

**United Nations Development Programme**



**CHALLENGES OF HUMAN  
DEVELOPMENT IN THE ARCTIC**

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This paper examines past and current development trends in the Arctic from the viewpoint of human development. It is an attempt to see how these trends affect the present state of human development in the region, and what future opportunities are possible, particularly for the wellbeing of indigenous peoples living in this region. The purpose here is to encourage debate and raise questions for further research and policy debate.

The main conclusion—or, more appropriately, hypothesis—emerging from the discussion is that a change in perspective may be required if development in the Arctic is to become more sustainable and people-centered. To date, policy analyses and debates have tended to look at the circumpolar region from the *outside*--with an interest in how the region relates to more southern policy concerns and endeavors. Fostering sustainable human development, however, requires matching outside interests in the region with an insiders' perspective, focusing on the development needs and resources of Arctic communities and territories, and on how they could, towards this end, cooperate with actors outside the region. Although considerable progress in terms of human development has occurred in the region in recent years, these achievements will be rather tentative and fragile until such reversal in perspective has happened and the participatory nature of Arctic development has been strengthened.

But is such change a feasible policy option? This paper suggests it could be. First, achieving more sustainable human development in the Arctic is likely to generate net benefits for all--Arctic and non-Arctic regions and peoples. And second, several relevant initiatives aiming in this direction are already underway. They can be bundled into a more coherent strategy. However, change will not occur automatically; it has to be advocated--by making persuasive efficiency arguments.

Human development is not about charity; it is the end or outcome of development that makes good economic and political sense. In the short run the two--economic growth and human development--may sometimes be out of step. But in the long run they go together.

The paper develops these points in three steps. The first section introduces the concept of human development and its main measures. The second section summarizes the key policy messages that UNDP's *Human Development Reports* have generated since they were first published in 1990. The third section presents select facts and figures concerning the state of human development in the Arctic as well as important trends. Against this backdrop, it also highlights a number of issues that may warrant further study.

## *I Human Development: Concept and Measures*

The newly released *Human Development Report 2002* (UNDP 2002) reminds the reader that “[h]uman development is about people, about expanding their choices to lead lives they value. Economic growth, increased international trade and investment, technological advance—all are very important. But they are means, not ends.

Whether they contribute to human development in the 21<sup>st</sup> century will depend on whether they expand people's choices, whether they help create an environment for people to develop their full potential and lead productive, creative lives." (p.13)

The fundamental requirement for enlarging people's choices, the Reports recalls, is building human capabilities, such as the capability to lead a long and healthy life, an educated and informed life, and a decent life. It is about building the capability to have an existence that enables them to think through their policy choices, to articulate and advocate, and realize these choices as far as possible. .

When UNDP started the series of *Human Development Reports* in 1990, under the guidance, vision and intellectual leadership of the late Mahbub ul Haq, it was difficult to determine whether development was—or wasn't—translating into human development in different regions and among different population groups. The most frequently used measure of development success at the time was gross national product (GNP) per capita, a measure that indicates a country's performance in terms of the expansion of its income and wealth. Certainly, statistics on other dimensions of development existed, such as, data on changes in life expectancy, educational attainments, housing, water and sanitation, or nutrition. However, some of these indicators went up and others down and as a result, it was extremely difficult to determine in terms of human development, whether the world or its various regions were moving forward or backward or standing still.

Consequently, it was felt that it would be desirable to construct a measure, similar to GNP per capita, which would express the status of human development in one number. The *Human Development Index* (HDI) is intended to be this measure. It is an index composed of three variables: average life expectancy at birth, educational attainment (assessed in terms of adult literacy and combined gross enrolment), and an adjusted income figure. The HDI can be constructed for countries, sub-national units within countries (e.g. states or provinces) as well as different population groups.<sup>1</sup>

The HDI as well as other related new measures of human development have generated important new insights into how development works and how people fare in the development process.<sup>2</sup>

## *II Select Key Policy Messages of the Human Development Reports*

Perhaps the main finding of the Reports was that, in most parts of the world, the past five to six decades have witnessed significant progress in human development (see also table 2 of the background notes). However, some countries, notably countries in Sub-Saharan Africa, are witnessing reversals in their overall levels of human development, due to a combination of factors, ranging from unsustainable debt burdens, to excessive disease burdens, environmental degradation, weaknesses in their systems of governance, and civil strife and conflict.

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<sup>1</sup> See, in this connection, also the statistical background note to this paper, presenting select HDI tables and other statistics from the 2002 *Human Development Report* (UNDP 2002). For a detailed description of how the HDI is constructed, see *ibid.*, p. 253.

<sup>2</sup> The additional measures include such as: the human poverty index (HPI), the gender-related development index (GDI), and the gender empowerment measure (GEM).

In all countries, including the richest ones, the overall level of human development is a net figure, reflecting both progress and reversals. A number of factors can lead to such setbacks in human development, including changing life styles (such as smoking or too sedentary patterns of behavior), environmental degradation, accidents, or various types of stress.

The following six points comment on some of the reports' messages in more detail.

