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**Article**

## Climate Change and Vulnerability of the Arctic Elderly: An Assessment from Human Rights Point of View

CES Working Papers

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*Suggested Citation:* Begum, Shahnaj (2012) : Climate Change and Vulnerability of the Arctic Elderly: An Assessment from Human Rights Point of View, CES Working Papers, ISSN 2067-7693, Alexandru Ioan Cuza University of Iasi, Centre for European Studies, Iasi, Vol. 4, Iss. 3a, pp. 459-479

This Version is available at:

<https://hdl.handle.net/10419/198191>

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# CLIMATE CHANGE AND VULNERABILITY OF THE ARCTIC ELDERLY: AN ASSESSMENT FROM HUMAN RIGHTS POINT OF VIEW

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**Abstract:** *There are increasing challenges among the elderly in the Arctic region. Global warming due to climate change is one of the major reasons for these challenges. Because of climate change temperature in the region increases, which results in rapid melting of sea ice causing various environmental, social, cultural and economic problems. Population in the region suffers from these problems where elderly people are the most vulnerable. Climate change has already affected the elderly lives in different ways, such as, by physical, social, political, cultural and psychological ways. These have serious consequences in terms of human rights of this vulnerable group of people. However, the elderly people's human rights issues have not been adequately researched in the context of this region. The goal of this paper is to present elderly related human rights issues, particularly the rights that are affected due to climate change in this specific region.*

**Keywords:** elderly, Challenges, climate change, human rights, Arctic region, vulnerable

**JEL Classification:** Q5, R11

## INTRODUCTION

The elderly\* people are the fastest growing population all across the world (Mégret (a), 2011, p. 34). It is expected that this growth will be drastic in the future. The former UN Secretary General Kofi Annan stated at the 2nd World Assembly on Ageing (Madrid, 2002), "The world is undergoing an unprecedented demographic transformation. Between now and 2050, the number of older persons will rise from about 600 million to almost two billion. In less than 50 years from now, for the first time in history, the world will contain more people over 60 years old than under 15" (CESCR General Comment, 1995). As a result, elderly people's concerns are likely to rise gradually in all across the world. The Arctic region will not be an exception in this regard. According to the predictions of the Finland Demographic Statistics, the number of people with age of 65 will increase over 600,000 by 2030 (Patosalmi, 2011, p. 1). Another source also support that at present, people under 15 years constitute about 18% of the total population and those over 65

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\* Elderly" in this proposal refers to "elder persons", "old people", "senior persons" including "elderly men and women". Since in Finland, in different research the age from 65 has counted as an elderly person, I will also take that age as my reference.

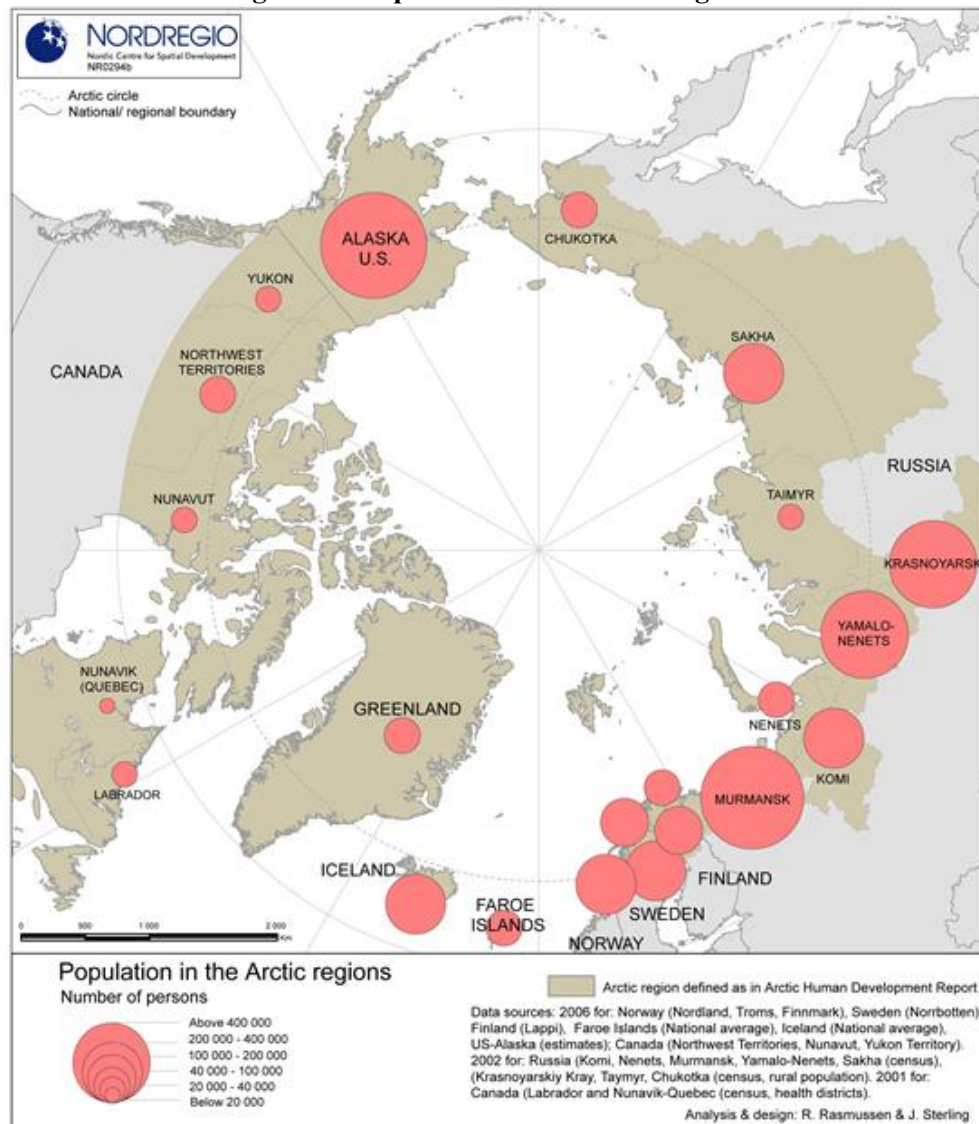
years some 15%. The number of people aged 65 years or over will grow by about 400,000 (e.g. by over 50%) in the next 20 years (Järvelin, 2002, p. 1).

