

# Where to go when nobody's home?

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# Where to go when nobody's home?

- Adaptation to climate change and migration in Sweden's third largest city, Malmö.

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## Abstract

This study has investigated the adaptation ability among Swedish public institutions with the intention of contributing with an understanding of the governmental and institutional approach on how they are supposed to manage potential larger-scale relocation due to climate change in the not so far reaching future.

My specific research objective was to study the case of adaptation ability among institutions that interact and are linked to the community planning in Malmö and Sweden. The study investigated the adaptation ability by conducting interviews, mail correspondence and by reviewing official documents regarding policies, guidelines and legislation. The study showed that the conversation among the chosen institutions regarding adaptation towards climate induced migration has not started. Even though there is awareness among the street-level bureaucrats, regarding the relation between climate change and migration, an adaptation is dismissed or not presented within the institutional frameworks, planning strategies and visions because of poor international recognition on the topic. Additionally, the study shows that it exist a potential opening in the Swedish asylum regulations for people seeking refuge from environmental disasters and consequently also an opening to start the conversation. This opening have although been taken away temporarily for three years in July 2016 as a way to create a more restricted immigration to Sweden.

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# 1. Introduction

The Fifth Assessment Report: Impacts, Adaptation, and Vulnerability by The Intergovernmental Panel on Climate Change (IPCC) is projecting climate change to increase the amount of disaster-induced displaced people over the 21st century. Extreme weather events and long term climate variability and change can cause changes in migration patterns especially when migration can be an effective adaptation strategy (Field et al, 2014. Moench, 2004).

Evidence from the past as well as recent figures shows that climate and weather related events have resulted in significant levels of global population displacement. Between the years 2008 – 2014, nearly 23 million people have been displaced by climate or weather-related disasters in the world (The Advisory Group on Climate Change and Human Mobility, 2015). Currently and in the next coming years the majority of the displaced people will remain in poor nearby regions in the Global south, and especially in south Asia, which is not a sustainable solution; one way to reduce the vulnerability and exposure for such populations is to expand the opportunities for mobility (Field et al, 2014. Warner, 2012).

In 2015, the European Union received 1 255 600 asylum applications from people who sought for international protection, a number more than double that of the previous year. During 2015 Sweden received a total of 162 877 asylum seekers which equals with 23% of the asylum seekers to the EU (Eurostat B, 2016. Eurostat A, 2016). The high influx of asylum seekers to Sweden, with 2% of the EU population, reached its limit in November same year when the government started to talk about a “collapse” of the welfare system and consequently decided to introduce border control for the first time in 15 years (EUR-Lex, 2009. Regeringen, 2016). Among the EU member states, Sweden was one of few states who took their responsibility during this period. Malmö, due to its geographical location in southern Sweden and close attachment to the continent, had a hard time coping with the high influx and civil servants were reported being overwhelmed with work. (Sveriges Radio, 2015. Emanuelson, 2016.)

Due to the disproportionate amount of refugees received by the member states several countries chose to close their borders and introduce border control. While Europe are struggling with increased tension and becoming more constricted a growing part around the world are in need of protection and refuge away from their place of origin.

## 1.1 Purpose

According to a majority of the literature this study has taken part of, indicates that there is a general lack of climate induced migration adaptation within institutional frameworks, laws and policies. Adaptation is needed if we are going to be able to respond to the coming challenges related to climate change and migration.

This study aims to present and illustrate the adaptation ability among relevant Swedish institutions with an intention of contributing with an understanding regarding the governmental and institutional approach on how they are supposed to manage potential larger-scale relocation due to climate change in the not so far reaching future.

My specific research objective is to study the case of Malmö and central institutions that interact and are linked to the city and are a part of Sweden’s national community planning. The study investigates the institutions adaptation ability by conducting interviews, mail correspondence and reviewing official policy documents.

## 1.2 Questions

The research questions for the thesis are:

How does the selected Swedish institutions adaptation ability look like?

- How has selected Swedish institutions adapted their organisation for an unspecified amount of people fleeing the climate?
- How does the connection between climate changes and migration emerge in the institutions strategic and operative planning?

What are the conditions for a person who is displaced by the climate to receive asylum in Sweden?

