However, these practices are not institutionalized, and many of the herding enterprises in the area wait for help from the regional and local administration, even though the reduction of governmental support has been a major trend of the past decade.

North America

Taking part in developing oil and gas resources has been an important strategy for many communities in Alaska. The Alaska Native Claims Settlement Act (ANCSA) allowed for the creation of 12 regional for-profit corporations, which control large funds as compensation for the loss of land (5-6), as well as 200 village corporations that distribute and manage land for subsistence activities. This is further described in *Chapter 7. Resource Governance.* The developments in Alaska's North Slope Borough represent an interesting and in many ways unique case of coping with the challenges of this approach, and point specifically to the importance of political entrepreneurship.

Oil development is also important in Canada, where funding from land claim agreements led to the establishment of several for-profit corporations that are not under government control. In contrast to the case of the North Slope Borough, and also of the Greenland Home Rule Government, the Nunavut Government does not control funds from commercial activities. Instead, economic power rests to a large extent in the hands of Nunavut Tunngavik, Incorporated (7). Canadian Inuit Corporations actively pursue the development of their own industries (8).

Theme summary

In some cases, oil and gas development can provide cash income and create new opportunities for reviving communities, as illustrated by cases in North America and Russia. When successful, these ventures have often involved a large degree of political entrepreneurship as the basis for productive partnerships with outside actors. For community viability, however, an important factor is to what extent the local community has ownership rights to, or other forms of control over, the resources.

Combining pre-industrial and welfare economies

In some communities, there are almost no market activities. These include areas where oil and gas exploration provided only a brief experience of an industrial economy. They often rely on a combination of government support and subsistence activities. Two case studies from the Canadian Arctic illustrate this theme.

Holman/Uluqsaqtuuq, Victoria Island

In the late 1970s and the early 1980s, communities in the Northwest Territories faced the challenges of oil exploration in the Beaufort Sea and the Mackenzie Delta. Some communities suffered the experience that jobs and incomes lasted only as long as the exploration and construction period. In some cases, drilling holes were dry. Still, some communities gain income from the land claim agreements, such as that provided by the 1984 Inuvialuit Agreement. One of these communities is Holman/ Uluqsaqtuuq on the west coast of Victoria Island, with 400 Inuit inhabitants (Innuinaq and Inuvialuit).

Holman became a mission and trading post as late as 1939, and it was not until the 1960s that community development took place as people moved into town from the camps where they used to live. In the wake of the land claims agreement, it became a municipal government unit and received hamlet status in 1984. This led to many new amenities and facilities, including television and a new school (*9-10*). The community also has plane connections to other places in the Northwest Territories several days a week.

While subsistence activities still play a role in this village, it is wage labor that provides most people with income, and nearly all from public service jobs. Still, only half the working-age population have regular full-time or part-time jobs. Some have seasonal paid employment and live partly on welfare payments.

Holman has no industrial activity. Jobs are found in the local authority, in the school, and the health center, in shops, and in the Holman Community Corporation, which is financed by the Inuvialuit Regional Corporation. Administrative positions are held by nonnative people. In many other positions, people work side-by-side with their kin. Subsistence hunting has become a leisure activity for many inhabitants. Supported by funds generated by industrial resource extraction elsewhere, people in Holman have taken the step directly from the pre-industrial to a post-industrial phase, depending heavily on public service transfers.

Kuujjuarapik, Nunavik

Kuujjuarapik is the southernmost of 14 Inuit villages along the coast of Nunavik (*11-12*). It can only be reached by plane or by sea in summer. This village consists of two communities: an Inuit population of around 700, and a Cree population of more than 600. In Cree, the name of the village is Whapmagoostui. Although there is evidence of relations between populations at the individual level (especially through marriage), relations at the institutional level are few. In fact, each community has been granted its own institutions by the James Bay and Northern Quebec Agreement.

This is a community where people have been confronted with several choices in connection with the land claims process. The Great Whale hydroelectric project was planned for construction near Kuujjuarapik. As a result of the James Bay and Northern Quebec Agreement, the people of Kuujjurapik were offered relocation to a new village – Umiujaq (constructed in 1986), north of Kuujjurapik – and some moved. Meanwhile, the hydropower project was postponed and some have moved back to Kuujjuarapik.

Kuujjuarapik is a case of community development typical for the Canadian Arctic. As in Holman, there is almost no market economy and little private business development. This is due to late modernization and societal integration of Arctic communities in Canada, but also because this integration is shaped by publicly governed and subsidized processes. The role that the Hunter Support Program plays in Kuujjaurapik illustrates this well.