The Arctic faces huge challenges in the event of global climate change. The effect of climate change is significant on marginalized people all over the world. As marginalized people the elderly population suffers from various problems due to the adverse consequences of climate change. On one hand climate change strengthens existing vulnerabilities (World Development report, 2010), and on the other hand it is also linked to inequality (Cameron, 2011, p. 2). Climate change motivated indirect effects also include mental and social stress which is related to loss of community and culture (Parkinson and Berner, 2009, p. 84) putting psychological pressure upon particularly the elderly people who belong to such community. Since climate change in the Arctic occurs twice faster compared to other parts of the region (Hassol, 2004, p. 12), the elderly people in the Arctic are likely to suffer the most by the climate change related consequences. The Arctic Climate Impact Assessment (ACIA) was issued in 2005, which was the first inclusive scientific assessment of climate change in the Arctic. The assessment came up with ten significant findings. Out of these, findings 8, 9, and 10 are particularly relevant in the context of the Arctic people.\* These findings speak about community, culture, economy, health and well-being of the Arctic people in which the elderly people's concerns are well placed. These concerns significantly affect particular aspects of human rights of the region's elderly population. It may be argued that human rights-based assessment of climate change is of particular relevance in the Arctic as far as current approaches activate human rights rhetoric in the interests of perceiving inclusive system for mitigating climate change (Humphreys, 2008, p. 11).

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\* See: Findings 8, 9, 10 are: Indigenous communities are facing major economic and cultural impacts; elevated ultraviolet radiation levels will affect people, plants, and animals; multiple influences interact to cause impacts to people and ecosystems, Arctic Council 2005. Arctic Climate Impact Assessment Scientific Report, (Cambridge University Press, 2005), 863-960.

**Figure 1 – Population in the Arctic regions**



Source: Nordregio at [www.nordregio.se](http://www.nordregio.se).

