

**University of Akureyri**  
**Social Science and Law Faculty**  
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**Instructor: Joan Nymand Larsen**

# **Economic Development in Greenland**

– towards a more diversified economy–

**Elísabet Ingunn Einarsdóttir**  
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## **Abstract**

This paper is mainly based on interviews with ministers and representatives of the Greenland Home Rule ministries as well as on other interviews taken during fieldwork in Greenland. All interlocutors' had their different view on the Greenland society and the current social and economic problems that the country confronts. However, all interlocutors' mentioned two crucial problems as the main challenges in Greenland today: a low level of educated personnel and language issues. These issues are very problematic and they interconnect into all sectors of the society and hence, they have a huge effect on economic development in Greenland. In interviews with ministries that had more knowledge of the Greenland economy, such as the Ministry of finance, Greenland Statistics, Bureau of Minerals and Petroleum and in the Ministry of Fisheries and Hunting, most of them saw the main obstacles towards economic development in Greenland, apart from education and language, the narrow resource base that makes the economy fragile and unstable and the public monopoly. All these obstacles are highly problematic and in many ways extremely difficult to handle.

The main goal of this paper is to discuss and describe obstacles and goals towards economic development in Greenland. A special focus will be on economic diversification as a way to reduce fluctuations and increase economic growth and on the importance of education as the crucial precondition to achieving economic independence.

# Chapter 1

## Fieldwork in Greenland

### *1.1 Fieldwork and Method*

The purpose of the field trip was to expand further earlier research projects of four students in the faculty of law- and social science at the University of Akureyri. Each student had a different focus in their projects about Greenland. Elísabet Ingunn Einarsdóttir was focusing on economic development, Embla Eir Oddsdóttir, gender issues, Guðbjört Erlendsdóttir on social development and Hilda Charlotte van Schalwyk on socio-economic impacts of mining. We travelled along with our mentor Dr. Joan Nymand Larsen to the capital city of Greenland, Nuuk, for an eleven day fieldtrip in April 2006. The main goal was to meet people and take interviews in order to get a greater perspective on the Greenland society and the current economic and social situation in Greenland. While preparing the fieldtrip we contacted ministries as well as people we thought would be important to meet. All those who we contacted were willing to meet us, which gave us the privilege of hearing many different perspectives. Our first meeting was with Yvon Csonka, head of the department of cultural and social history at the University of Nuuk. His information was of great importance as it gave us an overall view of the current social situation in Greenland as well as his opinion on the school system, both as a teacher and a father. Birger Poppel, the manager of the Survey of Living Conditions in the Arctic (SLICA survey) and former director of Statistics Greenland was also one of the first people we interviewed. He informed us about living conditions in the Arctic with special focus on Greenland, this information was priceless as well as the privilege of having him as one of our main contact in Greenland.

Four directorates of the Home Rule government were visited, the Directorate of Culture, Education, Research and Church, the Directorate of Fisheries and Hunting, the Directorate of Finance and the Directorate of Labour and Agriculture.

In the Directorate of Culture, Education, Research and Church, the office manager, Jes Dahl and two consultants, Hanne Lindberg and Inaluk Brandt received us. They informed us about the current situation of the education system in Greenland, future goals and strategies towards higher education in Greenland. In the Directorate of Fisheries and Hunting we had a meeting with the Head of Section, Torsteen Overgaard and Jens Jakobsen, they informed us about the hunting and fishing society, the statues of hunters and fishermen in Greenland today. At the same directorate we also had the privilege of meeting the office manager, Jeanette Holding who informed us about language issues within the society, but Jeanette has for years been the representative of Danish speaking Greenlanders in the complicated language struggle in Greenland.

In the Directorate of Finance we had the privilege of meeting the managing director, Peter Beck, who has been working for the ministry for more then 20 years now. He informed us of the situation of the economy in Greenland, obstacles towards economic development, the government's future plan as well as hopes. His information was of great importance, not only because of his knowledge and years of experience working within the economy in Greenland, but also because these information is often very hard to get.

At the Directorate of Labour and Agriculture we had an interview with Fleming Enequist, the office manager, who informed us about the current statues of the labour market in Greenland as well as future hopes and obstacles. A visit was also made to Statistics Greenland, which is the central authority that is responsible for collecting and publishing statistics. A visit was also made to the labour union in Greenland– SIK where we spoke to the vice-chairman of the union, Josef Therskildsen, who informed us of the rights and working conditions of the labour force.

The Royal Greenland, The Royal Arctic Line, and Kalaallit Niuerfiat (KNI) were also visited. These are home rule owned enterprises that play a major role in the Greenland economy. In Royal Greenland we spoke to Niels Bjerregård who informed us about the company as well as the companies' educational programmes. In the Royal Arctic Line we met John Rasmussen who informed us about the structure of the company, current situation as well as future plans and the personnel manager Søren Peter Jensen who talked to us about the company's educational programme. In KNI we had an informal interview with Steen about the company and the Home Rule government monopoly.

Last but not least is the informal conversation we had with local people in Greenland, a group of women that we met to discuss gender issues as well as interesting discussions with politicians. Marie Katrine Poppel who is a PhD graduate and working on her thesis on gender and power relations, organized along with her husband Birger Poppel, an informal meeting with a group of Greenlandic women. This meeting was one of the most interesting during our trip to Greenland, in my opinion, as these women were sincere and allowed to speak from their heart. Kuupik Kleist and Mininnguaq Kleist, both secretaries of the North Atlantic Group, which is a body within the Danish Parliament whose main aim is to work towards independence of the people in the Faroese and Greenland, were also of great help. They informed us about the political status in Greenland both regarding self governance as well as the main political debates today.

I would like to thank all the people we met in Greenland for the remarkable hospitality they showed us. They took our project seriously, were open minded to our questions, as well as our criticism. Marie Katrine Poppel and her husband Birger Poppel also deserve our best of wishes for their kindness and incredible will to help us getting as much out of this field trip as possible. Special thanks goes also to all the companies that

financially supported us and KEA which was our main financial supporter.