## 2. Methodology

### 2.1 Research Ethics Aspects and research method

Based on the ontological viewpoints this study reflects on the inclusion of personal values and practical considerations made during the study process. Achieving objectivity is difficult and it can be challenged throughout the process during the production of the study, individual values and preconceptions are seldom completely excluded (Bryman, 2011). Due to this the author's interpretation has emerged in all parts of the thesis. The base for the study when researching and reviewing the existing materials considering the subject has been the notion of the equal value of all humans and the human right for protection in situations of catastrophes and extreme poverty. The social context and psychological influence is hard to convey considering the thesis limited scope and therefore it will only elucidate the problematic situation.

The study conducted interviews or mail-correspondence with officials at three of four included institutions, and they were contacted because they were assumed to have the knowledge the study was searching for. The study has chosen to present the interviewed persons by name and position which they have given their consent for, the study made this choice to create a personalised presentation in an attempt to avoid a direct generalisation of the empirical results.

When the study collected its data through interviews, email correspondence and public policy documents there were a perception that the study's theoretical framework would influence it. The empirical material that was then created were linked to the study's theoretical framework, therefore, the study used an inductive method when an evaluation of the relationship between theory and practice is done (Bryman, 2011).

According to Yin (2007) single-case and multiple-case designs are two major types of designs which are relevant. The purpose with a single-case study is to in-depth study a case and its main context. The multiple-case design makes it possible to study several different objects which lead to an extensive and comprehensive presentation of the results. This study aims to investigate the adaptation ability within relevant Swedish institutions that have an impact on or are directly involved in the reception of refugees. The chosen institutions are also in one way or another involved in and linked to the urban development of Malmö. The study have investigated the adaptation ability through public documents relating to the institutions operational and strategic work, and as well through the viewpoint from informants regarding their past experiences and potential improvements of the institutional work. The study has consequently conducted a single-case study, where the adaptation ability is the case and investigated through the perspective of four public institutions, which all can be related to the development of Malmö.

### 2.2 Theoretical framework

The study has chosen to use Christine Wamsler's adaptation tool to determine the current adaptation and the adaptation ability within the institutions. The tool was used as a guide to identify where within the institutions organisational structures an investigation had to be made, the layout of the tool was as well used as the basic structure to present the empirical results.

The guide identifies institutional levels where an inclusion of adaptation is important, and consequently leads the study to which institutional levels it should be focusing on and consequently can evaluate the adaptation ability. The Inter-institutional level will present the reviewed institutions cooperation and association with external actors to improve their climate adaptation, in other words the adaptation concerning climate induced migration. The Institutional level will present the adaptation within each institution's frameworks, planning strategies and visions. The Local level will present the operative measures each institution has conducted or are planning to conduct related to adaptation for climate induced migration. When the study investigated each level, an interpretation has been made to adjust the guide for a presentation

of the adaptation of climate induced migration. According to a majority of the literature this study has taken part of indicates that there is a general lack of adaptation within institutional frameworks, laws and policies regarding climate induced migration. The interpretation is therefore based on the idea that climate induced migration needs to be addressed and taken into account when relevant institutions are planning for the future.

The study then included Roine Johansson (2007) to create an understanding for the investigated institutions organisational base and structure. By including Roine Johansson a visibility of the existence of discretion among street-level bureaucrats in the public sector is done and an explanation of possible institutional limitations within the bureaucracies. A study by Ottosson et al (2012) was also included to point out the discretion street-level bureaucrats' possess within public institutions and how the discretion is perceived which can be crucial for the way street-level bureaucrats are handling and determine cases. The study then includes *Preparing BC for climate migration* to illustrate tendencies of passivity among street-level bureaucrats and the exclusion of adaptation as well as planning towards climate induced migration within public institutions. This could partly be explained because of the organisational limitations within the public sector.

The obtained empirical material was divided into Wamsler's institutional levels according to the levels description. The empirical material from the investigated institutions were related to each other and was then explained and analysed through a theoretical approach based on Roine Johansson (2007) and Ottosson et al (2012) to pinpoint the organisational structure limitations and the existence of discretion. Additionally the report *Preparing BC for climate migration* was used as an illustrative example of street-level bureaucrats and public institutions perception of adaptation for climate induced migration.