In contrast to Greenland, for example, there is no legal local market for country food in Arctic Canada. Hunters can only share with other community members and maybe sell informally. The Hunter Support Program, however, operated by a local committee with money from the Quebec Government, supports a municipal freezer arrangement.

Hunters that need support to cover their hunting expenses can receive a monetary subsidy from the program if they give the municipality some of their catch. Although it looks like a sale it is not, as the money received in exchange for the catch is not proportional to the value (defined by market prices) of the meat, nor to its weight, and even less to the preferences of the community members. On the contrary, money allocated by the program supports a sustainable hunting practice by encouraging hunters to catch different species all year long. By this arrangement, hunting for popular species is not rewarded. The money that the hunters receive can thus be regarded as an incentive outside the market economy. This is underlined by the fact that food stored in the municipal freezer is made available to every community member, who can thus pick up country food for free, an instance of modern solidarity (13).

This program and the municipal freezer produce a certain social division of labor. Informal relations between kin and community members are still possible and do exist, as many hunters keep a portion of their catch to share with their family networks. But this practice is now combined with the politically governed and publicly funded distribution program of country food, making market development for this type of food not only illegal but also unrealistic.

This is again a specific combination of preand post-industrial development, where public funds support the continuity of traditional hunting practices. The redistribution of food via the freezer differs from informal sharing and exchange, as it does not build on direct social ties between people. For those who can choose where they get their country food, more autonomy has been gained, and traditional personto-person ties are no longer the sole basis of social integration. The basis of social life in a community like Kuujjuarapik has thus become the choice of autonomous individual households.

Theme summary

The two communities Kuujjuarapik and Holman illustrate how industrial social forms can transcend traditional social forms even when there is no local industrial development. People become integrated on a new basis as citizens. People are heavily dependent on public transfers, however, and there are few ways open for community development through locally embedded business entrepreneurship.

Negotiating for jobs

How can Arctic communities use opportunities to negotiate for public initiatives that create new jobs? When can such opportunities be the start of a cultural revival and of creating local business opportunities? Three cases from Scandinavia illustrate the challenges in societies where public service sector jobs expanded until the 1970s. The provision of welfare services to all inhabitants, regardless of location, has thus played a role for community viability, along with the general political goals of regional development.

Storfjord, Norway

Storfjord is a municipality along the major north Norwegian highway about 120 km from the city of Tromsø. The municipality comprises several villages, is inhabited by three ethnic groups (Norwegian, Saami, Kven), and borders on both Sweden and Finland, with easy road connections. Until the 1970s, there were very few business enterprises and a low level of public services in this community. A large hydroelectric development was then proposed. To

Northern Norway

In northern Norway, there is a population of about 450,000. Approximately 10,000 people have registered themselves in the Saami census register, but the number of Saami-speaking people is higher than this. The Saami Parliament is located in Karasjok, and it is elected by registered Saami voters from the whole country.

The total number of people in northern Norway has been relatively stable during the last decades, but an increasing proportion of the population live in urban municipalities, Tromsø with a population of 62,000 the biggest one. Unemployment rates are low (about 4 %) and not significantly higher than in southern Norway. Very few of the many smaller localities in the region have been abandoned, but almost all of them have suffered population declines since the 1980s. Among the exceptions from this overall trend are the two Saami municipalities Karasjok (pop. 2,900), and Kautokeino (pop. 3,000), the fishery-based municipality of Båtsfjord (pop. 2,400) in Finnmark County, and the municipality of Storfjord (pop. 1,900) in Troms County (14).

implement it, the regional energy authority needed approval of the project by the municipal council.

Instead of just welcoming this project and the jobs that would come during the construction period, the people of Storfjord, through their elected representatives, went into hard negotiations with the developers and succeeded in getting compensation in the form of a laundry which would service public institutions in the whole region, providing jobs for almost 30 women. Moreover, a voluntary-sector-based rehabilitation center for people with heart and

Saami children in Norway, spring 1975



lung diseases was established, and a missionary school – a branch of the US-operated Youth with a Mission – was opened. In addition, the developer pays a special tax to provide capital for two funding schemes, one for small-scale business development, and one for investments in local fishing and farming equipment.

Female occupational levels exceed male, which results in a vital population structure as well as a favorable environment for growing up (*15-16*). A comparative youth study has shown that young people really appreciate the easy access to nature and the "good social environment" in the locality

Storfjord is a story of developing strategies for negotiating with regional and central level public agencies. The community is admittedly weak on business innovations, but community dynamics work on the basis of households combining incomes from public and private sector sources. Many one-person or family-based firms, starting with support from the municipal funding arrangements, take advantage of the local and the regional markets for construction and services. And as in many other Arctic communities, there is a tendency to organize the stable public sector jobs on a part-time basis, particularly jobs for women.