Finally I would like to make special thanks to my mentor Joan Nymand Larsen. Without her, none of this would ever have happened. I would like to thank her for the incredible job she put into organizing this trip, helping us with the funding and giving us the best possible guidance one could get in a project like this.

## **Chapter 2**

### **Introduction**

#### ***2. 0 Introduction***

The Arctic has undergone enormous changes in recent years. The area that recently was a rather isolated pre-industrial area is now experiencing huge impacts of globalization, large-scale renewable resource exploitation, a growing influence of large industries and an increasing degree of income transfer (Poppel, Rasmussen, Winther, 2005).

Greenland is no exception to this. The country has undergone enormous development changes in a very short time or mainly since after the Second World War when the country was invoked by the US. Before that time the Greenland society was almost completely isolated from the outside world (Lyck, 1997).

Since then, the society has gone through enormous changes that happened fast and within only a few decades this former society of hunters and gatherers became a modern society with a high standard of living. These social and economical changes have led to many good things, but they have also led to extreme social as well as economical problems for the Greenlandic nation.

These problems can in many ways be attributed to the fast modernization that has its root in the development plans of the 1950's and

1960's, referred to as the G-50 and G-60 policies. The main goal of these policies was to create a living standard comparable to the Danish one, which should be achieved with economic modernization that required centralization of the nation. These policies failed and many unforeseen social and economic problems started to develop such as, high crime and suicide rate, alcohol abuse and violence, (Louise and Petersen, 1986).

The new modern society required a more and more educated or skilled labour force that led to a massive influx of Danes. This influx was stabilized due to a growing number of skilled Greenlanders, however, with the introduction to Home Rule in 1979 the demand for professionals increased again, and again most of them being Danes. As a result, Danish was maintained as the main administrative language (Rasmussen, 2000). Still in the year 2006, Greenland is highly dependant on educated Danish labour and in recent years language issues have started to occur as well.

These modernization policies didn't just fail socially but economically as well. The overall development plan that ought primarily to be based on the local shrimp, cod fishing industries and private investment failed to a large extent (Rasmussen, 2000). Greenland did though experienced unprecedented economic growth during the 1950's and 60's but there was also a growing discrepancy between the economic growth rate and economic structure, In other words, the economy was growing without development (Dahl, 1987).

A lack of resources in the Greenland economy has made it difficult for the society to become self-sustain with its own source of income and hence, Greenland is highly dependent on Denmark both economically, as Denmark finances about half of the Home Rule government's revenue each year, as well as being highly dependent on imported Danish personnel.

Since Home Rule was established in 1979, the main development goal has been to lower the dependency from the Danish annual block grant and imported Danish personnel by developing it's own sources of income. In recent years the Home Rule government has mainly been looking at expanding the economy by focusing in on education and diversification. This ought to be achieved by increasing production and service within the private sector, and by moving away from public monopolies toward more private initiatives and by creating local educational and cultural institutions (Peter Beck, 2006)



## **Chapter 3**

### **The Greenland economy**

#### ***3.0 Introduction***

The purpose of this chapter is to give an overview of the Greenland economy, its structure and obstacles towards more independent economy. The chapter first outlines an overview on the economy, the current situation and challenges; the high dependency rate on primary products and the limitation of the economy do to few sources of income.

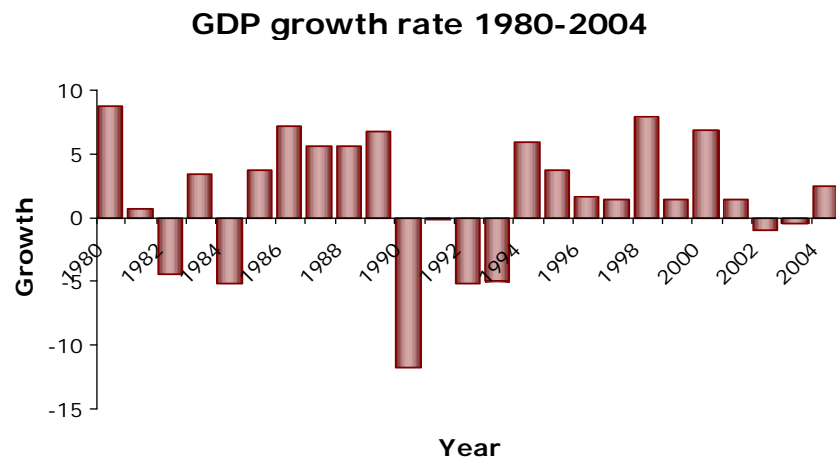
#### ***3.1 Overview of the Greenland economy***

The Greenland economy can be described as a small, open and narrowly based economy that is highly dependent on Denmark in terms of external trade and imported personnel (Larsen, 2002). The economy is primarily based on a block grant from Denmark and exports of living marine resources. The block grant and fishing agreements with EU account for 60% of Home Rule's income and the export earning from the fishing industry mark up to 20% of the countries GDP. Foreign economic influences on Greenland are first funnelled through the block grants, world market prices on shrimp and Greenland halibut, interest rates and import prices.

The economy has increased annually since 1993 but it was not until 1999 that it managed to recover from the downturn of the early 1990's when the last Greenlandic zinc mines were closed and cod, which had been an important export product, disappeared. As shown in figure 3.0, the GDP growth rate fell significantly during the early 1990's. There was economic growth in 2004 and according to Peter Beck (2006) Deputy Minister of the Greenland ministry of finance, GDP increased again in 2005 and is expected to increase further in

2006, because of rising employment due to more private based economy and increasing world marked price on shrimp.