## 2. 3 Gathering of data

### 2.3.1 Conversational interviews

Within the qualitative research, interviews are an important and common used method of data collection (Bryman, 2006). According to Yin (2007) interviewing is a source of information that is specifically important in case studies because they often can take the form of guided conversation rather than a strictly structured questioning. Case studies typically focus on something that includes humans and through interviews initiated informants provide important insights about a particular situation. The study chose to conduct informant interviews in attempt to receive deeper knowledge concerning the topic of the study. Informant interviews can lead to a better understanding of the topic of interest and reveal social settings and the knowledge domain which can be useful when the study exploring the institutions ability to adapt (Lewis-Beck, Bryman, Futing Liao, 2004). Informant interviews were conducted with three representatives from The County Administrative Board of Skåne and the City Planning Office at the municipality of Malmö.

The study had a hard time finding interviews of the 20 interview requests sent the study conducted interviews with 3 informants. Some of those who were asked did not have the time or they said there were not so much to say about the subject. In one particular case, in the search for an interview with an analyst at the Sweden statistic's forecast institute the asked questions was answered by email which was attached with two documents containing the scientific base the institution have regarding the study's topic and was summed up in a half page.

My past experiences conducting academic works which include interviews or statements from initiated individuals have never been this complicated as it have been while writing this report. The reasons for this may be because the subject, concerning climate change and migration, is new and relatively unexplored.

The interviews were conducted to demonstrate the adaptation ability within the institutions and were done through semi-structured interviews based on Wamsler's adaptation guide and previous research within the area.

The initial idea was to conduct semi-structured interviews with focus on the interview guide but during the interviews the guide was unfortunately relatively unusable.

The informants were interviewed based on their knowledge of the institutional organisation and their experiences from last year's refugee situation (Migrationsverket H, 2016).

The interviews were recorded and then transcribed word for word to provide an accurate picture as possible of the answers from the informants (Bryman, 2011). The answers that concerned their responsibilities, organisational work with adaptation towards climate induced migration and the comprehended connection between climate change and migration was presented in the results.

### **2.3.2 Interview with head of division for the Strategy unit at Malmö municipality**

The interview was conducted as planned over the phone on the 15th of March and started off with asking for permission to record it and regarding the estimated duration of the interview. The interview was conducted with the head of division for the Strategy unit at The City of Malmö, Johan Emanuelson. Before the informant was asked any questions the study's starting point regarding climate change and migration was explained; that adaptation is needed if we are going to be able to respond to the coming challenges related to climate induced migration. After the introduction was made it appeared that the interview guide was not going to be followed because of the informant response to the introduction, he was confused by the approach and thought the study intentions was to investigate the actual, on site, reception of potential climate induced immigration. After further explanation regarding the study's research objective questions were asked regarding the municipality's planning for future challenges such as increased immigration and about their general stance towards the relation between climate change and migration. The interview lasted for 20 minutes and the key questions were answered.

When contacting the municipality there was an expectation to arrange a face to face meeting instead for over the phone. Due to the chosen subject for the study, which is a relatively new and complex the interview might have been given more exhaustive answers if it had been conducted face to face. According to Bryman (2011) it can be helpful while interviewing to see the face of the informant to be able to interpret a confused or uncertain facial expression and consequently try to better explain the question.

### **2.3.3 Interview with the climate adaptation coordinator and representative from the unit for Urban planning at the County Administrative Board of Skåne**

The interview was conducted with the climate adaptation coordinator Therese Ehrnstén and Hanna Sahlström Negash who is focusing on housing, both are working at the Board's unit for urban planning. The interview was carried out as planned at the County Administrative Board of Skåne's office in Malmö and lasted for approximately 35 minutes. The interview was recorded with the permission from both informants and began with an explanation of the study's starting point regarding climate change and migration and was followed by the first question in the interview guide. The answers from the first question made it clear that the interview guide was not going to be directly followed instead questions regarding their comprehension of the connection between climate change and migration and concerning potential measures in the future began.

The study believes it was for its advantage that the interview was conducted with two informants at the same time because the informants have different specialisations within urban planning and they complemented each other during the interview.

### **2.3.4 Written data**

The study is aware of the few conducted informant interviews, which can affect the validity of the study negatively. The lack of interviews was compensated by thoroughly reviewing annual reports, informal institutional guidelines, national policies and legal regulations.

The study used different types of secondary data such as archive material, reports and previous studies. Annual reports, informal institutional guidelines, national policies and regulations which provided information on the institutions organisation and their current reference point regarding climate induced migration. Several Swedish laws (SFS 2001:453, SFS 1994:137, SFS 2005:716) and government communications have been

reviewed to identify the institutions responsibility and the current possibilities for a person who is fleeing climate change to be granted asylum in Sweden.