Culturally, complex identity formation is taking place in the context of common "projects," such as a large annual market festival, and Storfjord is asserting itself as an arena of northern multi-culturalism. Storfjord's municipal authorities play a key role in providing the agenda for networking and funding of public welfare investments, but this would not work without the diverse income base at the household level, ranging from agriculture to jobs requiring a long-distance commute.

Karasjok and Kautokeino, Norway

Karasjok and Kautokeino are neighboring municipalities, located in the inner part of the county of Finnmark, and bordering on Finland. Both municipalities are connected by road to the nearest regional centers and airports (Alta and Lakselv). In spite of setbacks in reindeer herding, they experienced population growth in the 1990s. This growth has been most evident in the municipal centers, where several central-government-funded Saami institutions, such as the Saami Parliament in Karasjok, and the Saami College and the Saami Theatre in Kautokeino, are now located.

The successful outcome for these two munic-

ipalities is the result of processes involving the Norwegian state and the Saami organizations. Once the Norwegian Parliament had decided to contribute to the construction of a broad range of Saami institutions, the two inner Finnmark municipalities were the inevitable choices. As a number of institutions were to be created, this facilitated the distribution between the two Saami "capitals." Being the core Saami communities, both Karasjok and Kautokeino have also been able to develop a viable tourist industry with a focus on activities related to reindeer herding.

Northern Sweden and Finland

The northern peripheries of Finland and Sweden have experienced a population decline due to the restructuring of the forestry sector, agriculture, and the steel industry. When the economic crisis was over, only the urban centers of the regions benefited, while unemployment remained high in the rural peripheries. Today public sector services are by far the most important provider of jobs.

Sweden and Finland joined the European Union in 1995, and contemporary regional policies are implemented in a variety of EU supported programs, providing infrastructure support for tourism development, but also facilitating the formation of village development groups. Some of these programs create a project economy, where much activity is associated with adult education and other types of infrastructure development. While substantial results within the business sector are hard to achieve, project employees are required to work to raise funds for the next generation of projects.

Jokkmokk, Sweden

Jokkmokk municipality has 6,000 inhabitants, with more than 3000 in the central town of Jokkmokk. The municipality stretches from the highlands in the west with reindeer herding, recreation, and tourism, to the intensively utilized forestlands and wetlands in the east. Rivers have been used for hydropower development.

In 1960, Jokkmokk reached its maximum population of 12,000 inhabitants. Since then, the local forest industry has been in steady decline and the last sawmill in Jokkmokk has been closed (17). The vast forest resources are now transported to sawmills and processing plants outside the municipality and citizens of

Jokkmokk feel their resources are being extracted without proper compensation.

Jokkmokk is home to a Saami reindeer herding community. In addition to reindeer herding, their economic activities include hunting, fishing, and tourism. Saami entrepreneurs have gained some influence through international networking in the formation of the UNESCO cultural heritage landscape Laponia (18). The idea behind such cultural landscapes differ from those of conservation areas and national parks in that they recognize the economic and cultural activities in an area as an integral part of the area. The process of realizing Laponia, however, has been full of conflicts between state, regional, municipal, Saami, and international actors; few economic benefits can be documented.

Jokkmokk's present economy is dependent on transfers from the Swedish state to finance much of the public sector activities. Jokkmokk no doubt has some advantages from being the location of the language department of the Swedish Saami Parliament and of other Saami institutions, but this has not had the same effects in added employment opportunities as in Karasjok and Kautokeino in Norway. The attempts at economic diversification, for example in "cultural tourism," are by no means sufficient to compensate for the vast job losses in the industrial sector.

Theme summary

In the inland of northern Scandinavia, many small communities depend on political initiatives and funding to create local jobs. In some cases, negotiations between local representatives and governments have led to new institutions and small businesses, which have provided a base for maintaining viable communities. However, the picture is mixed. Communities that used to depend on forestry face problems with the displacement of this industry. There are also marked differences in the priority given in official welfare and regional policies for the periphery areas in Norway, Sweden and Finland. Furthermore, Norway has the advantage of the revenues from oil, redistributed nationally.

Networks

Combinations of market-driven processes, a politically governed economy, and informal relations can provide a way to ensure survival for small communities. This has been the case for a number of fishing communities across the Arctic. One key to success has been access to the international fisheries market. Another has been to diversify the economy. A major challenge has been to transform the gains from commercial, political or civic networking to lasting local development.

Båtsfjord, Norway

Båtsfjord is a modern fishing village in Finnmark County, situated on the coast of the Barents Sea. It has all-year road connections, in addition to an airport with daily connections and transport by sea. As in all peripheral Norwegian municipalities, public sector employment is important, but in Båtsfjord the fishing sector is still the backbone of the community. For decades, the owners of the landbased processing firms have co-operated in order to make the community an attractive fishing harbor.