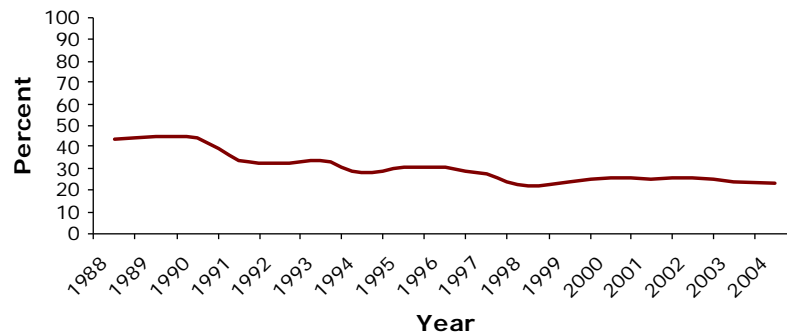
Figure 3.0



Source: Greenland statistical bank, 2006

Due to the closure of the mines, the Greenland's fish industry became the lifeline of the Greenland economy with about 6,500 employers, which corresponds to approximately a quarter of the labour force (Greenland statistical bank, 2006). Fishing is also extremely important as a source of supplementary income in individual households. In terms of export, the fishing industry dominates the market. The total export value of the fishing industry was 2.1 billion DKK in 2004 or 86% of Greenland's total export which amount's to 20% of the county's Gross Domestic Product (Greenland statistical bank, 2006).

### Total export as a percentage of GDP 1988-2004



Source:

Greenland statistical bank, 2006

According to the department of minerals in Greenland, the country has great potential for becoming a significant supplier of mineral resources to the world market, however large areas are still almost unexplored as generally mineral resource exploitation is far more costly and problematic in Greenland than in milder climates. Despite that, Greenland has regained new interest from the international mineral industry in recent years.

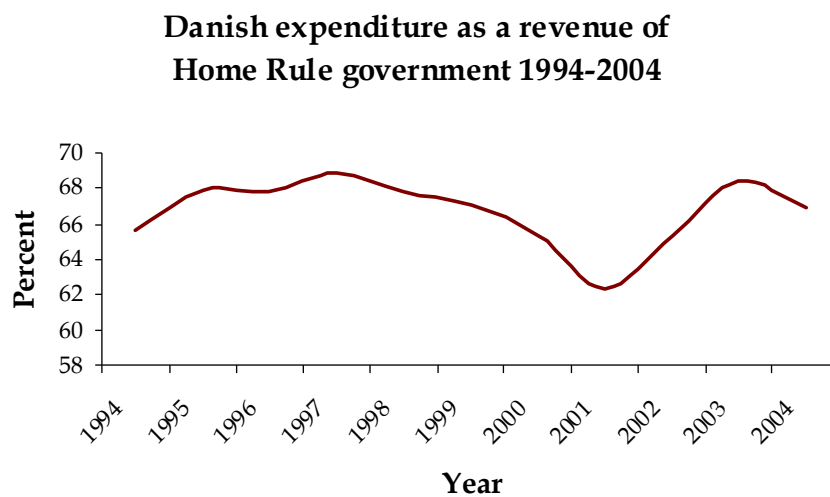
South Greenland has a gold mine, the gold content of which is deemed to be around 30 grams per tonne of ore. This is a high yield for a gold mine, and it is estimated that the mine contains 15 tonnes of gold 136, which corresponds to a value of approximately DKK 1.2 billion (Bureau of minerals and petroleum, 2006).

Traditionally, Greenland has been a society of hunters. Nowadays, hunting is mostly confined to the North and East Greenland region. Primarily users of meat from seals are individual households. Sealskin is also used for clothing but most of it is sold to many small production units that manufacture skin and fur products for the domestic market as well as to a tiny number of larger companies that have made a name for themselves in the international market. According Peter Beck (2006) the government has high future hopes for more export of furs. It is now around 20 million DKR a year and is expected to increase annually.

Apart from fisheries, the public sector, including publicly owned enterprises, plays a dominant role in the Greenland economy. An annual block

grant Greenland receives from Denmark makes up about one-half of the revenue of home-rule government. The grant makes up a significant share of GDP and it stood at DKK 3.1 billion in 2004, which is approximately 31% of GDP (Greenland statistical bank, 2006). As shown in figure 3.2 the grant has been fluctuating in recent years. It decreased annually from 1997 to 2001, went up again later that year and has been increasing since. The increase had among other factors to do with fall in world market prices of shrimps.

Figure 3.2

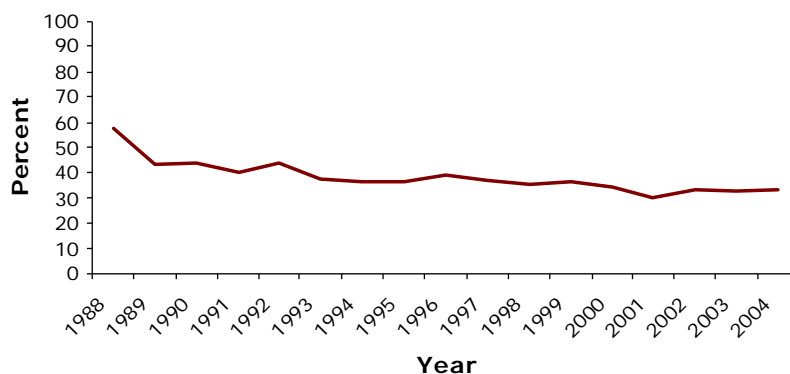


Source: Greenland statistical bank, 2006

There are no large-scale industries in Greenland. Apart from fishing and hunting, very few goods are produced in Greenland, thus making the country highly dependent on imports that comprise practically all consumption goods in households, trade industry, institutions and investments (Greenland statistical yearbook, several years). Like shown in figure 3.3, imports remain high, but have gradually declined since 1988 when they stood at 57.8% of GDP compared to 33.4 in 2004 (Greenland Statistics, 2006).

Figure 3.3

### Import as a percentage of GDP 1988-2004



Source, Greenland statistical bank, 2006

Denmark is Greenland's largest trading partner with 63.8% of the country's exports going to Denmark, 12.6% to Japan and 3.9% China. Of import is Denmark also the dominant country or 63.8% of all imports coming from Denmark, then 2.7% from Sweden 2.7% and then 11.9% from Norway (Greenland Statistics, 2005).

All this listed above shows how narrowly based the Greenland economy is. A small fluctuation in world market prices on shrimps for example can have an impact on the whole economy because of the high rate of fish export to Greenland's GDP. The Greenland home rule emphasis now is on diversification of the economy by increasing production and service within the private sector and by moving from public monopolies towards more private initiative (Larsen, 2002), and development of the necessary requirements for an economically viable private sector (Beck, 2006). The main development goals stemming from this economic policy is to gain higher degree of independence from the Danish annual block grant, to increase export income and employment rates, and to reduce Greenland's dependency on Danish personnel (Ibid. p.31).