The study sought for an interview with an analyst at Statistic Sweden but instead information was sent through email therefore the mail correspondence is used as written data.

All of the written data the study used gave insight into the institutions strategic and operational work. The use of written data created a comprehensive basis to ensure that as much as possible of the relevant information was presented. Additionally, the study used unprocessed data from the Internal displacement monitoring centre (IDMC) and Statistic Sweden when making the two diagrams presented in this study. The diagrams purpose are to demonstrate the magnitude of displaced people by natural- and human induced disasters and to present the development of asylum seekers with citizenship in South Asia applying in Sweden.

## 2.4 Limitations of the study

This study is focusing on Swedish institutions adaptation ability based on the notion that the country received 162 877 asylum applications during 2015 which was the third largest figure between the EU Member States. (Eurostat B, 2016. Eurostat A, 2016). This affected the whole country but Malmö was the city who became the first stop in Sweden for many of the refugees which resulted in a high pressure on the city's municipality, the Swedish Migration Agency and the Administrative Board of Skåne. The study consequently chose to investigate these three institutions. Additionally, an investigation on Statistics Sweden has also been conducted; the institution is placed on national level and conducts no local operational work. But the institution influences all of the previous institutions because Sweden statistics conducts forecasts and analyses which the other institutions use to plan their organisation. Therefore all four institutions are involved in the urban development of Malmö and consequently the planning for potential climate induced immigration. There is a possibility that furtherer organisations and public institutions are involved as well but due to the time limit and the interview request responses the study chose to focus on four institutions. Due to the fact that policies and institutional frameworks do not change overnight the study was also interested in Sweden's current legal considerations towards people fleeing from climate change.

## 2.5 Reliability and validity

According to Bryman (2011) reliability is about whether the results are reliable or not which have an important role if the study is conducted again to conclude with the same results. To achieve reliability the same study could be made again and regardless who is conducting the study the results should be the same. When the study was preparing for the interviews there was an expectation of following through the listed questions in the interview guide and use it as a base for an analytical frame but due to the informants responses the study had to deviate from the interview guide. This may affect the reliability negatively because the adaptation ability could have been revealed in a different way if the informants were changed. If a study with similar research objective would be conducted in a couple of years, (hopefully) the answers will be more informed and convey possible measures concerning climate change migration.

To be able to achieve validity the study have to make sure that it is observing, identifying or measuring what that study intended to do, which means that the scientific tools used by the study have to actually measure what the study plan to measure (Bryman, 2011). To make sure the study are measuring its intentions, the question formulation and the interview questions were based on previous studies and theories regarding the topic. Lastly there can always be questioned how to really measure the adaptation ability in public institutions, it can be defined and measured in several ways not just one. This study has chosen to reveal it by looking at the current adaptation and the institutions stance towards the connection between climate change and migration.

### 3. Christine Wamsler's climate adaptation tool

One of the theories the study is using to convey the adaptation ability among the institutions is Christine Wamsler's climate adaptation tool. The study finds the need for policy adaptation towards climate induced migration among relevant institutions, the tool show where to look within the organisational structure.

Wamsler's process oriented tool can be used by local politicians and civil servants to integrate climate change adaptation into public institutions to generate a sustainable city development. The tool can be considered as a guiding instrument during the integration process. The tool was developed together with 15 municipalities and 5 universities in Sweden and Germany (Wamsler, 2015).

Wamsler's tool is pointing out organisational levels and categories where an establishment and integration of adaptation is important. The guiding instrument is divided into three identified levels which are central for the integration of climate adaptation (Ibid, 2015). This study used Wamsler's tool as a guide to identify which organisational levels within the chosen institutions should be investigated in the search for climate change induced migration adaptation. This study made the interpretation that adapting public institutions for climate change induced migration could be included within the term climate adaptation. The study therefore adjusted each organisational level investigation to pinpoint the adaptation for climate change induced migration instead for a general climate adaptation. The investigation within each level are defined and described below:

- The Inter-institutional level will present the reviewed institutions cooperation and association with external actors to improve their climate adaptation, in other words the adaptation concerning climate induced migration.
- The Institutional level will present the study's conducted investigation of the adaptation for climate induced migration within the institutional frameworks, planning strategies and visions.
- The Local level will present the operative measures on site each institutions has been conducted or are planning to conduct related to adaptation for climate induced migration.