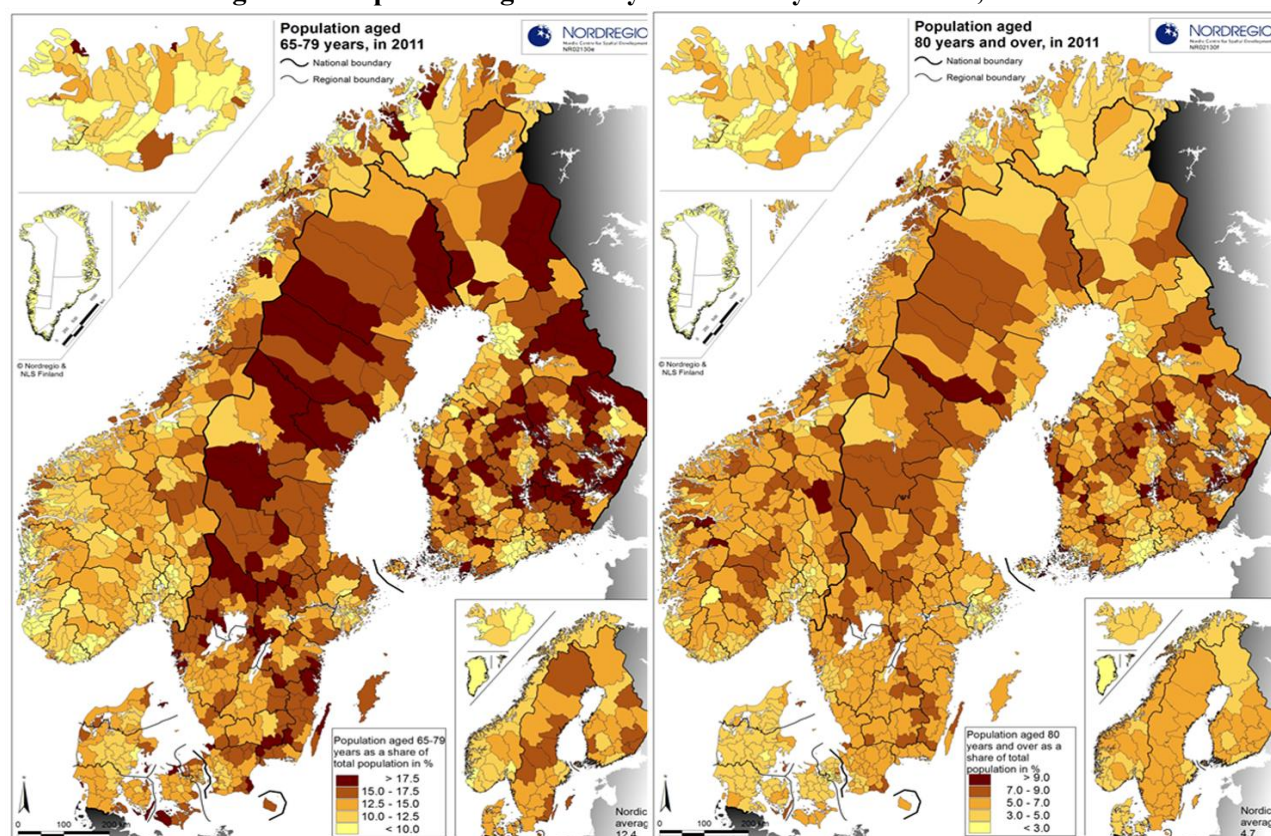
While the debate over comprehensive human rights for elderly has started in recent years, and scholars argue more and more on elderly human rights to take seriously (Doron and Apter, 2010, p. 586; Butler, 2002, p. 152), there is no such particular development regarding all inclusive elderly human rights. The rights of elderly persons have not yet attracted international legal attention as there is no specific instrument exclusively addressing elderly people's human rights (Fagan, 2002). The reference to this assertion can be found also in the statement of the African Commission on Human and People's Rights (Yeung Sik Yuen, 2008). However, there are a number of international and regional instruments that address particular aspects of human rights applicable to the elderly population. They include aspects of human rights generally applicable to all as well as to a particular group of people, such as to children, people with disability, women, migrant workers,

indigenous people etc. The elderly human rights may be deduced from these instruments. Yet it is suggested that an inclusive research on the necessity to protect elderly human rights required (Mégret (a), 2011, p. 38). The Human Rights Council Advisory Committee in 2009 has also come up with similar conclusion. It is particularly important in the Arctic context, and precisely in the context of elderly people of the region, since vulnerability of elderly people from the human rights perspective has not been properly addressed elsewhere. The aim of this paper is not to examine any legal violation of human rights or any legal remedy to be provided where there is a violation of human rights. Rather, it intends to address the challenges of the elderly population of the Arctic region, resulted from climate change, and to integrate human rights aspects associated with such challenges. The aim therefore is to show how climate change consequences affect elderly people's human rights in this particular region.

This paper thus addresses three important issues in this context. First, it examines how elderly people are affected due to the climate change in the Arctic, specifically in the Nordic Arctic. The aim is to show how elderly people in this region affect differently than that of the other region. Second, it delineates the particular provisions embodied in the human rights instruments applicable to the elderly people of the region. Third, it examines how the climate change related consequences affect the region's elderly population, particularly from the perspective of human rights. The methodology used for this paper is the reviews of extensive literature, which include: scientific articles and monographs, relevant international and regional legal instruments, the reports and statements published by the United Nations and other international and regional institutions as well as informal discussions with scholars and stakeholders.



**Figure 2 – Population aged 65-79 years and 80 years and over, in 2011**



Source: Nordregio at [www.nordregio.se](http://www.nordregio.se).

## 1. IMPACT OF CLIMATE CHANGE ON THE ELDERLY POPULATION IN THE ARCTIC REGION

The Arctic consists of the northern parts of eight nations: Norway, Sweden, Finland, Denmark, Iceland, Canada, Russia, and the United States (Alaska) (Hassol, 2004, p. 5). The region is inhabited by almost four million people. They include local people and recent arrivals, hunters and herders, city dwellers etc. These inhabitants are encompassed of different proportions of indigenous and non-indigenous peoples (Parkinson, 2008, p. 156; Hassol, 2004, p. 6). Among all these inhabitants elderly people are significant in number. Despite that fact that challenges posed by climate change affect the entire portion of inhabitants in the region, the elderly people are particularly vulnerable. While aging itself or turning age 65 does not make a people vulnerable, socio-cultural elements as well as physiological conditions exacerbated by the negative impacts of climate change create greater vulnerability (Filiberto et al., 2010, pp. 19-25). As mentioned, climate change contributes to major challenges in the region; it greatly affects the overall socio-economic, cultural, environmental and infrastructural aspects. The distinct groups of people in the Arctic,