### ***3.2 Dependency on primary products***

While the Greenland economy has been growing and becoming rather modern, it still has a number of obstacles to overcome and at the moment its main emphasis

is to find new income sources both to stimulate and stabilise the economy in order to gain more independence from the Danish State (Mininnguaq Kleist, 2006).

Greenland's dependence on primary products does not necessarily have to have negative effect on economic growth in the country. It can though be one explanation on economic instability. Two thorough studies, one from the 1950's by Alsdair MacBean and the second in the mid 1960's by Odin Knudsen and Andrew Parnes showed that although a country suffered from export instability, their investment and economic growth may not be hurt by it (McBean, 1966). What seems to characterise countries that suffer most from export instability is according to the World Trade Organization, concentration on one or few products, especially if those products are primary commodities, and if the country's markets are concentrated in few importing countries (World Trade Organization, 2004). Both apply to Greenland; it's high concentration on fish export and very few importing countries. 63.8% of all imports coming from Denmark, then 2.7% from Sweden 2.7% and then 11.9% from Norway (Greenland Statistics, 2005).

Hence, Greenland needs to lower the high degree of dependency on specific renewable resource and it needs to diversify it's trading in order to stabilise its economic instability regarding external trade. This can though be rather problematic. First, Greenland continues to be constrained not only by the lack of resources but also by the lack of flexibility in existing resources (Larsen, 2002). Second, Greenland's historical roots and economical dependency on Denmark, makes it hard for Greenland to switch to other trading partners (Jónsson, 1998).

Rasmussen (2000) argues that in order for Greenland to change from dependency on a single resource towards resource flexibility, the change will require a growing awareness of the expanding markets that would enable much more diversification in the economy with more diverse production range than has been the case so far. According to him the trick is to maintain a basic production founded on resources that are showing long-term stability, and in addition to this, to take advantage of fluctuating resources. He further argues that even if there still are unexploited resources in Greenland, there is no doubt that an increase in that production should not be based on a substantial expansion of the resource exploitation. Instead, efforts should be concentrated on exploring further ways to add value to manufactured products, using the present resource base (Friis and Rasmussen 1989; Poole 1995; Rasmussen 1998a).

### ***3.3 High dependency on the export of fish***

To promote economic development, Greenland must explore ways of producing products other than fish in order to decrease its dependency on the narrowly based export sector according to Peter Beck (2006).

In order to understand how trade and development interact, it can be good to adopt an eclectic approach, using trade theory where it is useful but also revert to other kinds of analysis. Because there are different kinds of approaches to trade, that favours different types of export and import and therefore, different kind of economic development. One of such strategy is primary-export-led growth (Gillis, Perkins, Roemer and Snodgrass, 1987).

### ***3.4 Primary export as an engine of Growth***

Since the 1950's fisheries have been viewed as primary source of income and a potential engine of economic growth and development in Greenland (Larsen, 2003). At that time it was generally believed in the world market that the road to development was to export raw materials, raising per capita income and therefore permitting structural changes to take place. Countries such as, the United States, Canada, Australia and Denmark had already become developed by following this path. This approach has not worked for all countries and especially not well for the so-called third world countries or developing countries. Though few countries such as Colombia, Mexico, Ghana and others did undergo significant structural change as a consequence of primary export, this change has only taken them half way to development (Gillis, Perkins, Roemer and Snodgrass, 1987).

Half way to development can in a way be used in the Greenland case as well, as after economic development in the 1950's and 1960's, growth ceased when income reached middle-income level.

When looking of benefits of primary export led growth, there is no doubt that they can be many. It can lead to economic growth as it can improve factor utilization, expand factor endowments and have linkage effects that leads to stimulation of other industries in the country. But there are also barriers to

primary-export led growth and since the late 1950's some economists and many third world leaders have argued that primary exports, other than petroleum, cannot effectively lead to economic development. Markets for these commodities have been declining, earnings are too unstable and linkages do not work (Gillis, Perkins, Roemer and Snodgrass, 1987).

### ***3.4.1 Slow Demand for primary products***

It is common observation, known as Engel's law that the demand for primary product grows more slowly than income, although in a world of balanced growth, exporters of primary products could expect their export to expand at the same pace as national incomes of the countries that import primary products, and hence expect their own incomes to grow at that rate. In the book *Economics of Development*, Gillis, Perkins, Roemer and Snodgrass point out that the world is not balanced in this way. They point out that there are many obstacles that face primary product export. Technological changes in manufacturing may work against the consumption of raw material by raising the yield of finished products from a given input of raw material. For example, modern looms waste less cotton, metal cans contain less tin and so forth. They also point out that in order to reduce the expected growth of material imports towards income, the societies expenditures need to shift away from goods toward services (Gillis, 1987). Although several countries have experienced substantial export growth ever since 1960, primary product import in industrial countries has been declining. Even at the same time import growth in the industrial world was high and rapid. Those countries that experienced economic growth while producing those commodities used diversified group of other traditional exports to stimulate growth (Gillis, Perkins, Roemer and Snodgrass, 1987).



## **Chapter 4**

### **Economic diversity**

#### ***4.0 Introduction***

This chapter analyses and discusses economic diversification within the Greenland economy. First a definition of the concept diversification, then theory, diversity and stability and finally how economic development is measured.

#### ***4.1 Economic diversification***

As discussed in previous chapters the Greenland economy is highly narrowly based. The block grant from Denmark and fishing agreements with EU account for 60% of Home Rule's income and the export earning from the fishing industry mark up to 20% of the country's GDP. A small fluctuation in world market prices on for shrimps for example could therefore have a huge impact on the entire economy, due to the high rate of fish export on Greenland's GDP. In comparison to Iceland, that also relies greatly on fish export that provides 70% of export earnings and employs 8% of the workforce. The gross domestic production of Iceland is not as highly dependent on the fish industry. In recent years the Icelandic economy has been moving toward more private initiative, diversifying into manufacturing and service industries that now makes up approximately 70% of GDP, while the entire agriculture industry in Iceland makes up about 11% of GDP. Focusing on new developments in software production, biotechnology, financial services and the tourism sector has also had its impact on the fast growth rate in Iceland which has put the country in seventh place on the list of richest countries in the world (Iceland's Ministry for foreign affairs, 2005).