1 *High income is not an automatic guarantee of good human development.*

The introduction of the new HDI has made it possible to see how different countries fared in human development rankings, compared with their rankings according to GDP per capita (see, table 1 of the background note). The comparison reveals that some countries have a better HDI rank than income rank. Put differently, their policy performance in respect of promoting human development is relatively better than that of countries with similar income levels. Among the “good performers” in terms of human development are several countries with territories in the Arctic circle: Norway, Sweden, and Canada (these three countries, in this order top this year's world's HDI rank list). Finland also does better in HDI terms than income terms alone, while the US slips four places when assessed in terms of human development, Iceland falls two places, and Denmark 6 places—with all three countries, however, being in the category of “high human development”. Only Russia is in the category of middle human development, in 60<sup>th</sup> place -two ranks below its GDP per capita rank.

Looking at some other countries: Ireland (HDI rank 18) moves down 14 places, Tunisia (rank 97) slips 26 places, and South Africa (rank 107) 56. By contrast, Costa Rica (43) moves up 14 places, Greece (24) 10 places, and China (96) holds its place.

All this means that income is important. It is an option that people might want to have. But income is not the sum total of human life and it does not automatically translate into human development. Policy choices also matter—the decisions about how to produce economic growth, what investments to pursue, and how to share the benefits of economic growth.

This same message is also evident from the fact that there exist important *within-country* disparities in human development. Since the HDI, as an average figure, hides these disparities, many countries are, by now, preparing national human development reports,<sup>3</sup> presenting disaggregated HDIs for various sub-national units. The human poverty index (HPI) and the gender-sensitive measures (mentioned before in footnote 2) also help shed further light on such disparities and on the fact that indeed economic growth does not trickle down automatically. Clearly, the links between economic growth and human development usually need to be deliberately created (e.g.

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<sup>3</sup> Such reports exist by now for more than 135 countries. See <http://hdr.undp.org/aboutus/nhdr/default.cfm>

employment policies, incentive measures, social programs, or transfer payments), and are thus, in large measure, the result of policy design.

2. *Basic human development does not have to wait until a country is rich. It is affordable even at lower levels of income.*

This fact is immediately evident when examining the list of countries in the category of high human development: They are not just the richest countries but include such developing countries as Barbados, Chile, Costa Rica and (not taking into account the effects of the most recent crisis in this country) Argentina.

But what are the “basics”? As noted before, human development depends first and foremost on people having certain capabilities, such as those captured by the HDI. These capabilities are important to people’s empowerment and their ability to ‘fend for themselves’: the capability to lead a long and healthy life, to be educated, and to live a decent life. Ensuring that people enjoy these basic capabilities worldwide is also at the heart of the Millennium Development Goals (MDGs), which were adopted at a special session of the United Nations General Assembly in 2000 as part of the so-called Millennium Declaration.<sup>4</sup> Cost estimates for these goals are under preparation but they seem to suggest that an approximate doubling of national and international resource allocations to these policy objectives would probably allow many countries to come significantly closer towards realizing the MDGs by 2015. In terms of official development assistance, for example, this would mean mobilizing additional resources in the amount of \$ 50 billion per annum--certainly an amount that should be affordable, considering that the world's income stands at about \$ 31 trillion.

3. *Human development begins when the” basics” are attained.*

“Being able to make one’s choices” is a relative concept: Some actors are more powerful than others in income terms as well as other respects (notably technology and military strength). So to have an effective voice, at the local, national and international levels, it often does not suffice to enjoy just the basic human capabilities. It is important and desirable to have strength that goes beyond the basic achievements. Yet while global gaps with respect to basic capabilities are narrowing, gaps in respect of other capabilities, such as development means and opportunities are often widening (see, on this point, also box 1.1 and figure 1.11, and 1.13 in the background notes).

Development in many instances is path-dependent. For example, where income levels are high, more can be invested; where more knowledge exists, further knowledge can be more easily absorbed and generated; or where physical and institutional infrastructure has been built, adding additional elements is easier than building systems from scratch. Similarly, a vicious cycle has made, certain types of global inequity and disparity assume increasingly grotesque dimensions—income

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<sup>4</sup> [http://millenniumindicators.un.org/unsd/mi/a\\_res\\_55\\_2.pdf](http://millenniumindicators.un.org/unsd/mi/a_res_55_2.pdf)

disparities are among them (see again box 1.1). As an illustration, the richest 1% of the world's people today receive as much income each year as the world's poorest 57% (UNDP 2002, p. 2).

For people to freely express one's views and to realize their visions and aspirations—and to avoid dependence on opportunities granted by others, people need their own means, their own wherewithal, such as good credit history (in order to be able to take out a loan and to invest in projects of one's own choosing).

4. *Democracy and political participation form an integral part of human development.*

This is a point that has been re-affirmed again and again in more than a decade of *Human Development Reports*. This is also why the 2002 Report has selected “democracy” as its main focus.

The opportunity to participate in the decisionmaking on development has intrinsic value as well as instrumental value. As A.K. Sen, 1998 Nobel Laureate in Economics, has argued, people in democratic countries are less likely to experience famines or other (preventable) disasters than people in non-democratic countries.