During the 1990s, the managers developed a common strategy to take advantage of the more liberalized fishery regime in Norway, and in Russia as well (19). Despite a deep crisis in cod resources around 1990, they succeeded in securing stable and even growing deliveries by making contracts with trawlers from the Russian fleet, diverting them from delivering their catch back in Russia by offering Norwegian prices. Meanwhile, reluctance on the part of the local population to work in filleting plants had been countered by bringing in refugees, coming to Norway mainly from Sri Lanka, to work for Norwegian fixed wages. More recently, this refugee labor is being partly replaced by Russian workers, women and men, coming in on shortterm contracts (20). To secure diversification at the local level, the owners of the fish processing industry have cooperated with the municipal authorities and with central government agencies. Båtsfjord has, for example, set up sports facilities, relocated the airport in order to be able to serve 40-seat airplanes, and offers secondary and university level education on site and through distance learning.

In the highly volatile fisheries industry, setbacks come on short notice, however. It is also a problem to convert business success into development of culture and identity. Many of the refugee workers have by now left Båtsfjord, and a study of young people in Båtsfjord showed that the younger generation expresses mixed feelings about their home place (21). Business innovation is the main thing in Båtsfjord, but the networking involves only a limited group of actors connected to the international fish trade (22).

Teriberka, Russia

Teriberka is a fishing village on the coast of Kola Peninsula, 120 km northeast of the city of Murmansk with a population of 1,400. It is one of the very few fishing villages left in this highly urbanized region. It was, for ages, a wealthy town, and open to international contacts, especially at the time of the Pomor trade before the Russian Revolution of 1917. During most of the Soviet period, Teriberka experienced intensive development, with a population maximum of 12,000 inhabitants in the 1960s. In the last decades before perestroika, the population stabilized at a level of 2,400 inhabitants. The economy has been based on a fishing kolkhoz, which owned the fishing fleet, several fish processing plants, and a shipyard (23).

In the beginning of the 1990s, the village faced a deep socio-economic crisis caused by the transformation of Russia to a market economy together with the introduction of strong regulation of fish resources. In 1993, the shipyard was closed and about half of the jobs in the fish processing plants were lost. The former "pride of the coast" was about to collapse as the local economy crashed. Living standards declined and a class of "new poor" appeared, made up of well-educated people. The welfare infrastructure was cut back, with reduction of state transfers and a diminishing base for local financing.

Since 1994, the dominant strategy in Teriberka has been to attract external (primarily foreign) capital to the traditional sector of its economy. These efforts resulted in establishing a joint Russian-Portuguese-Lithuanian fish processing enterprise and a project of cooperation with the Norwegian municipality of Båtsfjord. These business initiatives were mainly a result of ties between outside entrepreneurs who had either formerly worked in Teriberka or who knew about the place from business partners. The local and regional governments provided strong political support for measures to attract external financial resources and to stimulate cross-border cooperation. Informal social ties connected to the fishery economy had been very strong between family members and neighbors, but these ties played no role as a basis for the new business initiatives.

New initiatives in the fisheries industry have been important for keeping the local economy alive. Nowadays, people of the village can find work in fish processing, both at the kolkhoz and at the new enterprise. In addition, 40-50 workers from Teriberka (9% of the workforce) have been employed in fish processing in Båtsfjord, which is seen as a fortunate way of coping with poverty.

Oil and gas transportation development in the region may bring another perspective into Teriberka's life, as there are some prospects of constructing transportation facilities in the village. Realizing these plans depends on corporations from outside the region, but people in the village believe this new project will create new local jobs.

This case is about attracting external resources to a traditional sector of the economy via entrepreneurial and political networks at the regional and local levels. During the most difficult period, the decline in living standards led to the rise of a subsistence economy. The local informal economy can thus be regarded as a safety net.

Iceland and the Faroe Islands

Community development in Iceland and the Faroe Islands is much about networking and entrepreneurship in the fishing industries, where the very small municipalities used to play an important role in organizing and facilitating business activities. It is much an "economy of flows," where the decisive factors keep changing all the time: the presence of fish in the sea varies, as do regulations concerning access to these resources and international markets. An important response, especially in Iceland, has been to diversify the economy, including new information technology and tourism developments. The two municipalities, Ísafjörður and Hornafjörður, illustrate this well.