The narrow resource in Greenland causes the risk of great economic fluctuations that makes households in Greenland vulnerable in achieving sustainable livelihoods. If Greenland had more sources of income it would be

easier for the country to cope with the economical stress and shocks. This is, according to Beck (2006), one of the main obstacles towards a more sustainable economy. Therefore there is an urgent need for economic diversification in Greenland.

#### ***4.2 The theory of economic diversity and stability***

In theory, a country or a region that is heavily dependent on primary production or highly income-elastic durable manufacturing may face productivity shocks and often, sharp swings in prices or income. This will often result in alternating periods of chronic unemployment

Diversification policies are intended to reduce dependence on industries with instability by encouraging industries that are likely to enhance stability (Gilchrist and St. Louis 1991). In a sense, diversification becomes a type of averaging process: the greater the variety of industries in a region, the less likely a region is to suffer from overall economic decline (Kort 1981). According to McLaughlin, there are no two businesses that have exactly the same seasonal and cyclical swings, the more types of production and trade are represented, the more stable the economy will get (McLaughlin 1930, 133). Further, businesses that do not face a cyclical swing will be able to reemploy displaced workers from businesses that do face a cyclical swing. However, diversity is not only an absence of specialization but in regions or areas of sufficient size, a multiple specializations can compensate for one another when business cycles or external shocks occur. For that reason, diverse areas should be more stable than narrowly specialized cities because “their fortunes are not tied to the fortunes of a few industries” (Chinitz, 1961, 281. More diversified regions or urban areas also tend to have more industries that can remain relatively healthy during difficult times and retain their employment levels.

For diversity to work effectively in reducing unemployment, a workers loosing their job in one industry should be able to find work in another local industry; occupational diversity may therefore lead to more unemployment or instability because of the difficulty of reemploying workers (Malizia and Ke 1993). Also, diversification is also roughly neutral in its effect on cyclical stability. What really makes a region especially vulnerable to cyclical swings

is specialization in cyclically sensitive activities (Hoover and Giarratani 1984). In the case of Greenland, almost all small settlements have specialized in cyclically sensitive activities, mainly within the fishing industry and in very few areas of small settlements in Greenland has the worker the opportunity to find job in another local industry. Royal Greenland, the country's fishing industry, is the largest job providers in the settlements. Like many fishing industry, they are affected by cyclical instability. In order though to ensure that workers get salaries each month, the company distributes the salaries the worker earns during working seasons. However, in theory a regional policy makers who wish to help their region avoid the serious fluctuations in employment and income that accompany business cycles may want to increase the diversity of the local economy (Kurre and Weller 1996). This is all good in theory, but do to difficult situations in Greenland where small settlements are isolated from the outside market; diversification of the local business is very much problematic.

### ***3.3 How is economic Diversity Measured?***

Regional scientists have for long tried to develop meaningful definitions and measures of economic diversity and diversification, and to establish functional relationships between diversity, diversification, and economic performance. The multiplicity of definitions and measures explains, in part, the confusion about these relationships (Siegel, Johnson, and Alwang, 1995). To test the hypotheses of economic diversity, researchers have tried various measures of regional economic diversity on a region's economic structures. After a comprehensive review of different measures of economic diversity, Siegel, Johnson, and Alwang (1995) warned that most of these measures "lack a sound conceptual basis". In particular, they are cautious against the use of any standard being used to measure economic structure. These measures may actually be wasteful on their opinion because they can be mistakenly accepted as guidelines for desirable changes in economic structure while assuming that every region, regardless of resource advantage, infrastructural development, agglomeration economies, or to re endowment, should conform to that norm (Jackson,1984). There fore, they can be used to describe a regional economy

at a given point in time but not to compare alternative diversification strategies (Siegel, Johnson, and Alwang,1995).

## **Chapter 5**

### **Goals towards economic diversification in Greenland**

#### ***5.0 Introduction.***

According to Peter Beck (2006) the main obstacles towards economic development in Greenland are: Lack of educated personnel, the high public monopoly and the narrow resource based economy. According to him, more private initiatives are necessary for expanding the economy as a tool towards more economic diversity. The Home Rules government economical plans since 2000 has been towards similar strategies as the government has been moving a bit towards more private initiative as the production within the private sector has been increasing. Although economic diversification is essential, the main obstacles in the Greenland society today, is according to all interlocutors in the field work in Greenland, the lack of qualified/educated labour force. Beck (2006) further talks about the uniprice system in Greenland as an obstacle towards economic development in the country as it keeps prices high in all Greenland.

This chapter will focus in on the Home Rules Government economical goals towards self-sufficient and independent economy, with economic diversification and education as the main tool towards achieving these goals. According to the Home Rule governments, *Politisk-Økonomisk Beretning 2006*, their main political plan in order to strengthen the society will be on huge investment in education, infrastructure such as new airport in Nuuk, and houses. In this chapter I will focus in on education and industries in Greenland that gives the most hope for more diversified economy, such as the tourism industry, minerals, new export opportunities and finally privatization related to the one price system.

## ***5.1 Education and language issues***

In all of the interviews during fieldwork in Greenland, formal and informal, educational problems and language issues were viewed as the countries main challenge today, socially as well as economically. In my earlier research about the Greenland economy that was finished in December 2005, *The Greenland dependant economy*, these issues were not viewed as crucial problems in the Greenland society, as they were only mentioned very briefly in sources that were available in English. Actually, the language issue seemed to be something that came as a surprise for the whole group that participated in this fieldwork. These problems are of such a large scale that they affect all setsquare of the society.