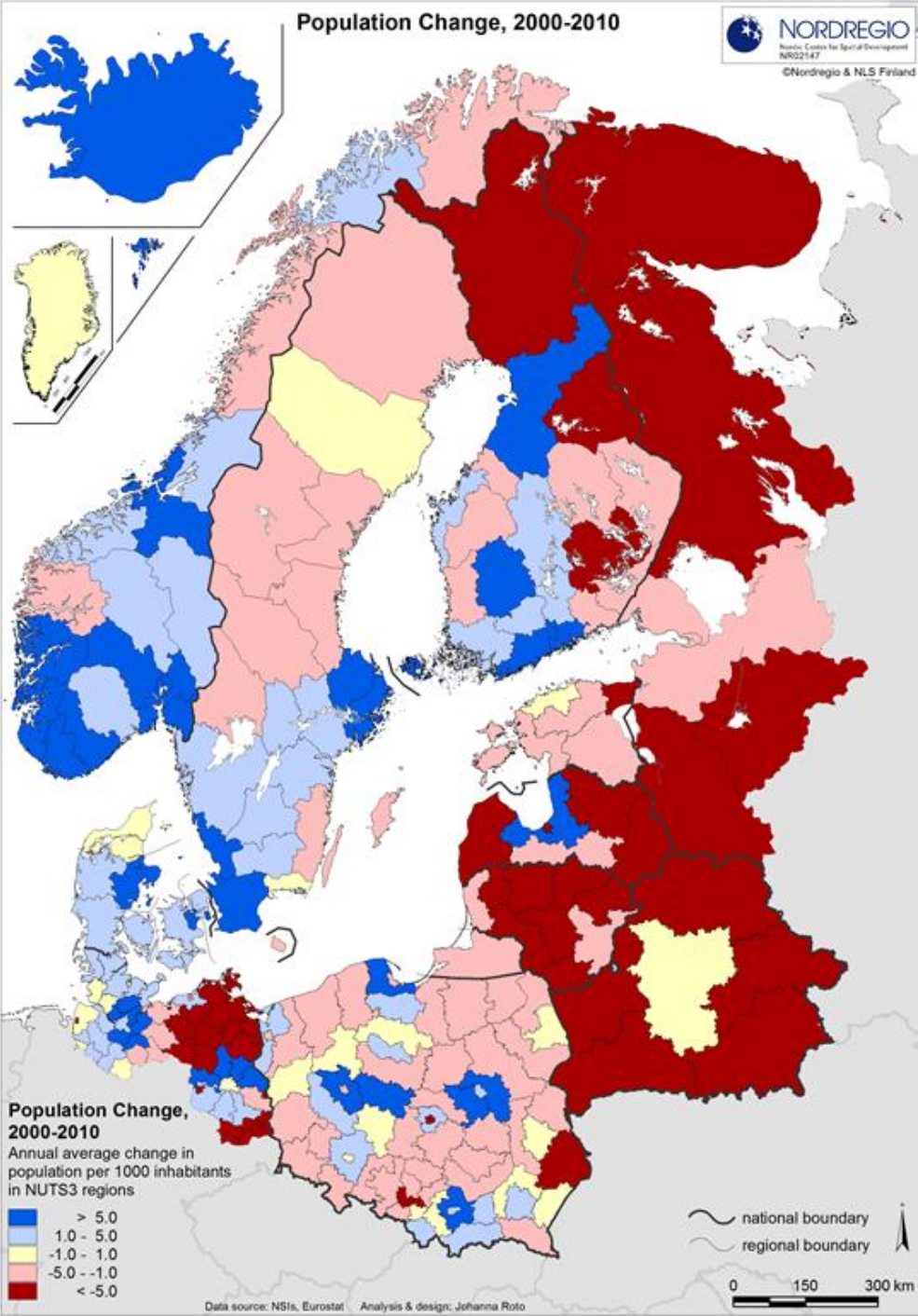
especially in its remote regions, already survive with little public support, poor economic infrastructure and poor means of communication services. The population in the region to a great extent suffers from access to community health and acute care systems, which are minimal and poorly supported in these distant areas. These factors, when combined with the adverse consequences of climate change, create a complex social situation contributing to distracting economies, abolishing livelihoods, undermining development and exacerbating discriminations between the sexes (UN Population Fund, 2009, p.1). In many cases such changes encourage migration of the young people to the urban areas outside the region leaving their elderly generation behind, which results in isolation for the region's elderly. Even though climate change has both positive and negative impact to the Arctic communities, it poses distinct challenges from both social and economic perspective (Rasmussen, 2009, p. 525). The following sections highlight the instances of the effects of climate change on the region's elderly people.