Wamsler's guide then gives an indication according to a three point grading scale regarding the institution's integration of adaptation. The institution can be graded as a 1 if the general institutional approach towards climate induced migration adaptation is not or marginally considered. An institution can be graded as a number 2 if steps have been made through initial contact with relevant external actors, began introducing climate change induced migration adaptation within its institutional frameworks and the organisation as a whole. If an institution is graded as 3 the institution has expressed an integration of climate change induced migration adaptation within its institutional frameworks, formal/ informal plans and conduct repetitive reviews of related processes and planning strategies.

In the next chapter possible limiting and disruptive factors for an integration of climate change induced migration adaptation are presented and explained through Roine Johansson (2007) and Ottosson et al (2012). An identification of organisational structure limitations is done and as well the existence of discretion within the public sector, these identified factors affect the public institutions ability to adapt to climate induced migration.

## 4. Bureaucratic boundaries

With the intention to create an understanding for the reviewed institutions organisational base and highlight the discretionary power, the study applies theories from Roine Johansson (2007) and Lisa Ottosson et al (2012).

During the past 30 years the Swedish welfare state has gradually but thoroughly been reorganized and transformed, this happened after a long time of criticism towards the government central planning and governing – in other words against the structure of the public sector regarding the way it was administered and organised (Johansson, 2007. Svallfors, 1989. Lauri, 2016). Since the mid-70s the Swedish government have practised work of renewal where focus has turned from central planning and uniform administrative solutions towards decentralised, partially privatised system that emphasises individual responsibility. The governing of the public sector is now supposed to include the concept "service" and in the relationship between the government and the public, the individual should be the focus. Consequently, the interest was not placed on the organisational work of the authorities and its content as it was before; instead the focus was turned towards the shape of the public sector (Johansson, 2007).

In connection with the decentralisation that took place during the renewal, the public sector grew extensively which resulted in an increased number of street-level bureaucrats.

Street-level bureaucrats are in this study considered to only exist within the public sector and the non-profitable part. They are in direct contact with the citizens in their work and possess over a certain amount of discretionary power. When the exercise of power shifted the street-level bureaucrats working situation changed and was given more opportunities to make personal assessments and independent decision in their role as a civil servant at a public institution (Johansson, 2007. Ottosson et al, 2012).

Traditionally, Swedish legislation has described authorities and civil servants alternatives fairly accurate. The laws that were developed after the power shift, such as the Swedish Reception of Asylum Seekers and Other Act (SFS 1994:137), are constructed as general frameworks that allow extensive scope for assessing the circumstances in each case (Ottosson et al, 2012). In contrast with other European countries Swedish street-level bureaucrats possess significant amount of discretion, the framework legislation at national level relates to goals and directives for the public sector. Consequently, power is delegated to the local municipalities and public administrations to provide additional and often more detailed local regulations and directives adjusted to the specific local context. The street-level bureaucrats are then using these local directives as guidelines in their work (Johansson, 2007. Ottosson et al, 2012).

Three of four reviewed institutions in this study are all organisations with a commissioning body who formulates the goals whilst the management within the institution coordinates the work that is performed inside the organisation.

Roine Johansson (2007) is pointing out the connection between the commissioning bodies stipulated goals and the tactical action of the institution as problematical since organisations are not aboulc tools which automatically act accordingly to the commissioning body's intentions (Johanssons, 2007).

Within the organisations street-level bureaucrats are often expected to execute contradictory tasks within a limited period of time and with limited resources. This consequently leads to street-level bureaucrats develop a number of strategies; they start to use e.g. simplifications and shortcuts (Ottosson et al, 2012). According to Ottosson et al (2012) the findings in their study *"Safeguarding a Child Perspective in Asylum reception: Dilemmas of Children's Case Workers in Sweden"* street-level bureaucrats was found using their discretion in ways other than those beneficial to the management e.g. they were acting beyond their authority based on moral perceptions (Ottosson et al, 2012).