According to the representatives of the Directorate of Culture, Education, Research and Church, Jes Dahl, Hanne Lindberg and Inaluk Brandt. The main problem lies within the high drop out rate, language issues and a great need for educated teachers. A special need is for Greenlandic speaking ones, as the major part of the teachers or 2/3 are Danish. The school system in Greenland is also very young or only about 30 years old, and therefore there one could argue that there is a very low educational tradition in Greenland. In several interviews people mentioned the lack of parents support towards their kids education. In my informal discussion with several young Greenlanders they claimed that this has among other factors roots to low level of self-esteem of the parents as they don't want their kids to earn more money than they do, or they don't see the profit of investing in education as the child could be working instead. However, most people both from formal and informal interviews said that the reason that people don't seek further education has first of all to do with language issues, as if one doesn't speak fluent Danish one faces severe problems when entering high school as most of the material is then in Danish instead of Greenlandic like in primary school. This has both to do with a little educational material available in Greenlandic as well as the lack of Greenlandic speaking teachers. In primary school 2/3 of the teachers are Greenlandic, around 10% of teachers in high school are Greenlandic and less than 5% of teachers in the university level are Greenlandic (Jes Dahl, Hanne Lindberg and Inaluk Brandt, 2006). According

to Peter Beck (2006) from the ministry of finance and Fleming Enequist (2006) from the Directorate of Labour and Agriculture, the high drop out rate has also to do with salaries. As current situation, one could have very similar salaries by driving a taxi as to work for example for the Home Rule government. As seen in table 4.0 wages difference between skilled and unskilled publicly employed from 1980-2003 is relatively low. The measurement in DKR per hour.

Table 4.0

<b>Workers</b>		<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2003</b>
<b>Unskilled</b>	<b>April</b>	<b>25</b>	<b>53</b>	<b>63</b>	<b>68</b>
<b>Skilled</b>	<b>April</b>	<b>28</b>	<b>60</b>	<b>77</b>	<b>82</b>

Unit. Dkr per hour

Source, Greenland statistical bank, 2006

Therefore it can be argued that people make economical reasonable choices by quitting school. Salaries within the private sector are on the other hand much higher then within the public sector according to Beck and Flemming, which has now led to competence for the workforce.

The continuous high dropout rate in schools and low admission to educational programs keeps the work force in a low training standard. In the whole work force, which is of around 40.000 persons between 15 and 62 years old, only about one third have a competence-giving education (Directorate for Culture, Education, Research and church, 2006). According to a representative of the directorate of Labour and Agriculture, there will be years until Greenland manages to have enough educated workforce to ensure that the population born in Greenland can replace the present labour force and until then, there will be a continuing need for labour from abroad. This has a huge impact on economic development in Greenland, not only due to dependency on imported personnel but also to the lack of competence in the fast growing Globalization. Untrained workforce is also much likelier to be unemployed as they are not attractive to employers, because of their lack of competence within the workplace. (Directorate for Culture, Education, Research and church, 2006). This has an impact of economic development and hence economic growth.

### ***5.1.1 Education as an instrument for promoting economic growth***

Education is widely accepted as a leading instrument for promoting economic growth (The World Bank, 2006). According to The Bank development agencies have for several decades placed great emphasis on primary and more recently secondary education as an instrument to improve economic growth and poverty reduction. The recent evidence suggests higher education is a determinant as well as a result of income, and can produce public and private benefits. Higher education may create greater tax revenue, increase savings and investment, and lead to a more entrepreneurial and civic society. According to Bloom, Canning, and Chan (2006) education also improves a nation's health, contribute to reduced population growth, improve technology, and strengthen governance. They point out India's investment in education and their remarkable leap onto the world economic stage (Bloom, Canning, and Chan. 2006).

In December 2005 a proposal for educational plan was presented by the Home Rule government where it stated that the governments main focus both in economic and social development will be on improving education. The action plan retains a reserve an investment level of around 400 million DKR till the year 2012. Their main emphasis is towards educating people towards sectors that can support growth in the economy or have great demands for specialised work force in the public sector, e.g. tourism, construction, raw materials, health, social science and education (Directorate for Culture, Education, Research and church, 2006). This huge investment in education as well as the action plan, shows of how much important education is towards socio- and economic development in Greenland. However, at the same time as huge amount of money is put into the education system, new buildings such as a new University and primary schools in Nuuk are being built. The problem regarding the urgent need for qualified, educated teachers is still an unsolved problem. According to Josef Therskildsen the vice-chairman of the labour

union in Greenland , SIK. Teachers receive amongst the lowest salaries in the society. And due to low level of education in the society, educated teachers are usually offered job within the Home Rule or within the private sector. That leaves uneducated personnel as teachers that due to low salaries seem often to have very little enthusiasm towards their job. This can be seen according to Josef Therskildsen in the high level of sick days that teachers take. One could argue that a teacher can be seen as one of the fundamental condition for kids to learn in school, one could argue that no matter how much the government will invest in education by promoting the “good school” system with better language teaching and a good educational plan, the goal will never be achieved as money can for sure buy books but they cant buy knowledge. Therefore, Greenland can face ongoing problems within their school system, if teachers are not taken into consideration as one of the main instrument of the educational plan.

The language issue that challenges the society is a very problematic issue to handle. Within all of our interviews people mentioned this problem as one of the main obstacle towards socio- and economic development. Most people said that due the shift in the educational system after the introduction to Home Rule, that was towards primary school’s should being in Greenlandic Had entailed that many Greenlanders had problems with Danish later on in the school system. This sounded logical as the high droop out rate in High school can be related to language issues. However, when speaking to young Greenlanders, they felt that their lack of good enough Greenlandic was more an obstacle for them rather than not good enough Danish. Later when speaking to a Greenlandic- Danish woman, Jeanette Holding she informed us about the hard situation in Greenland for Danish speaking Greenlanders as herself. As for example new laws at the Home Rule government entails that Greenlandic speaking personnel should always have the job, if qualified. This is done in order to increase the participant of Greenlanders within the ministries, which in many ways makes sense, however, Danish speaking Greenlanders consider themselves just as Greenlandic as the Greenlandic speaking ones. However, in order for a Greenlander to get a “good” job, for example within the private sector or the Home Rule, most of the time one needs to speak Danish (Beck, 2006). Despite of Beck and most of our interlocutors view on job and



educational obstacles towards only Greenlandic speaking Greenlanders, one wonders how come the Prime Minister of the country, Hans Enoksen was elected as he only speaks Greenlandic. This perhaps gives an example how extremely problematic this issue is.