### **1.1 Social and Economic Effect**

As far as the elderly people are concerned, one of the major problems in the region is population decrease, in particular the decrease of young people. Because of the poor condition of living and livelihood, unpredicted economic sustenance and the lack of available local and traditional resources, the region's young people migrate for better opportunities in the urban areas. The elderly people in most cases are left alone in the region. For the elderly losing of family tie and suffering from social bondage with the loved ones contribute to psychological stress upon them. In addition limited movement capacity obstructs them from being engaged in other social activities. Moreover, unavailability of adequate social networks and limited access to social gatherings make them feel even lonelier. The overall consequence results in isolation and helplessness. The elderly people of the region feel themselves worthless, which finally may turn to psychological problems. On one hand social isolation, and on the other hand chronic diseases linked to old age, together would cause greater risk to the region's elderly (Haq and Kohler, 2008, p. 19). Moreover, the elderly who are in one way or another engaged in economic activities face multifaceted difficulties. To mention one example, in the workshop entitled "Barents International Political Economy: Governance and Gender" held at the Arctic Centre in the University of Lapland on 15 December 2010, it was mentioned that climate change has negative impact to the elderly women's life. Especially economically they become vulnerable. The elderly women, who come from Russian border to do business in the open market in Kirkenes (Norway), suffer from a greater economic risk

because of unpredicted weather causing no business benefits. However, they have to pay in advance for the permission to the authority for a specific duration of the business function. This situation really affects elderly people’s social and economic life. As a result, the elderly people suffer from narrow and restricted social lives.

Figure 3 – Population change, 2000-2010



Source: Nordregio at [www.nordregio.se](http://www.nordregio.se).



## **1.2 Health related affect**

The affect on health is the most obvious consequences of climate change. The impacts vary from place to place due to regional differences in climate change as well as variations in health status, psychological and social characteristics, and adaptive capacity of different populations (Geller and Zenick, 2005, pp. 1257-1262). Temperature rise causes significant higher mortality risk of the elderly in the Arctic (Costello and Abbas et al., 2009, p. 373). Extreme cold and longer wet environment bring other health problem such as, hypothermia, bronchitis, pneumonia among elderly and children (Guide on Climate Change & Indigenous Peoples, 2009, p. 11). In this regard an interesting discussion has been held recently in the 10th Annual Research Seminar entitled “Science-Policy Interface – Societal Impacts of Arctic Research”, organized by ARKTIS Doctoral Programme of the Arctic Centre in the University of Lapland from 15-16 March 2012. Professor Birgitta Åhman, a keynote discussant in the Seminar, mentioned that extreme hot could be better than extreme cold for the elderly in the Arctic region.

Due to aging, functional changes such as, reduced gastric acid production, changes in respiratory function, decline in blood flow, decline in pulmonary excretion, neurological degeneration can be evidenced among the elderly. Climate change accelerates these functional changes affecting particularly the elderly (Geller and Zenick, 2005, p. 1259). Physical isolation, lack of fresh water, energy insecurity, and increased prevalence and virulence of infectious diseases become apparent (Guide on Climate Change & Indigenous Peoples, 2009, p. 22). Rural Arctic residents in small, isolated communities with a fragile system of support appear to be most vulnerable because of little infrastructure and marginal or non-existent public health systems. In addition, social and economic disadvantages limit the capacity of the elderly to avoid the negative health impacts of climate change.

## **1.3 Health implication due to food consumption**

Climate change in the Arctic effects availability of traditional food, especially in the distribution of fish and wildlife. As a result significant changes occur with major health implications. Decreases in commercially important species, such as salmon, are likely to create economic hardship and health problems associated with reduced income in the traditional small communities (Parkinson, 2008, p. 161). Because of lack of traditional food, the region’s population is forced to rely on imported western food, which on one hand is expensive, and on the other hand,

is known to increase the risks of cancer, obesity, diabetes, and cardiovascular diseases among these people.

#### **1.4 Cultural effect**

In the Arctic, the cultural dimension of the local and traditional community plays a significant role in their livelihood. The indigenous and local communities of the region rely on traditional activities for their livelihood. Traditional livelihoods fluctuate from rotational agriculture to hunting, gathering, trapping and coastal and marine fishing. Traditional knowledge used to play an important role both in traditional activities and in maintaining the traditional culture. The elderly people are the holders of such traditional knowledge. Because of climate change overall ecosystem in the Arctic is changing rapidly causing traditional knowledge unpredictable. As a result, today traditional activities are in many cases undermined children (Guide on Climate Change & Indigenous Peoples, 2009, p. 11). It should also be noted that indigenous women in many parts of the Arctic region are treated as the custodian of the traditional knowledge and cultural practices, especially with respect to the maintenance of biodiversity and environmental sustainability (Dankelman, 2010, p. 146). The total impact of climate change on indigenous women is the erosion of their world views, culture and identity which are intricately woven in their relationship to their land and resources (Dankelman, 2010, p. 148). The loss of traditional plants, as well as decline of traditional knowledge in their conservation, reduces the opportunity for the future generations to learn and practice traditional health, biodiversity conservation and protection, and food security knowledge (Guide on Climate Change & Indigenous Peoples, 2009, p. 81). From the elderly perspective, climate change contributes to uncertainty in prediction based on traditional knowledge, which make them suffer from the respect from the younger generation as the knowledge they bear is no more as accurate as it used to be.