In fact, without democracy and other political rights, human development is a farce. But democracy without strong and capable human beings would also be a farce, as such a political system would be a democracy in form only. People must be able to become involved in the decisionmaking process and take educated and well-informed decisions for democracy to exist in form as well as substance. This means that abject poverty stands in the way of democracy. For example, poverty may weaken people's ability to think beyond the most urgent daily necessities, or, because of a lack of infrastructure, prevent people from obtaining information.

But as the *2002 Human Development Report* also underlines, democracy cannot be imported, but rather, it must be developed locally, from the bottom-up. Democracy must be anchored in people's daily lives and based on local institutions.

5. *Institutions also need to be “home-grown” in order to foster sustainable human development.*

Development usually advances in an incremental day-by-day way. It occurs partly under the pressure of changing realities and partly as a result of deliberate policy choices. Besides people's basic capabilities, it depends on the existence of physical infrastructure as well as institutional infrastructure—legal frameworks, including property rights, the existence of well-developed markets, state agencies and services, as well as organizations and people capable of linking the community to outside forces and trends, or as the case may be, providing protection against these forces. As one development aspect or system changes, other parts of the local society and economy might be affected and forced to evolve.

Yet as experience has shown, where development is not "home-grown" and is not rooted in local politics, policy coordination among local interest tends to be relatively weak. Supply-driven--as opposed to local, demand-driven--development may also have negative impact. It may skew incentive structures and initiate dependency on outside support or certain negative development trends that may not support local development in the long run.

6. *Human development and people's wellbeing depend on private as well as public goods, including global public goods.*

People's wellbeing depends on what they, as individuals, acquire and possess, such as good health status and the ability to read and write, understand the natural environment, or be adequately nourished, clothed and housed. But, in addition to such private goods, people's wellbeing also depends on public goods and on how the public domain (the things whose consumption we share with others) is structured and stocked. For example, important elements of the public domain could include such as: a balanced eco-system and common pool resources that are managed in a sustainable way; a healthy environment (e.g. living conditions free of preventable and controllable communicable diseases); peace and security; or well-developed joint (non-rival and non-exclusive) institutions, such as markets or the state agencies, or respect for human rights and equity.<sup>5</sup>

In fact, an adequate availability of private goods, such as employment opportunities or food, often depends on the existence of an adequate public domain.

At present, the provision of public goods poses special policy challenges. Due to an increasing openness of national borders (including increasing emission by countries of polluting substances into the atmosphere), many public goods (and thus the public domains of countries) have become interlocked. As a result, an adequate provision of these "globalized" public goods can often no longer be ensured through domestic policy action alone but requires international, cross-border cooperation (see, for a fuller discussion on this point, Kaul *et al.* 1999, 2003 [to be published in October 2002]).

Since institutional change to adapt to new realities tends to be slow, many global public goods are at present seriously underprovided, and constitute from the viewpoint of many countries and people, global public "bads". Examples include the

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<sup>5</sup> It may be useful to note that private goods are defined as goods that have excludable properties and are de facto made excludable--usually with clear property rights attached to them. Examples are a loaf of bread. If a person buys the loaf in the market, he or she, in many cultures, owns it and can determine to what use to put it--to share the bread with others, to give it away as a present, or to consume it alone. Many private goods are not only excludable and exclusive but also rival in consumption: Once a person has consumed the loaf of bread, it is not any longer there for others to consume. Public goods, by contrast, are goods that are non-excludable and in the public domain. They can be--or sometimes even, must be--consumed by all. For example, it would be difficult, if not impossible, to exclude anyone from enjoying the warming rays of the sun. It is also important to note that publicness and privateness is often not an innate property of a good but a policy choice--a decision that societies, *the public*, people together, have to take. See, for a more in-depth discussion on public goods, Musgrave and Musgrave 1989 and Stiglitz 2000.

risk of global climate change, the over-provision of instruments of defense, such as nuclear and other types of weapons, or the spread of new and the re-emergence of old diseases, such as HIV/AIDS or tuberculosis.

Strengthened cross-border cooperation among states as well as between states and other actors is, therefore, of growing importance to achieving sustainable human development--locally, nationally, regionally as well as worldwide.

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How then do these messages apply to the specific conditions of human development in the Arctic region? Where do similarities exist, and where do the differences lie?

## *II Looking at the Arctic Region through the Lens of Human Development*

The following observations are of a preliminary nature, intended to provide suggestions that could guide further research and policy debate. They aim at raising questions—not yet at answering them, pointing to areas where Arctic experiences correspond with those of other countries and regions as well as areas where Arctic experiences differ.<sup>6</sup>

### *1. The status of human development in the Arctic: fragile progress*

Judging from available statistics and other accounts, human development in some parts of the Arctic has progressed quite significantly. But progress seems to be built on a weak economic foundation; and it seems to be under strong pressure from countervailing trends, notably health hazards stemming from environmental degradation.<sup>7</sup>

#### 1.1 Signs of progress

Examining some of the positive trends first, life expectancy at birth of indigenous peoples in Alaska has, for example, risen by 20 years between the 1950s and mid-1990s, and that of Inuit in Canada has, during the same period, more than

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<sup>6</sup> Moreover, the following remarks are only based on a survey of English-language literature on the topic, not on primary data collection and analysis. Their value thus lies primarily in the comparison with the broader lessons about human development that the international community has learned during the past years—not so much in adding new facts and figures to the existing stock of knowledge about human development in the Arctic.