In the year 2000 a Committee on language legislation associated with the minister of culture advocated a legislative activities to make space for status raising campaigns and creation of some of the badly needed language tools like terminologies, dictionaries, and language technology programs.

It seem to be generally assumed both in the language board as at the political level in Greenland that Greenlandic cannot be whipped toward the goal by means of extensive language regulations - at least not too many. A certain degree of regulations is though, considered appropriate.

Instead, according to Jeanette Holding, a much effort is put into trying to facilitate the development by allocating resources to institutions with Greenlandic language and Greenlandic culture on the agenda and via activities believed to strengthen the status of the Greenlandic.

#### ***5.4 Tourism Development***

Tourism development is one of the Home Rule government strategy towards more diversified economy. Tourism development can be an important component of the overall efforts to more diversified economy. As growth that occurs under tourism development does not only crest jobs and diversifying the economic base of the community but can also attracts further investment in terms of tourist money brought into the community (Lambansen, 2005).

The focus on tourism industry is increasing in the whole world. EU has for example been focusing in on tourism as a way to increase economic growth. Recent statistics show that tourism provides some eight million jobs for the EU workforce and is the operating foundation for two million enterprises. The volume of EU tourism is even expected to double again over the next quarter of a century, and tourism employment is expected to rise by 15% over the next ten years (The Nordic Council of Ministers, 2006).

As in all Europe, the tourism industry in Greenland has been increasing annually. According to Peter Beck (2006) the Home Rule

government puts high hopes in the tourism industry as a way to diversify the economy. Greenland's commitment to tourism development can be illustrated by the annual investments in Greenland Tourism A/S (GT), a publicly owned organization established in 1992 to promote tourism development in Greenland. In the first years of its operation, GT was funded approximately 28 million DKR annually (Lyck, 1998: 77), and since 2000 the organization has been funded approximately annually for 20 million DKR. These investments can be considered sizeable, as they amount to approximately 0,21% of Greenland's total GDP (Statistics Greenland, 2006).

In a discussion with the representatives of the Ministry fishing, hunting and settlements they informed us that tourism industry could be Greenland's last option in order to save the settlements. However, tourism development can have both positive and negative economic, environmental and social impact that often are not taken under a consideration. In the case of Greenland, one could though argue that in order for them to save the settlements that preserve the countries historical roots, changes need to be made, with tourism or any other activities in order for the people's survival.

#### ***4.5 Mineral Deposits***

Exploration for oil and minerals together with fishery and tourism, have been the most important ventures of the Home Rule. However relatively few of the mineral deposits found in Greenland have so far been exploited (The Bureau of Minerals and Petroleum in Greenland, 2006).

According to Ole Christiansen from Nunaminerals (2006), the country has great potential of becoming a significant supplier of mineral resources to the world market, however large areas are still almost unexplored. In the last few years Greenland has however regained new interest from the international mineral industry, due to strong mineral and metal prices that have increased the interest for exploration in Greenland after nickel, gold, molybdenum, platinum and palladium. An increasing number of licences have been granted and the value of mineral exploration in Greenland has tripled in the last two years (Bureau of minerals and petroleum, 2006).

The first gold mine was opened in Greenland in 2003, the Nalunaq Gold Mine. And in 2005 the Home Rule granted a new exploitation licence to

exploit olivine for the next 30 years. The company expects to mine up to 2 million tons of olivine per year for the next 25 years. However, these numbers are still very much of a speculation but if the wise exploitation of the mineral resources will become true for Greenland, it can become an important part of the basis of a sustainable economy in Greenland, according to Peter Beck.

On the west coast, several licenses have also been granted with the purpose of exploring diamonds. Other promising projects are developing on the east coast of Greenland, projects such as the Skaergaard Intrusion, which is known for its large potential of gold, palladium and platinum (Bureau of minerals and petroleum, 2006).

#### ***4.6 Export of Furs, Ice and Water***

Greenland needs to diversify its export sector in order to stabilize the economy, the Home Rule government's focus is now on export of furs, Ice and water.

Hunting is still very important in terms of economy. For large parts of the population, subsistence hunting and fishing are still very important according to Torsteen Overgaard and Jens Jakobsen in the Directorate of Fisheries and Hunting, This is particularly true for the about twenty per cent of the population who live in small, remote settlements and who have very few alternative options as regards employment. For them, the daily catches are an essential and necessary part of life. Hunting is also very important from a cultural perspective. In a society such as Greenland, which for centuries was based on subsistence hunting until about fifty years ago, hunting is still of great cultural importance. However, there are less and less people participating in this sector and specially by the young generation. In the interview with Jakobsen and Overgaard they informed us that as the situation is now, there are too many professional hunters in Greenland today. Therefore they can't make their income of living just by hunting and hence they get support from the government. Due to lack of interest of the young generation the Directorate expects a decline in professional hunters that will make it easier for few hunters to live on their own source of income.

Export of furs is one of the hopes for the Home Rule in order to diversify its export and according to Peter Beck the world market price for furs is increasing annually that gives the Home Rule government hope of expanding the export from 20 million DKR a year towards 100 millions DKR within five years.

The Greenland Parliament started in the year 2001 to act on exploiting ice and water. According to Beck (2006) the Home Rule has high hope for this to expand within few years. Already there are 40-50 employees working on this field.

### ***Privatization***

Apart from increases in skill development with higher education and diversification, there is also a need for structural changes and new private commercial activities to create a sustainable economy according to Peter Beck. However, during my fieldwork in Greenland, it became evident to me that the debate about privatisation of the Home Rule Government enterprises is a highly fragile and sensitive matter. This can perhaps have roots to the failed attempts that were made towards privatization in Greenland in the 1950's and 1960's. The reasons that have been pointed out by scholars for this failure is for example the high cost of doing business in Greenland and the harsh arctic climate. However, the Greenland society is not the same society today as it was 50 years ago. At that time there were no business traditions in Greenland as they did not exist in the old Eskimo culture and the Danish colonialists were not businessmen, but civil servants (Paldam 1997).