Ísafjörður is the main town within a municipality that also includes villages and districts south of the town (24). While the population of the villages had declined to around 1,000 in 2002, the town of Ísafjörður has had a stable population of just over 3,000. The system of individually transferable quotas in the Icelandic fisheries has led to the municipal area losing both some of its quotas and some of its vessels. Instead, Ísafjörður is becoming a town dominated by public and private service sectors. The strategy of the municipal authorities has been to make Ísafjörður a center for marine research in Iceland, and a number of businesses in fishing technology have located there. Tourism is also



PHOTO: NIFLS FIMARSON

growing. The municipal authorities have played an active role in supporting innovative projects. Ísafjörður is a town that its young people take much pride in, according to a survey of young people's perceptions of their communities (25). Many migrant workers from different countries have come to work in the fishing industries and are now enriching cultural life, for example by the creation of an annual festival displaying the cultural multitude of the community.

The Hornafjörður municipality covers a 200 km long but narrow strip of land on the south east side of the glacier Vatnajökull. It includes the fishing town of Höfn and five small rural municipalities, and has 2,300 inhabitants. The fishing industry in Höfn has coped more successfully with the quota system than Isafjörður, but the municipality has nevertheless engaged in strategies of economic diversification. A major new source of income is tourism, which was facilitated by the completion of Iceland's circle road that made Skaftafell National Park beneath Vatnajökull much easier to reach by car. Major events, such as the 1996 sub-glacial volcanic eruption and the following flood, have created extra visitors. Other job opportunities were created when a biotechnology venture was established in Höfn. Apart from the raw materials useful for producing enzymes and seafood flavorings, there were few reasons to locate the business in Höfn: but the choice of location was facilitated by personal networks of a non-business character. As in Ísafjörður, the municipal authorities of Hornafjörður are actively promoting an innovation strategy, which includes bringing together secondary and continuing education facilities, the municipal library, an entrepreneurial center, and a branch of the University of Iceland. On the other hand, inhabitants of Öræfi (a small formerly independent municipality, now part of Hornarfjöður) more than 100 km away from Höfn feel that municipal authorities do not do much for them.

These Icelandic cases indicate a shift on the part of local people away from trying to stabilize and "ground" the volatile fishing sector towards developing strategies that are more in line with post-industrial attempts to become involved in dynamic game plans of potentially global scope. This includes attracting new types of tourists and developing high-tech enterprises related to marine resources and/or advanced services for the fishing fleet. By capitalizing on informal networks and allowing entrepreneurship and outside contacts to flourish, at least some fishing communities are coping with the challenges posed by the process of restructuring traditional industries.

Greenland: Uummannaq and Ilulissat

The introduction of Home Rule in Greenland produced many expectations of policies for community development, especially in the villages and rural districts. Today, regional policy is integrated into all policy in Greenland, but with an increasing orientation towards economic independence for Greenland as such. There is thus less emphasis on the leveling of regional disparities.

Municipal authorities in Greenland are expected to behave as "midwives", in facilitating business development in their areas. Two municipalities in West Greenland have been relatively successful in connection with the success of specific fisheries: Uummannaq, with a stable population in the 1990s, and Ilulissat, with a growing population in the same period (26-28).

The municipality of Uummannaq (population 2,700) comprises the town of Uummannaq (with a population of 1,400) and seven smaller settlements separated from the town by water or ice. Travel in the vast municipal area is possible by boat, snowmobile, dog sledge, or even by car over the sea-ice, but isolation is part of life,

Whale watching is a growing business in Iceland



Supply ship in springtime, Ittoqqortoormiit (Scoresbysund), East Greenland

especially when it comes to contact with the rest of Greenland. Sea transport is only possible in summer. Since 1999, air connections go through the new airport for fixed-winged aircrafts near the small village of Qaarsut, 20 km across the sea from Uummannaq, thus involving a further transfer by helicopter to Uummannaq or the other small villages. As a result, tourism development is also limited. After the closure of the Maarmorilik lead and zinc mine in 1993, the main economic activity, except for the public service sector, has been the fishing of Greenlandic halibut. There are fish plants in the town and in several of the villages producing halibut fillets. In addition to Royal Greenland, the home-ruled company, new private firms have tried to enter into this business since the late 1990s, supported by cooperative initiatives between the municipality, local fishermen and non-local capital. This has caused conflicts, for example concerning obligations to secure jobs on-shore instead of relying on more profitable factory ships. These events show that though municipal and central governments are still major actors, the fishermen's organization also plays an important role.

Entrepreneurship in Greenland is much a

question of political activities and personal networks. The intersections and networks between business, political and trade associations, the public sector, and fishermen are what nourish innovation. This is also true for Ilulissat, the third largest town in Greenland with 4,500 inhabitants, and growing since 1990. Its municipal district also includes some smaller settlements with a total of about 500 inhabitants. Ilulissat's economy is different from Uummannaq's. It hosts one of Royal Greenland's cornerstone plants for processing both shrimp and Greenland halibut and the biggest fleet of private fishing vessels in any town in Greenland. Ilulissat is also a major tourist destination in Greenland, facilitated by its location vis-à-vis the most productive glacier fjord in the northern hemisphere and its airport for fixed-winged aircrafts (opened in 1984).