As written above the public sector in Sweden has been controlled and characterized by strict law enforcement through a detailed regulatory system but the shift of power during the 60s and 70s brought a change to this and a number of administrative methods to facilitate decision-making, planning and controlling were introduced. An example of this was the Programme Budgeting, the introduction of Programme Budgeting was meant to generate organisational planning and explicit goals. But the Program Budgeting came to be questioned and after a lot of critique against the rationalistic method, which was clearly associated with the

earlier system of central planning and governing, the ambitions of controlling by planning was reduced. Today Programme Budgeting and its focus on goals in the public sector still exists even though there has been an reorientation towards controlling by evaluations and follow-ups of the activities, also called an "ex post-control"(Ibid).

Consequently, the work made by street-level bureaucrats might include moral based goal oriented tendencies which are revised retrospectively. These tendencies may affect the emergence of new working areas. This study is interested in the adaption ability in the chosen institutions which can be linked to the street-level bureaucrats' discretion, whether they use their discretion to fill the gaps in current policies or if the formal frameworks, the moral perceptions and the goal-oriented organisation prevent relevant topics to arise on the agenda (Johansson, 2006).

In the next chapter focus is turned from the theoretical approach towards an illustrative example on the current institutional work with climate induced migration. According to the report *Preparing British Columbia for climate migration* the intuitional organisation is limiting the institutions to plan long term, which consequently leads to future oriented problems e.g climate change are neglected in favour for more urgent needs. Additional example from the report is that the indirect impacts of climate change, like migration, are seldom identified, even by migration providers themselves which can also be related to this study empirical material from the Swedish Migration Board.

## 5. Preparing British Columbia for Climate migration

The report *Preparing BC for Climate migration* by Stephanie Dickson, Sophie Webber and Tim K. Takaro emerged from a five-year research project lead by the Canadian Centre for Policy Alternatives and the University of British Columbia.

The report *Preparing BC for Climate migration* is one example of describing the adaptation among public institutions regarding the climate migration subject. According to the report there is a consensus among projections that in coming years climate change will oblige hundreds of millions of people to relocate and many vulnerable migrants will remain in nearby poor regions in the Global South. The paper aims to evaluate where British Columbia are in meeting some of the most vulnerable people – “climate migrants”. According to the report “climate migrants” are considered as Canada’s collective obligation due to country’s disproportional benefits of historic and current combustion of fossil fuels (Dickson, Webber, Takaro 2014.)

In contrast to Canada there are many countries more vulnerable to the consequences of climate change and there are countries in the Global South where governments and communities have less ability to increase their adaptive capacity and become resilient because of social, economic and political factors. In addition to their lack of adaptation and preparedness these countries receive the worst impacts of natural disasters and making up 97 per cent of climate-induced global mortality (Ibid.).

The authors of the report *Preparing BC for Climate migration* are stressing that although the unfair situation Canada’s federal and provincial governments have yet to define the country’s responsibilities to those displaced by climate.

By conducting surveys and interviews with informants from the housing, health, law, government and the non-governmental sector the study sought to determine the familiarisation with environmental degradation as a driver of migration among service-provider organizations, the adaptive capacity for climate-based migration within BC and what policies and programs are needed to be developed or strengthened to build such adaptive capacity.

During the interviews the report received some interesting answers regarding the governmental and regional viewpoint on climate targets which is considered as a future problem and is not prioritised. Some of the informants interviewed by the report mentioned that long-term, future-oriented problems, e.g. climate change, are neglected in favour for more urgent needs. The informants indicate furthermore that the indirect impacts of climate change, like migration, are seldom identified – even by migrations and social-service providers themselves.

According to the report little recognition and attention are given to the “second order” effects of climate change, the consequences on lives and livelihoods can be described as such. It is not considered surprising that the “second order” effects are not prioritised, due to the fact that gradual impacts produce less alarm than those that are sudden.

In conclusion the study presents several recommendations regarding a re-engineering of the immigration policies, which should become more including and consequently take into account the ones who are the most vulnerable.

Further on the authors recommends the country to create a new immigration class of “climate migrants” and provide accessibility and better co-ordination of key services to climate migrants including legal, housing and education. Canada’s government should reassure the public that all levels of government address the impacts on social services involved and invite society as a whole to undertake this ethical responsibility together.

Canada should also take their responsibility because they owes a climate debt towards the countries bearing the greatest impacts including the ones who are geographically closer the impact zones and will host and assist climate induced migrants. Therefore Canada should substantially increase its support to developing countries shouldering the burden of climate displacement (Dickson, Webber, Takaro 2014).