State firms dominate most of the sectors producing private goods and it owns all the key corporations such as, The Royal Greenland Inc that dominates the fishing industry. Air Greenland, Greenland energy supply and many more (Greenland statistics, 2005). The domestic market for goods is dominated by the public owned corporation KNI, or about 50%. The market is divided between Brugsen and private retailers in Greenland.

In the Home Rule's Structural Policy Action Plan in the year 2000 the government laid its emphasis on the need for structural changes and new private commercial activities to create a sustainable economy in Greenland.

This was emphasised in the action plan; the public sector is too large, the one-price system gets in the way of commercial development and education is an important prerequisite for social development (Politisk-Økonomisk Beretning 2000). Since then, several reforms and initiatives have been taken to support positive developments towards a self-sustaining economy, a rent reform and supports that make it attractive for people to buy it's own housing. A reform of the school system is to be made and recently a start on a restructuring of the one price system to reflect the true expense levels of water, electricity and heat (Beck, 2006)

The one price system is used to protect consumers in small settlement so the same price system occurs all over Greenland (Lyck, 1997). The one price system of water, electricity and heat no longer occurs in Greenland, but it still occurs regarding other goods, such as food. According to Paldam (1997) The uniform price system means a lack of transparency, inexpedient competition structures and makes contracting out very difficult because of the economic connection which cross-subsidising creates between the various operating costs (Paldam, 1997).

Recognising these problems, a sub report was submitted by the Home Rule in 1998 that stated by abolishing the uniform price system it would mean lower prices in the 6 or 7 large towns along the west coast of Greenland, which would make the Greenland business community more competitive, thus setting the stage for greater growth in Greenland society. The financing requirement should be presumed and covered through increases in taxes or duties (Greenland Home Rule government newsletter, 1998). Although Greenlanders are aware of the consequences of the uniform price system, Lyck (1997) point out that although it's possible that a new more transparent price system would lower the prices and the efficiency of the Greenland economy, it can easily spoil political stability that makes such changes problematic.

Paldam (1997) claims that Privatisation can be a way of decrease the high prices. Economists disagree on that matter, some say that privatisation is too difficult there, due to harsh climate, difficult and expensive transportation on the island, high salaries etc (Pool, Larsen, Lyck et al.). Lyck states that due to bad business conditions in Greenland privatization would

perhaps not work in order to lower the price of goods. Paldam on the other hand disagrees and points out that the Monopoly in Greenland is extreme and in order to find a country in the same monopolized position as Greenland, one would have to look to South-Korea or Cuba. He refers to the perfect competition model, that is an economic model that describes a hypothetical market form in which no producer or consumer has the market power to influence prices. According to the standard economic definition of efficiency, perfect competition would lead to a completely efficient outcome. He argues that at first, prices would be higher in small settlements because of lack of competition there but price wars are likely to lower the price in bigger settlements. When the market has run for some time, the market has the advantages to take care of itself. Still, prices will be lower for people that live in good locations which means, unequal income distribution. But instead of imposing uniform prices with monopoly Paldam argues that uniform prices can be market-based. This would mean that the authorities would leave the market running and put on a levy tax/subsidy system for the shops in smaller settlements. This would not mean that prices will be exactly the same everywhere, but the deviations will be arbitrary according to the competitive situation and the efficiency of local shops (Paldam, 1997).

If considered that privatization is the answer for decreasing the high prices in Greenland, the strategy still faces a lot of obstacles as listed above, for example, high operational cost, bad transportation and harsh climate conditions. Paldam (1997) points out that the difficulties regarding privatizing in Greenland have also to do with lack of business traditions in Greenland (Paldam, 1997).

## **Concluding remarks**

Throughout most recent years, several reforms and initiatives have been taken to support positive developments towards a self-sustaining economy in Greenland. Market conditions have been positive for some time now and are expected to remain that way. Tourism is showing advances and the unemployment rate has been falling the past two years. The public sector has contributed positively to growth in 2005, because it has loosened its reins on fiscal policy (Beck, 2006).

The fishing industry has caught more shrimp, and on average, experienced increasing shrimp prices and good catches of Greenland halibut (Bjerregaard, 2006). Gold mining operations have begun as well as budding exploitation of olivinsand. Exploration activities for minerals have increased. At the same time, financial lending has increased greatly – particularly in the building and housing trades, which has had a positive impact on activities.

Although several ways have been taken towards a more self-sustaining economy in Greenland and things are looking positive at the moment, a way towards economic development can be far more complex. Economic growth in the society has mainly been within towns and larger settlements and at the same time, growth is decreasing in the small settlements. There is also belief that if the one price system disappears within all sectors of the settlements, prices there will go up and people will be forced to move. As the situation is now, increase in the tourism industry can save some of the small settlements, but looking at other business sectors, apart from hunting and export of furs, there are few business opportunities in order for the small settlements to survive without any government support. However, the small settlements seem to be of very much importance to the Greenlanders, both in order to preserve their culture and heritage, and hence they will be preserved for some time at least, but for how long without it's own source of income, is problematic to predict. Within towns and larger settlements, Greenland has hope for diversifying its economy. The Home rule focus is now on increasing production and service within the private sector and by moving from public monopolies towards more private initiative, which has now in recent years led to more economic growth in Greenland. However, the Home Rule is facing a number of major challenges in the coming years towards a self-sustaining economy. First of all the Home Rule has to solve the dilemma concerning a large group of unskilled citizens that require financial support, while at the same time, resources are needed to expand the educational system as well as to develop infrastructure and housing in the major towns. The narrow resources in Greenland cause the risk of great economic fluctuations that makes households in Greenland vulnerable in achieving sustainable livelihoods, therefore, economic diversification is crucial in order for the country to get more economic independency from Denmark as well as to reduce fluctuation and

uncertainty in the economy. Whether more privatization is the answer or not, one could argue that the economical changes that the Home Rule government has made in recent years, towards more privatization, has made it possible for the Home Rule to invest more in education and infrastructure of the society.



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