<sup>7</sup> The data mentioned in the following are taken from a variety of sources, including among others: <http://www.amap.no/assess/soaer5.htm>; <http://www.statgreen.gl/english/yearbook> ; <http://www.gov.nu.ca>; <http://labor.state.ak.us/research/research.htm> ; <http://www.pmac.net/arctic> ; <http://www.ipcc.ch/pub/tar/wg2/612.htm>; . Their comparability would need to be ascertained. However, here they are meant to illustrate and highlight certain issues, not necessarily present exact measurements.

doubled, and now approaches 68 years. Similarly, school enrolment rates and levels of education have improved, including at advanced levels of study, as, for example, in Greenland. And although economic growth rates have been somewhat flagging, the trend has been positive.

So, if one were to construct an HDI for the Arctic region as a whole, it would show that human development is progressing. But HDI values would vary across territories and reveal wide intra-regional disparities. Chukotka, Russia, in particular, would rank lower than other territories--mainly due to a much lower income, which appears to be just 1/20<sup>th</sup>-1/10<sup>th</sup> of that in other Arctic territories. But then, Russia itself ranks lower than other Arctic nations, with its income (real GDP, measured in 1995 PPP dollars) amounting to approximately 1/6<sup>th</sup> of that of the US and 1/5<sup>th</sup> of that of Canada or Sweden (UNDP 1998).

Just as for most—developing and developed—countries, statistics for the Arctic also reveal wide rural-urban gaps in human development.<sup>8</sup> For example, life in Iqualuit seems to differ from life in other, more rural communities on Baffin Island. And of course, the HDIs of Arctic regions would, despite all progress, still be lower than the HDI value of the concerned countries. A major factor explaining this difference is life expectancy at birth, which is in some Arctic regions 10 years lower than the national average of the Arctic nations. Also, it tends to be lower than the life expectancy in non-Arctic countries of lower income levels than in the Arctic regions. Sri Lanka and Chile could be mentioned. And China, despite a much lower per capita income, has a similar average life expectancy at birth as the Arctic territories.

It seems that these and other differences in human development could be related to the following two aspects that mark human development in the Arctic.

## 1.2 How self-sustaining?

The first aspect concerns the income dimension. There exists a striking discrepancy between the region's wealth in natural resources (to which most Arctic studies allude) and the region's obviously critical dependence on income transfers from the respective national capitals. Such transfers are said to amount to between 50% and 90% of the public revenue of the territories in the Arctic Circle.<sup>9</sup> This fact raises the question of how rich the territories and their indigenous peoples really are. What is the distribution of ownership of its resources? How is resource exploitation organized and how the net benefits shared? How are prices formed? How much employment—and employment of what type—is being generated?

It would be interesting to examine these questions in order to determine how robust and self-sustaining the economic basis of human development in the Arctic region is. So far, it appears that human development has been achieved largely as a result of injections of public transfers into the Arctic territories; and only in some cases, such as Greenland, the high dependency on such transfers is slowly decreasing.

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<sup>8</sup> Statistics pertaining to the Arctic territories often do not present breakdowns of the data by gender (at least not those available in English). It would certainly be desirable to introduce such breakdowns in the future data analyses.

<sup>9</sup> See, <http://www.statgreen.gl/english/yearbook/chap.24.html>

### 1.3 Multiple new pressures and reversals of past gains

In addition, achieving human development in the Arctic (as in effect in many other regions) seems to be an “uphill battle”. Just as “standard” as the remark about the resource wealth of the Arctic is the observation that many people in the circumpolar region suffer from such deprivations as: high incidences of tuberculosis and pneumonia; malnutrition, alcoholism, suicidal tendencies, contaminated food, lack of clean water, sanitation and adequate housing, and social violence, including homicide.<sup>10</sup> The reasons of these and other deprivations are several, ranging from environmental degradation<sup>11</sup> and economic stagnation, accompanied by high unemployment rates,<sup>12</sup> to exposure to new and different life styles and difficulties of communities and individuals to address these new realities.<sup>13</sup>

Considering this lengthening agenda of human development in the Arctic and the growing urgency of many of these problems, the question that poses itself is current public-resource transfers to Arctic territories are adequate? Could a higher volume of resources be efficiently and effectively utilized to accelerate human development? What are the current expenditure priorities—for the transferred resources and other available financial means? Could a certain re-ordering of these priorities lead to better results in terms of human development?

In addition, there is the question of the roots of the social ills by which many people in the Arctic, notably indigenous populations, seem to be affected. They seem to lie both *within* and *outside* of the region, and as will be discussed below, they may thus also require corrective action locally, nationally, regionally and at the international level--seeking cooperation with non-Arctic states.