## 6. Climate change and migration

The following chapter will give an introduction on the currently available research on climate change and migration and try to explain the width of the complex situation. Migration is and has been a common adaptation strategy for exposed populations and individuals throughout history, even if it is not directly related to any given flood or drought event it enables people to adapt to change and extreme events. It is and has always been a central structure feature in global trends toward urbanisation (Moench, 2004. Field et al, 2014).

### 6.1 Disaster, hazard and displacement

In the climate change and migration literature, the use of natural hazards, disasters and displacement are frequently occurring. The concepts need to be carefully interpreted according to the contexts and perspectives from which they were developed and in which they are applied (Internal displacement monitoring centre ,IDMC, 2015). The definitions used in this study are international accepted and are taken from a recent published report from IDMC, Global Estimates 2015 – People displaced by disasters, and are developed together with The United Nations Office for Disaster Risk Reduction, IPCC's fifth Assessment Report and The UN's Guiding principles on internal displacement. The IDMC is a part of the Norwegian Refugee council (NRC) and is a independent, non- governmental humanitarian organisation. The council has become an important role as a global monitor and evidence-based advocate and been recognised and reiterated in annual UN General Assembly resolutions (IDMC, 2015)

#### Disaster

“Serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources”<sup>1</sup>. They are the result of a combination of risk factors that can be summarised as the exposure of people and assets to hazards, and their pre-existing vulnerability to them. “– IDMC, p.13, 2015

#### Hazard

“The potential occurrence of a natural or human-induced physical event or trend or physical impacts<sup>2</sup>, that may pose a severe threat to people and assets that are exposed to them. “Natural” hazards are time-bound events or gradual processes and conditions that originate in the natural environment. The intensity and predictability of hazards varies greatly.” – IDMC, p.13, 2015

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<sup>1</sup> UNISDR, Terminology on DRR, 2009, available at <http://goo.gl/vOFVwP>

<sup>2</sup> IPCC, Fifth Assessment Report, November 2014

Displacement

“The forced or obliged movement, evacuation or relocation of individuals or groups of people from their homes or places of habitual residence in order to avoid the threat or impact of a disaster<sup>3</sup>. It refers to situations where people are forced to move by other people and organisations, including local or national authorities, but also when people act of their own volition in response to the threats and severe conditions they face.” – IDMC, p. 13-14, 2015

According to IPCC’s fifth report the changing climate will intensify and increase the frequency of some hazards (Field et al. 2015). People’s exposure towards hazards depends on whether their homes, property and livelihood are located within a vulnerable area and if they are the likelihood of becoming displaced increase. When people become displaced their safety and basic human needs are put in jeopardy while they search for durable solutions because displacement amplifies the risk of impoverishment, discrimination which stresses specific protections needs. Displaced people counter several specific problems which include landlessness, joblessness and homelessness. They enter a marginalised position where they experience setbacks on the economic, social and psychological levels with constant food insecurity, degraded health and high mortality risk (IDMC, 2015. Cernea, 2000).

6.2 Displaced people around the world

Disaster brought on by weather-related and geophysical hazards forced more than 19,3 million people to leave their homes during the year of 2014. Among that 19,3 million 17,5 million people were displaced only by weather –related hazards, mostly floods and storms. The three largest were caused by typhoons and floods in the Philippines and India, see figure 1 (IDMC, 2015).

Data collected by the IMDC reveals the displacement in 2008 - 2014 has been significant in middle-income countries; East Asia, the Pacific and South Asia. The reason to this is because of the fast growing urban population within these countries which consequently leading to an increased number of people who are exposed to hazards and many of them remain vulnerable. The existing life-saving early warning systems and disaster response reduces the fatalities but leaving a growing number of displaced survivors as a consequence (IDMC, 2015).