Entrepreneurship in fisheries has played a major role in Ilulissat. Building on municipal initiative and a combination of local and international fisheries' networks, a business corporation began fishing snow crabs in 1995. The director was recruited, local fishermen are shareholders, and the factory ships only employ

people from the municipality. The 90 local citizens working on the factory ship operating in distant waters earn high incomes, which also benefits the municipal authority by income taxation.

Theme summary

In the face of a volatile market and dynamic marine resources, many fishing communities in the Arctic have had to become more competitive. The economic success of one community may well be at the cost of others in a zero-sum competition over fixed resources. Success is often built on a combination of business, public, organizational, and personal networks. The multiplicity of local stakeholders is important in making business innovations issues of public interest, auditing their legitimacy and testing whether they make sense to local people.

Another strategy has been to diversify the economy, often with tourism. Good communications are important in order to attract tourists.

Finding patterns

It is hard to point to an overall pattern in Arctic community development. Even though the forces of globalization may be based on a common set of principles of economic liberalization, there are differences in how specific regions and communities are exposed to those forces. Moreover, buffering mechanisms and compensatory measures vary within each national setting. This includes differences in welfare and regional policies, but also in policies towards indigenous peoples. Other factors are distances and the presence, and condition, of road connections that allow access to regional labor markets on a commuting basis.

The economic structure of communities can affect their viability. In many fishing communities along the North Atlantic rim and in some communities dependent on oil or minerals extraction, the economic basis may sustain a relative high standard of living. The situation is quite different in communities that depend in large part on a combination of subsistence activities, public sector jobs, and public transfers.

Local strategies can set specific local resources in motion, both by stimulating individual entrepreneurship and by more collectively oriented coping strategies and networking. In both forms, the strategies involve ties and relationships with institutions and actors outside of the community.

Community-based strategies must be understood both with respect to how relations to the globalized economy are being handled and how central and regional governments respond to specific bottom-up initiatives. In a number of successful fishing communities, a combination of market-driven processes, a politically-governed economy, and informal relations were found to intersect, along with local access to fisheries. This can be described as a way of combining industrial and post-industrial elements. Their direct involvement in the international fisheries economy has provided these communities with income from these markets, in addition to the income created by tourism and in the public and informal sectors.

Many communities without strong market connections combine subsistence activities and incomes from the public or corporate economies. Some communities have also been able to capitalize on compensations for oil, gas and hydropower developments, in some cases though not always with relatively high incomes as a result.

This diversity among Arctic communities begs for moderation in the ambitions of formulating an overall policy for Arctic community development. Two observations from the case presentations seem to be salient, however: First, while subsistence activities are going on in many villages, it is in fact wage labor that provides most cash income, and a large proportion of that income stems from public service employment. The second observation is that claiming compensation for utilization of local natural resources is becoming increasingly common, including compensation for loss of fish quotas, or industrial restructurings that have led to fewer local jobs. It is not always easy for communities to make central and regional government authorities accept compensation schemes, however, and to convert such compensations into productive and innovative activities at the level of the community.

Key conclusions

Community development is a complex process where, unsurprisingly, small events make the difference between who succeeds and who does not. The complexities are becoming increasingly important as Arctic communities are integrated in northern modern societies and in global economies. The potentials for development lie in measures that balance global economic flows, political organization, and often far-reaching civic networks. In some instances, Arctic communities have succeeded in really influencing rather than just adapting to external agendas and flows.

Economic actors located closer to consumers are often profiting most from the industrial extraction of Arctic resources. Welfare state subsidies to the Arctic, understood as compensations for this loss of natural resources, are therefore justified.

A proper infrastructure is necessary in Arctic communities in order to enable peripherally located businesses to be competitive, both in marketing products and in recruiting competent specialists and staff. This includes both physical and digital communication networks.

Self-government and home-rule government were introduced with promises of local and regional development, but paradoxically the political and economic priority given to national and regional independence may result in less focus on local development issues. However, self-government and independence may also lead to a stronger political culture of public debate and political accountability, thus securing political agendas where issues, initiatives, and projects can be formulated and evaluated.