## 2. *Democracy and political participation: Critical to moving beyond the “basics” of human development?*

Arctic development experiences confirm that opportunities for political participation, “home rule” or “self-government” can have a positive effect on human development and are often among the important choices that people want to have in order to gain--or regain--enhanced control over matters that affect their life.

In fact, indigenous groups have invested considerable and sustained effort to secure a stronger voice and more effective participation in various decisionmaking arenas. They have formed their own organizations, such as the Inuit Circumpolar Conference (ICC), the Russian Association of Indigenous Peoples of the North (RAIPON), or the Saami Council. They have worked towards being represented at regional bodies, such as the Arctic Council; and they have struggled for self-determination, home rule in Greenland and self-government in Nunavut. In addition, they have taken their concerns beyond the region and beyond the boundaries of their

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<sup>10</sup> See, among others, Espiritu 1997, Fondahl 1997 and <http://www.amap.no/assess/soaer5.htm> ;

<sup>11</sup> The problems existing in this respect are well documented in a number of surveys and studies. See, for example, Nuttall and Callaghan 2000; ZumBrunnen 1997 as well as <http://ipcc.ch/pub/tar/wg2/612.htm> .

<sup>12</sup> See, among others, <http://www.amap.no/assess/soaer5.htm> .

<sup>13</sup> Ibid.

respective country, cooperating with international bodies, such as the United Nations or with indigenous peoples from other parts of the world.<sup>14</sup>

The Arctic experience has not always followed the experience in other areas. In the Arctic, participation in decisionmaking, and especially self-governance, has, evidently, been an important means of fostering economic growth and human development. In other countries, such as the Republic of South Korea, the link between development and political participation and democracy has often worked the other way round: Economic growth and progress in HDI variables has, there, helped strengthen political participation and democracy. It would thus be interesting to explore this difference in the pattern of human development in future studies.

In this connection, it would also be interesting to examine how effective a political say can be that is *not* backed up by other assets and means of power and influence, such as property rights, income, or simply, a large number of people (mattering either as voters or consumers). In fact, it seems that indigenous groups have often pursued both goals simultaneously--political say and property rights.

A further aspect to clarify is how far the opportunities of political participation extend that indigenous peoples/local residents of the Arctic enjoy: Is the realm of their decisionmaking matching that of the reach of the issues and problems that local communities are facing? For example, to what extent are representatives of local communities involved in decisionmaking on global environmental problems--through, for example, inputs into defining the positions that their country's delegation will take in international negotiations on global challenges? Or, in international negotiations on trade, shipping, devising a system of intellectual property rights and knowledge management?<sup>15</sup>

While important transformations and changes in power structures have occurred, there would no doubt be a need to revisit in particular, some of the governance linkages between the Arctic territories and their national capitals to see whether recognized good policy principles and practices of fiscal federalism and subsidiarity are being followed: Is the right type of decentralization and centralization occurring? And where could further efficiency as well as equity gains be realized?<sup>16</sup>

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<sup>14</sup> These developments are also well-documented in the literature. See, for example, Johnson 1997; Nuttall 2000, 2000a; Oestreg 1999a; Petersen and Poppel 1999; Tennberg 2000; and Young 1998. Interesting, in this connection, is further that the United Nations Economic and Social Council recently established by its resolution 2000/22 a Permanent Forum on Indigenous Issues. According to operative paragraph 2 of this resolution, the forum "shall serve as an advisory body to the Council with a mandate to discuss indigenous issues within the mandate of the Council relating to economic and social development, culture, the environment, education, health and human rights...". See, [http://www.unhchr.ch/huridocda/huridoca.nsf/\(Symbol\)E.RES.2000](http://www.unhchr.ch/huridocda/huridoca.nsf/(Symbol)E.RES.2000)

<sup>15</sup> Johnson (1997) mentions that among the issues, over which indigenous peoples feel that have no or only limited say, are, for example, such as global warming, transboundary pollution, and many investment decisions relating to industrial activities in the Arctic.

<sup>16</sup> For a discussion on fiscal federalism and the principle of subsidiarity, see, among others, Cullis and Jones 1998.

3. *Development from below: The missing link in the Arctic development equation?*

For many centuries actors outside the Arctic have been taking a keen interest in the polar region—for economic, environmental, military and other reasons (Oestreg 1999; and various chapters in Nuttall and Callaghan 2000). Explorers and adventurers renamed Arctic places, explored its terrain and prospected its resources. Traders came to take its commodities to distant markets. Nation states extended their borderlines to include Arctic territories, using them for military and other purposes. Investors came, intruding ever further into the region. Pollution from other nations was spilled into the Arctic region, adding to damage caused by local economic and military activity.

For years, the world has reached into the Arctic, taking what was interesting but created only a limited local entrepreneurial capacity, technical skills, infrastructure systems, administrative structures, or income and wealth. The Arctic has been linked to the world economy during various historical phases and stages of development. The impetus has, however, tended to come from the outside the Arctic--not from within--and in many cases continues to do so. As Young (1998, p. 4) notes, "[i]n thinking about sustainable development in a region like the Circumpolar North, it is [thus] helpful to draw a distinction between endogenous and exogenous threats to sustainability", and of course, human development.