#### **1.5 Psychological affect & loss of identity**

Mental health of the elderly is also likely to be affected by climate related changes in the Arctic. Population dislocation and community disruption may negatively affect village habitability. Lack of social networks, loneliness, and extensive isolation combined with physical incapability due to old age diseases are likely to psychological affect the elderly population of the region. Loneliness makes the elderly easily feel frustrated and mentally ill (Haq and Kohler, 2008).

For elderly, identity is an important issue. As climate change in the Arctic disrupts the social and cultural structure significantly, the identity of the people of this specific region is under a risk. As mentioned earlier, the region is inhabited by a significant number of indigenous peoples; the ethnic cultural identity is the core of their survival, which is being disrupted as a consequence of ongoing socio-cultural changes caused by rapid climate change. Consequently, the elderly people become even more frustrated as their community identity suffers from a risk of disappearing.

## **2. REFERENCE TO ELDERLY RELATED HUMAN RIGHTS IN LEGAL INSTRUMENTS**

There are a number of available human rights instruments. These instruments can be distinguished as international as well as regional systems. The United Nations (UN) adopted instruments, when combined together, present international human rights system. They constitute international bill of human rights, which includes six documents (Gudmundur, 2010, p. 150). They are: Universal Declaration of Human Rights (UDHR), International Covenant on Civil and Political Rights (ICCPR) and its two Optional Protocols, and International Covenant on Economic, Social and Cultural Rights (ICESCR) and its Optional Protocol. While UDHR is only a non-binding declaration, the other instruments are binding upon the ratifying states. In addition to the UN system, there are also other regional human rights systems, such as African system, European system and Inter-American system. Each of these systems has its sole set of human rights treaties and regulatory appliances. Each of these regulatory appliances determines the current status of elderly rights within these various frameworks. There are also other human rights instruments targeting specific groups of people, such as Convention on the Elimination of all forms of Discrimination against Women (CEDAW Convention), Convention on the Rights of Persons with Disability, Convention Relating to the Status of Refugees, International Labor Organization (ILO) Convention No. 169 concerning Indigenous and Tribal Peoples, the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) etc. These instruments also refer to some of the rights that are applicable to elderly people.

### **2.1 UN Human Rights System**

Several of the provisions embodied within the framework of UN system are applicable to the elderly people. The UDHR, for example, referred to a number of provisions, which are of elderly

relevance. Even though it provides no binding obligation upon states, many of its provisions are later incorporated in both ICCPR and ICESCR. For example, article 25(1) of the UDHR states: “Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control” (UDHR. 1948). These rights can also be found particularly in the ICESCR. A number of the provisions therefore are directly linked to elderly people. These provisions are embodied in articles 3, 6, 9, 10, 11, 12 and 13 of the ICESCR. Whereas a number of ICCPR provisions are also relevant in the context of elderly. Article 6, for example, asserts that every human being has the inherent right to life, and no one shall be arbitrarily deprived of his life, which includes among others the elderly people. Article 27 addresses protection of minority culture, which includes protection of culture and cultural lives of the indigenous and other ethnic minorities. The article is applicable for the elderly belonging to these indigenous and ethnic communities. More relevant provisions on elderly rights are however found in ICESCR, which are summarized here.

Article 6 guarantees right to work which gives individual to live with personal freedom and dignity. Right to work also includes earning for livelihood and decent work condition. While at the old age people may suffer from various health related problems, it may be likely that they may be arbitrarily sacked even before the retirement age. If such a situation occurs, it brings a serious hardship for the elderly, especially in the remote region like the Arctic. It is also a fact that because of the old age, it is also difficult to keep the job running. By virtue of this article, among others, the elderly people are guaranteed a secure work or other alternative arrangements in case such security cannot be guaranteed.

Article 9 is the only article in the ICESCR explicitly applicable for the protection of elderly people’s rights (ICESCR, 1966 General Comment 6). The article addresses right to social security. The right to social security is essentially an important right, particularly when a person is not able to secure an adequate standard of living through work, due either to unemployment, old age or disability (Wiik, 2001 in Eide, 2003). Right to secure work and right to social security are therefore interconnected. A gender dimension can also be linked here, and relevant to elderly rights regarding non-discrimination. Article 3 conceives equal rights of men and women in the enjoyment of economic, social and cultural rights. According to the Committee on ESCR (Treaty monitoring body of the ICESCR), the spirit of Article 3 has been meant to inspire equal rights by way of having men with house hold responsibility, which would eventually contribute to reduction of



discrimination (ICESCR General Comment 20). An old age inequality is seen in the pension benefits in the cases where women who take care the family at home contributing less to the social security system, and thus, receiving less pension benefits at the end.