Municipal self-government plays a significant role in community development. An effective and democratic local government structure is able to coordinate different public services, supporting both daily life and cultural life, and stimulating business development. Municipal authorities are crucial actors when they combine the roles of (1) partner, supporter or even entrepreneur in innovation, (2) gate-opener, establishing contacts and legitimating actions by networking, and (3) integrator, securing the direction and commitment of actions to locate development. As the legitimate community representative, local government should have the capacity to bridge local and non-local relations, and the more isolated the locality the more important it is.

It is crucial to stimulate learning across the Arctic by strengthening international cooperation, not least at the level of communities, municipalities and first nations.

We suggest that community viability in the Arctic depends on people coping locally and at a distance, building on local citizenship, rights of mobility, bridging between social fields, and post-industrial economic development.

Gaps in knowledge

Understanding community development and its connections to global processes requires crosssectorial analyses that focus on the spill-over and connections between economy, nature, politics, and informal daily-life practices, not only at the local level, but also the links to higher levels. Such comprehensive community studies should investigate the relations (or lack thereof) between private businesses, associations, the public sector, and informal networks, including those working at a distance. Such studies can be implemented most fruitfully in cooperation with local authorities and communities.

Researchers working on community development across borders need support from international bodies to cope with barriers to research, including those of infrastructure, language and permissions. An international research project on "Modern Societies in the Arctic" would be valuable, and should help make Arctic communities interesting to institutions of knowledge, research and development around the world. While such development carries risks of continued colonialism, this would certainly also be the case if research on Arctic communities and societies were to be isolated and associated only with images of the pre-modern.

Chapter summary

A viable community is one in which people are able to dwell and prosper, for some period, finding sources of income and meaningful lives. For many small communities across the Arctic, populations have declined because of a lack of job opportunities. There are also examples of communities, however, where a combination of local entrepreneurship, engaged political leaders, and government initiatives have created more hopeful situations, where thriving businesses as well as cultural revival give people a meaningful way of life and thus community viability. This chapter has described social transformations in several such small Arctic communities and it points to some key factors for such positive developments, issues ranging from resource management and connections to global markets, to the role of public services and infrastructure.

References

- S. Jentoft, Ed. Commons in a Cold Climate: Coastal Fisheries and Reindeer Pastoralism in North Norway. Man and the Biosphere Series 22 (UNESCO, Paris; Partenon, New York, 1998).
- 2 V. Stordahl, "Identity and Saminess expressing world view and nation," in *Majority-Minority Relations: the Case of the Sami in Scandinavia* (The World Commission on culture and development, Guovdageaidnu, Norway, 1994).
- 3 T. Tuisku, "Surviving in the oil age, co-existing of the reindeer herding and petroleum development," in *Social and Environmental Impacts in the North*, R. O. Rasmussen, N. E. Koroleva, Eds. (Kluwer Academic Publishers, Dordrecht, 2003), pp. 449-461.
- 4 V. Didyk, L. Riabova, "Murmansk Province in 2002: Biannual monitoring review" (Institute of Economic Problems, Kola Science Centre RAS, Apatity, 2003); www.economicmonitoring.com
- 5 F. L. Korsmo, "The Alaska Natives", in *Polar People, Self-determination and Development*, Minority Rights Group, Ed. (Minority Rights Publications, London, 1994), pp. 81-104.
- 6 H. P. Huntington, *Wildlife Management and Subsistence Hunting in Alaska* (Belhaven Press, London, 1992).
- 7 J. Hicks, "The Nunavut land claim and the Nunavut Government: political structures of selfgovernment in Canada's eastern Arctic," in *Dependency, Autonomy and Sustainability in the Arctic,* H. Petersen, B. Poppel, Eds. (Ashgate, Aldershot, 1999), pp. 21-53.
- 8 I. Creery, "The Inuit of Canada," in Polar People, Self-determination and Development, Minority Rights Group, Eds. (Minority Rights Publications, London, 1994), pp. 105-146.
- 9 P. Stern, "Modernity at work: wage labor, unemployment, and the moral economy of work in a Canadian Inuit community," in Northern Communities and the Global Economy, R. A. Caulfield, M. Kojima, Eds. (Circumpolar Arctic Social Science Ph.D. Network (CASS), Proceedings of the Fifth CASS Field Course, Alaska 2000, Department of Alaska Native and Rural Development, College of Rural Alaska, University of Alaska Fairbanks, 2001), pp. 167-173.
- 10 P. Stern, "Subsistence: work and leisure," Études/Inuit/Studies, 24, 9 (2000).
- 11 T. Martin, "The reflexive community, quest for autonomy as a coping strategy in an Inuit community," in *The Reflexive North*, N. Aarsæther, J. O. Bærenholdt, Eds. (MOST and Nordic Council of Ministers, Nord 2001:**10**, Copenhagen, 2001), pp. 41-69.
- 12 T. Martin, De la banquise au congélateur modialisation et culture au Nunavik (Presses de l'Universite Laval and UNESCO, Quebec and Paris, 2003).
- 13 Martin 2003, chapter 4 (12).