Many traditional economic, social, environmental and political balances and systems have become unhinged in the process. And new economic initiatives have often been and remained isolated, leading to a fractured economy and polity. Does this explain why human development is so fragile today and the region so dependent on outside support? Should and could this dynamic be changed? And if so, what would be feasible strategies for achieving more integrated local development and development that pro-actively reaches out to pull in what is useful from elsewhere and capturing outside markets and development opportunities?

Some study and envisioning initiatives along these lines are underway. But further scenario building and searching for feasible development paths is no doubt needed. The key question to address would be how local societies see their futures and how to move local developments, if at all possible, into these directions.<sup>17</sup>

Answering these questions will require innovative policy thinking, because formidable development obstacles are to be overcome. It may require envisioning new products that could link the Arctic to outside interests and markets. For example, could the Arctic territories better capitalize on the strong continuing interests that many external actors have in the Arctic? Could biodiversity preservation be offered to the international community as a new (valued and to-be-paid-for) service? Could the same be done for providing "natural laboratories" for scientific purposes? For military bases? Could countries that adversely affect the Arctic through polluting emissions be expected to compensate the Arctic for adverse consequences (and thus, even have an

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<sup>17</sup> In fact, the ICC has given attention to this issue in its *Principles and Elements for a Comprehensive Arctic Policy*, 1992. See, Tennberg, p. 106.

incentive to reduce their pollution levels)? Could this be achieved by creating a Global Environment Facility for the North-North?<sup>18</sup>

#### 4. *Re-creating a proper balance between the private and public domains*

From various accounts of traditional life in the Arctic regions it appears that the societies and economies of indigenous peoples were earlier characterized by a large public domain, notably the existence of a number of common pool resources, including for example, land, waters and wildlife. In addition, many activities were, probably out of necessity, undertaken in a cooperative manner; and the results of such cooperative activities as, for example, hunting, were typically shared. In fact, it was the strength of the public domain that determined the wellbeing of individuals and the availability of such “private” goods as “strong health”, “being knowledgeable”, or being adequately clothed and housed.

The various interventions by outside forces in the Arctic led, among other things, to an erosion of the public domain of indigenous peoples. It resulted in over-utilization of common pool resources, such as marine wildlife, importation of conflict and war, creation of health hazards, and undermining of conventional norms and standards that had governed human activity in the Arctic.

These trends have affected levels and opportunities for human development in the Arctic. But it appears that the corrective development efforts so far have primarily targeted the resultant loss or relative stagnation in the availability of private goods--personal health and education (through state-provided services), or income (through transfer payments). Less, it appears has been done to restore or rebuild a new, strong public domain—e.g. local markets; local infrastructure, including IT connections; or local regimes for knowledge creation and management. And steps to protect local Arctic communities against outside encroachment of their public domain, e.g. in terms of actually reducing transboundary pollution, have also remained limited. Many environmental agreements have been adopted pertaining to the Arctic--seeking to limit "tragedies of the commons" that were not necessarily caused, or at least, not caused alone by local people. Thus, local people find their development options curtailed due to past forms of resource over-utilization (e.g. over-fishing and over-hunting); *and* they find themselves at the receiving end of current forms of over-utilization (e.g. the effects of global warming).

Thus, as noted earlier, the indicators of individual wellbeing (e.g. those that form the HDI) do not look too bad. But Arctic societies lack a well-stocked public domain--a fact that makes their development fragile, and in large measure dependent on others.

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Fostering human development in the Arctic will require a re-thinking of many familiar issues and a re-envisioning of many policy steps. Following conventional growth and development paths will not do.

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<sup>18</sup> Lyck 2001 explores similar ideas in her article "Arctic Economies and Globalisation", in which she discusses the sustainable competitive advantages (SCAs) of the Arctic.

But first, it is necessary to identify an approach that provides better understanding of present human development trends and that aids in the exploration of suitable policy options to encourage further sustainable human development in the Arctic?

### III Possible Next Steps

There exists a large and growing literature about various dimensions of development in the Arctic, including studies on the communities and living conditions of indigenous peoples. However, it is rare, or at least difficult to come by, firsthand accounts from indigenous peoples of their interpretations of past and current realities as well as their aspirations for future paths of development.

Accordingly, it might be desirable to create opportunities for *the voices of indigenous peoples* to be recorded and heard. It might be best for impartial research teams to convene focus groups and conduct the dialogues--not just as opinion polls but as conversations, including discussions about possible alternative interpretations of the current realities and scenarios of alternative future policy paths. Of course, indigenous people organizations (IPOs) should have a major role in such an initiative.

The outcome of these discussions could form a reference point for determining the study design and focus of a series of Arctic *human development reports*. Among the reports' purposes would be to bring together relevant existing data and identify where statistics are missing or needing improvement. The reports, could just as the global reports did, set in motion a process of generating more complete statistics, and thus, enhancing policy transparency and accountability.