Article 10 is relevant as far as protection of family life is concerned where elderly care is an essential part of maintaining family life. States are even required to provide financial support to family members caring for the elderly at home.\* Other relevant provisions include article 11 concerning right to an adequate standard of living including adequate food, water, shelter, clothing and housing, and to the continuous improvement of living conditions; article 12 referring to right to physical and mental health and; articles 13-15 referring to rights to education and the enjoyment of culture. These latter rights outline two views on how states should approach the education rights of the elderly: firstly by facilitating educational program for the elderly and; secondly, by taking efforts to pass on elderly people's knowledge and experience to the young generations as part of right to education (Pinzón and Martin, 2003, p. 973).

## **2.2 Human Rights Targeted to Particular Groups**

The UN System of human rights is applicable generally to all. There are however mechanisms available for the protection of human rights of particular groups. Several of the instruments have so far gained fundamental significance in the observance of human rights to the targeted groups. The instruments with particular importance for the elderly rights include: the Convention on the Elimination of all Forms of Discrimination against Women (CEDAW Convention) of 1979, the International Labour Organization (ILO) Convention No. 169 concerning indigenous and tribal peoples, the Convention on the Rights of Persons with Disability of 1975 (Disability Convention), the Convention Relating to the Status of Refugees of 1951 (Refugee Convention) and the UN Declaration on the Rights of the Indigenous Peoples (UNDRIP) of 2007. In all these instruments there are a number of articles that are either directly or indirectly linked to elderly people. CEDAW Convention, for example, in its article 11 (1) (e) clearly mentioned the need for elimination of old age and disability related discrimination between men and women. There are many other provisions which in one way or another applicable towards the elderly rights, such as general non-discrimination rights (article 1 and 2), non-discrimination related to participation in public and

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\* See: General Comment 6, para. 31. On the basis of article 10, paragraph 1, of the Covenant and recommendations 25 and 29 of the Vienna International Plan of Action on Ageing, States parties should make all the necessary efforts to support, protect and strengthen the family and help it, in accordance with each society's system of cultural values, to respond to the needs of its dependent ageing members.

political life as well as in decision making (article 7), and non-discrimination related to health, economic and social benefit (article 12 and 13) etc.

A number of articles embodied in the Disability Convention are applicable to the elderly people. The clear reference to elderly people is found in both articles 25 regarding access to health service and in article 28 regarding adequate standard of living and social protection. In addition other provisions, such as equality and non-discrimination (article 5), women with disability (article 6), accessibility (article 9), right to life (article 10), right to live independently and inclusion in the community (article 19), right to habilitation and rehabilitation (article 26) and right to work and employment (article 26), right to participation in political and public life (article 29) as well as in cultural life (article 30) have direct bearing with the enjoyment of the rights belonging to the elderly people. Among the others, the Refugee Convention referred social security rights at old age (article 24), both ILO Convention 169 as well as the UNDRIP embodied several provisions which are applicable to the elderly indigenous peoples.

### **2.3 Region Human Rights System**

In addition to the UN initiated human rights mechanisms, there are other available regional systems that guarantee the protection of human rights in the region specific context. Such regional systems are, for example, European human rights system, Inter-American human rights system as well as African system of human and peoples' rights. The European regional system is composed of the Convention for the Protection of Human Rights and Fundamental Freedoms (known as the European Convention on Human Rights ECHR) of 1950 and of several Protocols which amended the Convention framework. The ECHR entered into force in September 1953. For the better implementation of human rights provisions the Convention established the European Court of Human Rights (ECtHR), the judgment of which is monitored by the Committee of Ministers of the European Council. Inter-American human rights system is composed of a number of instruments of which the significant ones are: American Declaration of Rights and Duties of Men of 1948, American Convention on Human Rights of 1969, the Protocol of San Salvador (Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social, and Cultural Rights) of 1988, Inter-American Convention on the Prevention, Punishment, and Eradication of Violence Against Women of 1994 and Inter-American Convention on the Elimination of All Forms of Discrimination against Persons with Disability of 1999. The African human rights system has distinctive features when compared with the ones previously mentioned. The most distinctive

feature is its recognition of collective rights. It viewed individual and peoples' rights as linked. The system is composed of, among others, the African Charter on Human and Peoples' Rights (commonly known as Banjul Charter) of 1981, and which entered into force in 1986, the African Commission on Human and Peoples' Rights established in 1987 and a Protocol to the Charter adopted in 1998 in connection to the creation of the African Court on Human and People's Rights, which came into force on 25 January 2005. These regional systems, to the extent they guarantee the protection of fundamental human rights; also guarantee the protection of rights of elderly people.