- 14 Population figures in this section of the chapter are from Norwegian official statistics for 1992 and 2003: *Kommunehefter, Folke- og boligtelling 1990, 2001* (Statistics Norway, Oslo).
- 15 M. Aure, "Innovative traditions? Coping processes among households, villages and municipalities," in *The Reflexive North*, N. Aarsæther, J. O. Bærenholdt, Eds. (MOST and Nordic Council of Ministers, 2001), pp. 89-113.
- 16 On Storfjord, see also Bærenholdt and Haldrup 2002 (29).
- 17 S. Lloyd, "Contours of the Swedish forest landscape," in *Transforming the Local*, N. Bærenholdt, J. O. Aarsæther, Eds. ((MOST and Nordic Council of Ministers, Nord 2001:25, Copenhagen,2001), pp. 83-117.
- 18 K. Lindahl, "Coping strategies and regional policies, social capital in Nordic peripheries – Sweden," (Nordregio Working Paper no 6, 2002).
- 19 G. Hovgaard, Globalisation, Embeddedness and Local Coping Strategies. Ph.D. dissertation, Department of Social Sciences, Roskilde University (2001).
- 20 M. Aure, "The transnational North: constructions of labour migrants," in preparation.
- 21 Young people in Båtsfjord and Storfjord have been included in the UNESCO-MOST study Young voices – Northern Futures (*30*).
- 22 By February 2004, all the processing factories had laid off workers, and the population figures show a loss of about 100 inhabitants during 2003.
- 23 Teriberka has been studied in a number of MOST CCPP studies, including Riabova 2001: pp. 115-138 (31) and Skaptadóttir, Mørkøre and Riabova 2001: 43-67 (32).
- 24 Ísafjörður and Höfn have been studied in a series of studies supported by Nordregio, building on the CCPP platform (*33-34*).
- 25 This was very apparent when young people in Ísafjörður, during a visit of the president, wrote their school essays for the UNESCO-MOST study Young voices Northern Futures (*32*).
- J. O. Bærenholdt, "Circumpolar coping strategies

 embedding transnational cooperation in local practices in Greenland?" *Étude/Inuit/Studies* 24, 79 (2000).
- 27 J. O. Bærenholdt, "Coping strategies and regional policies, social capital in Nordic peripheries – Greenland, "Nordregio Working Paper 2002:4 (2002).
- 28 J. O. Bærenholdt, "Locals versus mobiles explaining different dynamics in North Atlantic localities," in *Coping Strategies in the North*, N. Aarsæther, J. O. Bærenholdt, Eds. (MOST and Nordic Council of Ministers, Copenhagen, 1998), pp. 201-219.
- 29 J. O. Bærenholdt, M. Haldrup, "Economy-culturerelations and the geographies of regional development" in *Voices from the North, New Trends in Nordic Human Geography*, J. Öhman, K. Simonsen, Eds. (Ashgate, Aldershot, 2002), pp. 56-58.

- 30 C. Bjørndal, N. Aarsæther, "Northern Futures Young voices. A report from the UNESCO MOST Circumpolar Coping Processes Project" (University of Tromsø, Tromsø, 2000).
- 31 L. Riabova, "Coping with extinction: the last fishing village on the Murman coast," in *The Reflexive North*, N. Aarsæther, J. O. Bærenholdt, Eds. (MOST and Nordic Council of Ministers, Nord 2001:10, Copenhagen, 2001), pp. 115-138.
- 32 U.D. Skaptadóttir, J. Mørkøre, L. Riabova, "Overcoming crisis: coping strategies in fishery based localities in Iceland, North-Western Russia and the Faroe Islands," in *Transforming the Local*, N. Aarsæther, J.O. Bærenholdt, Eds. (MOST and Nordic Council of Ministers, Nord 2001:25, Copenhagen, 2001), pp. 43-67.
- 33 K. Benediktsson, U.D. Skaptadóttir, "Coping strategies and regional policies, social capital in Nordic peripheries – Iceland. Nordregio Working Paper no 5 (2002).

- 34 G. T. Jóhannesson, U. D. Skaptadóttir, K. Benediktsson, "Coping with social capital? The cultural economy of tourism in the North," *Sociologia Ruralis* 43, 3 (2003).
- 35 U.D. Skaptadóttir, G. T. Jóhannesson, "The Role of Muncipalities in Innovations, Innovations in the three sectors of society in two municipalities in Iceland" in *Innovations in the Nordic Periphery*, N. Aarsæther. Ed. (Nordregio Report, forthcoming).

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