Another major purpose of the reports could be to develop *innovative yet practical and pragmatic policy options* and to identify public and private *expenditure/investment priorities*. The challenge would be to adopt an insiders' perspective and to seek to combine insiders' and outsiders' interests in a mutually beneficial way (see also figure 1).

In today's globalizing world, development solutions and opportunities cannot just be sought locally. A global perspective is important. The importance of that should be especially evident in a region like the Arctic that has had exposure not only to the contemporary forms of globalization but also to its earlier episodes. In this connection, one could also envision an *externality profile* of the type presented in figure 2. The profiles could help establish what Arctic regions receive and generate in positive and negative cross-border spillovers.

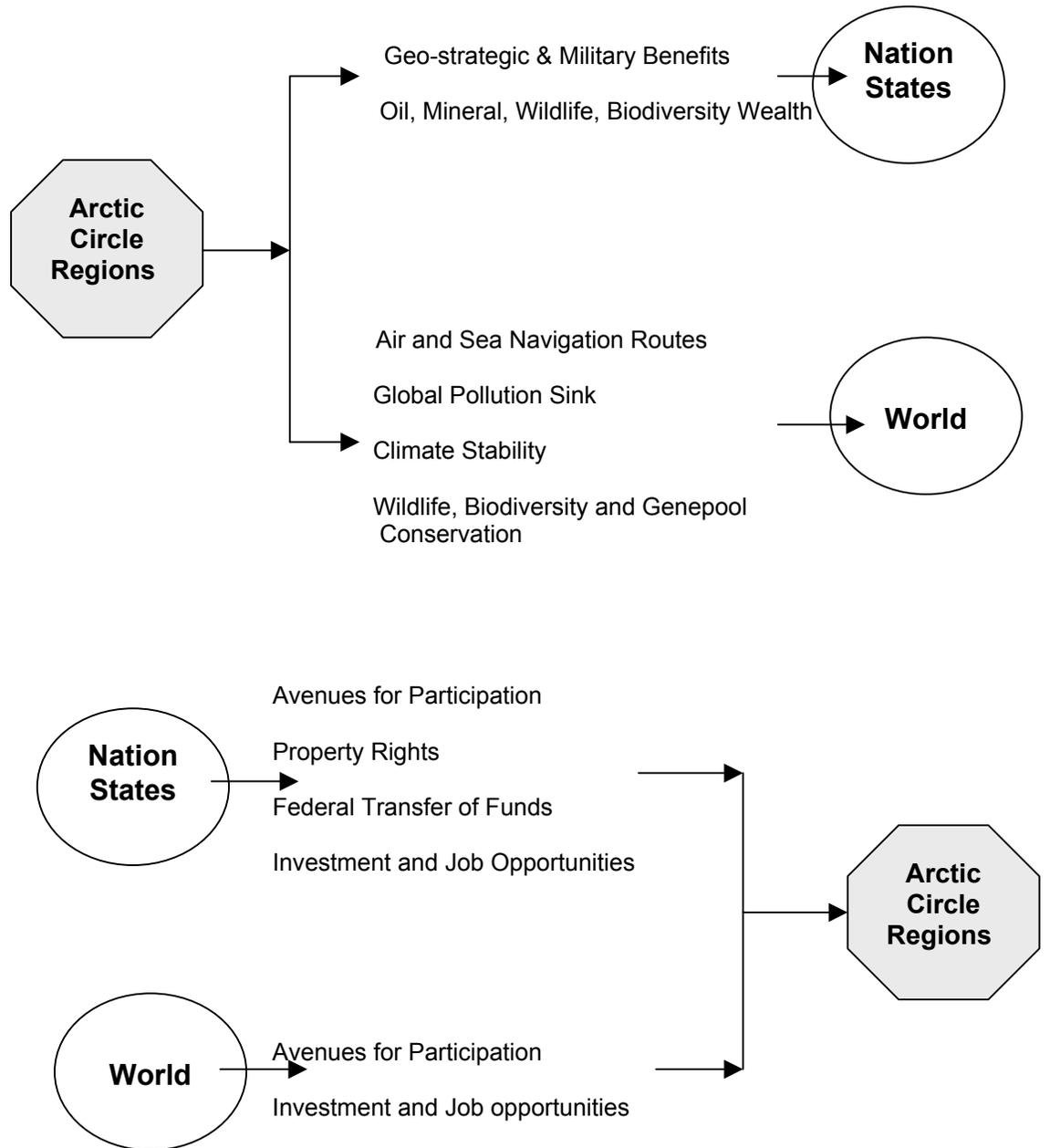
Such externalities profiles could also help clarify what the Arctic contribute to providing global public goods (e.g: to biodiversity preservation and climate stability) and where the region's own development depends on an adequate provision of certain global public goods- and thus on contribution by others.