### 3. ANALYSIS OF THE HUMAN RIGHTS EFFECT ON ELDERLY IN THE ARCTIC

The impact of climate change will affect the rights of certain vulnerable groups disproportionately. Among others, these vulnerable groups include aging population and the persons with disability (Lankford, 2009, p. 436). In the Arctic, as mentioned elsewhere in this paper, the affect of climate change is drastic; and the resulting consequences affect the rights of the region's elderly population who are the most vulnerable group. They suffer from the effective protection of human rights. This section addresses how specific human rights of the elderly are affected in the Arctic because of the adverse consequences of climate change.

**The right to life:** The most fundamental of all the human rights is right to life, which is affected by numerous ways as a consequence of climate change (Lankford et al., 2011, pp. 12-14). Climate change has been increasingly threatening livelihoods and food security of the vulnerable groups, including indigenous peoples (Anton and Shelton, 2011, p.18). In the Arctic people living in the coastal areas as well as the indigenous communities are at greater risks. Changes in ice and snow jeopardize the lives of these communities since their food sources are threatened. The elderly people of these communities as the most vulnerable group are the ultimate victim as far as their right to life is concerned.

**Right to food:** The right may be argued as interconnected to right to life. The impact of climate change has great influence to the availability and accessibility of food. Vanishing of high alpine floras which are the sources of food and medicine are affected because of climate change. Climate change contributes to unavailability of sufficient food as well as high food prices, which results in food insecurity. On the other hand climate change caused contaminated food provides greater health risks. As a result both the right to health and right to life are threatened, which affect the region's elderly population.

**Right to health:** Numerous health effects caused by climate change pose a greater risk for the Arctic elderly. Their old age physical health is exacerbated by the introduction of other invasive diseases, which is resulted from climate change. At the same time climate change related consequences also affect the health care facilities. There are four main aspects involved concerning the health care facilities to guarantee right to health, which are: availability, accessibility, acceptability and quality. It is far from the case that the region's elderly, particularly the elderly people living in the country side are effectively safeguarded by this right. The negative influence of climate change limits these aspects of health care facility in the Arctic. It is stated that the right to health in the context of climate change will demand wide-ranging measures, by raising importance to protecting vulnerable individuals and communities (Anton and Shelton, 2011, p. 19), including its elderly by virtue of, for example, article 12 of the ICESCR as well as article 17 of the San Salvador Protocol concerning right to special protection at old age.

**Right to protect family life:** Right to have protected family life has strong influence to the Arctic's elderly people. In a study conducted by Rasmussen Ole Rasmussen, (2009) noted that younger women from the north are increasingly moving to the urban areas. The decline of the number of younger women poses a risk for elderly since they are mostly taken care of by the younger women at family. Consequently, they are deprived of their right to protected family life enshrined in article 10 of the ICESCR.

**Right to Culture:** Culture constitutes the identity, especially for the Arctic people who are composed of, among others, groups of indigenous and coastal population. Maintaining identity and practice of culture is guaranteed in a number of human rights instruments. The adverse consequences of climate change affect this aspect of human rights in general. Losing culture and cultural identity is significant for the elderly as they suffer from the loss of community customary norms and values as well as confidence in their traditional knowledge. In the Arctic elders, for example, can no longer predict, the weather using their traditional knowledge (Henrikson, 2007, p. 22). Effect of climate change makes such knowledge unpredictable. These issues of culture and cultural identity are the core of their existence. Since in the Arctic traditional communities they are the custodian of traditional culture and traditional knowledge, loss of culture due to climate change challenges causes mental and psychological distress to the region's elderly population.



## CONCLUSIONS

Elderly people's human rights issues are becoming noticeable at the point of raising awareness, creating ethical demands for action and constructing coalitions (Cameron, 2011, p. 22). In the Arctic context however the mention on elderly human rights is hardly seen. This paper therefore roughly endeavours to show how climate change related consequences affect the lives and livelihood of the Arctic elderly population. The particular focus in this context has been placed on the human rights perspective. The elderly as the most vulnerable group in the region, as shown in this paper, are affected by various ways which have particular impact on human rights, such as right to life, right to health, right to access to food, health, family life, culture etc. The paper addressed these human rights concerns in order to show the vulnerability of the elderly people in terms of the enjoyment of their human rights. This paper therefore suggests some recommendations that may help the elderly to cope with the challenges they face. For example, the elderly people's participation in tackling climate change related problem can be developed. In this way they could contribute to problem solving mechanisms where they may involve in the policy making functions. Local authority of the region should give more concentration to ensure the safer, healthier communities for elderly people. The situation of elderly people of the region will be improved if elderly themselves, relevant stakeholders and academia work together, which will invent a national policy framework to improve the quality of life of older people. This collective effort would facilitate to tackle the impacts of climate change to the elderly lives in this region. Moreover, the elderly people have enormous spans of experiences to draw upon in the above mentioned problems. Traditional knowledge of indigenous people, for example, should be more recognized and respected in the national and international level.

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