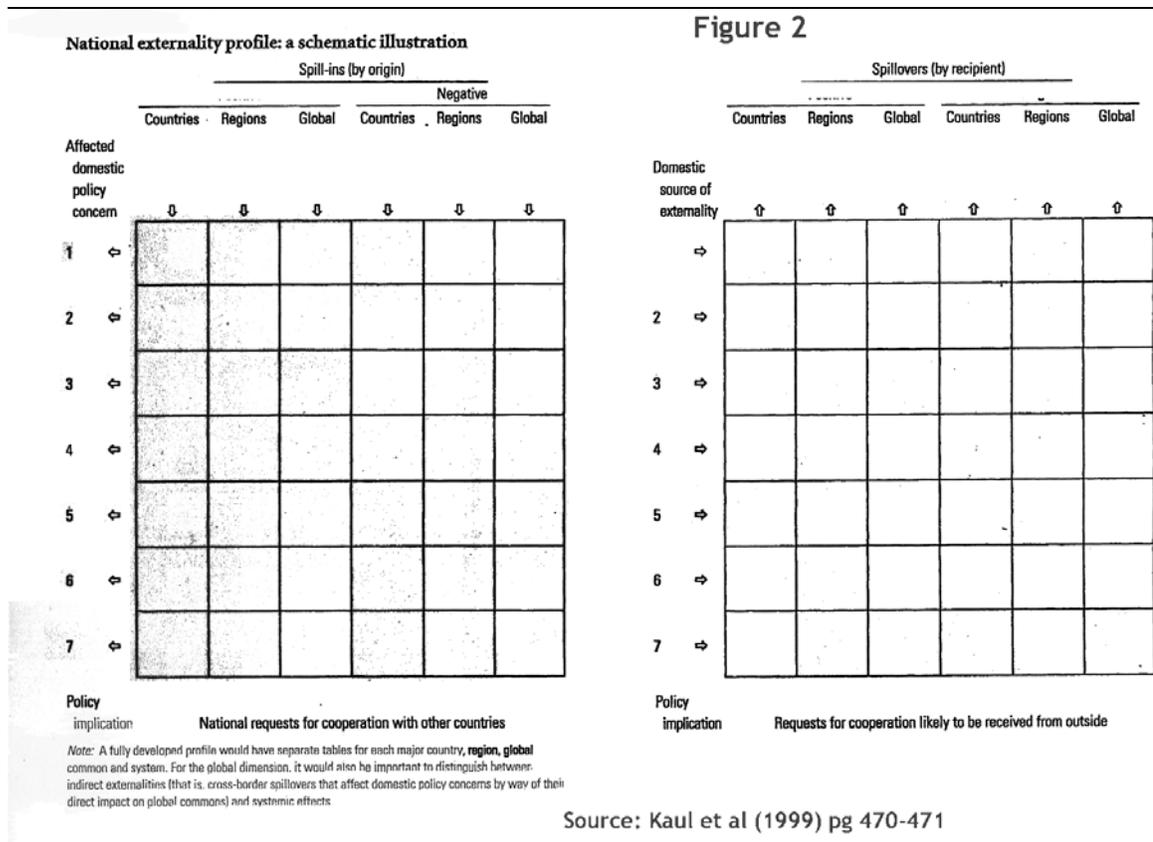
At present, the Arctic often is confronted with decisions made somewhere about global public goods provision, e.g: International Agreement on the Conservation of Polar Bears and their Habitat and Migratory Birds Convention. However things that are placed in the global public domain, such as international

**Figure 1**

**SELECT RESOURCE TRANSFERS BETWEEN ARCTIC CIRCLE REGIONS, AND NATION STATES AND WORLD**

**A "GIVE" AND "TAKE" RELATIONSHIP?**





regimes, should not only be public in consumption but also public in decisionmaking and public (equitable) in the distribution of benefits.

As the foregoing suggestions illustrate, fostering human development requires more than just specific, targeted interventions in the social areas such as education and public health care. Such interventions might be important to getting started and achieving the “basics”: the point where human development ought to begin to flourish—not end.

Yet even the “basics” have to be rethought. Being “literate” must today also mean being connected and able to access information. And a decent life must also mean being able to overcome with the help of modern transport technologies, distance and time. So how to close the communications gaps in the Arctic regions is a further priority topic that the suggested human development reports might investigate.<sup>19</sup>

Reports are not an end in themselves. They are just a prelude to action. Achieving more sustainable human development also requires willingness to change on the part of the local populations. It requires preparedness to move from one

<sup>19</sup> Studies on this topic and initiatives in this area have emerged. See, for example, [http://hotwired.lycos.com/collections/connectivity/5.11\\_inuit\\_pr.html](http://hotwired.lycos.com/collections/connectivity/5.11_inuit_pr.html) ; <http://home.worldonline.dk/nbc/arcus.html> ; and <http://www.idrc.ca/books/reports/1997/15-01e.html> .

socioeconomic and political equilibrium, the traditional form of society, to a new equilibrium, and thus, perhaps new and unfamiliar lifestyles. While no society has ever flourished by being stagnant, change must not to be imposed. It must come from within. If given the scope and time to adjust, the Arctic regions and their peoples will no doubt find the ways of life they would like to lead in the 21<sup>st</sup> century.

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