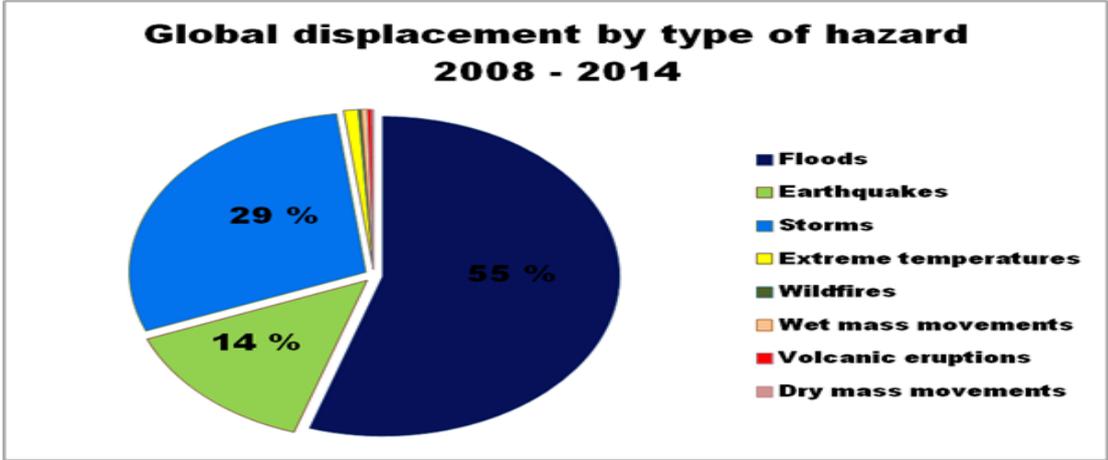


Figure 1. Source: IDMC, 2015.

<sup>3</sup> UN, Guiding Principles on Internal Displacement, 1998, available at <http://goo.gl/uVW0DW>

## 6.3 One of ten most vulnerable countries in the world - Bangladesh

Bangladesh has during the past 25 years experienced six major floods, a severe tropical cyclone every three years and annual seasonal droughts. It is one of ten most vulnerable countries towards the impacts of the changing climate in the world and with 50 million people living below the poverty line climate change are putting their lives and livelihoods at risk (Gogoi, Kashmala, 2014).

During this century the sea level is projected to rise 1 meter, a 65 cm rise will lead to a 40 % loss of productive land. The population density in Bangladesh is one of the world's highest with 1000 people per square meter (The World bank, 2013. CDKN, 2014). The country is referred to an impact hotspot due to increasing and combining weather and geophysical challenges occurring within the same timeframe. Bangladesh together with other regions in e.g South Asia are low-lying areas and have large cities located within them. Bangladesh is also likely to be exposed to an increasing amount of extreme river floods, more intense tropical cyclones, rising sea levels, extraordinarily high temperatures, and declining crop yields (The World Bank, 2013).

In May 2009 the cyclone Aila hit the Ganges delta region of Bangladesh and flooded villages and fields with saline water and destroyed hundreds of kilometres of embankments which were supposed to protect low-lying land, but when damaged inundated villages long time after the cyclone passed. The cyclone displaced 842,000 people most of them remained within Bangladesh but movements across borders into neighbouring areas also occurred. After six months around 200,000 people were still displaced and living in temporary shelters on roadsides and embankments surrounded by disruptive water at high tide and at low tide by thousands of hectares of desolate muddy land (Ashmore, Joseph et al. 2010. IDMC, 2015).

The country's exposed position with regularly floods and cyclones events disrupt traditional livelihoods and confines the alternatives available. Many of the households are unable to afford the high cost of relocation and settlement elsewhere because the repeated weather related events has eroded their savings (IMDC, 2015). In regions where the alternatives for livelihood is extremely few seasonal migration of male family members to work within the agricultural or construction sector is a common coping strategy. In places when there is no other solutions in people's area of origin they have moved more permanently to larger towns, the megacities such as Khulna and Dhaka or across the border into India.

An integration of migration into policy is needed. According to several scholars migration should be viewed as a rational and normal adaptation strategy not a sign of adaptation failure (Zetter, 2008. Black, Bennett, Thomas, Beddington, 2011. McAdam, Saul 2010).

## 6. 4 Definitions – refugee and migrant

According to several scholars a definition of the group of people who are driven from their place of origin due to climate related causes is complicated but a necessity (Biermann, Boas 2010. Dickson, Webber, Takaro 2014).

The definition is problematic because environmental drivers interact with a mixture of social, economic and political factors to influence migration decisions, and mobility has long been an adaptive strategy to cope with change (Black et al. 2011). The environmental factors of migration are exposure to hazard and availability of ecosystem services. Social factors include domestic or cultural expectations, the search for educational opportunities, and cultural practices for example inheritance or marriage. Economic factors include the possibilities for employment and income differentials between places. Political factors concerns not only conflict, security, discrimination and persecution but as well the existing public or corporate policies regarding land ownership and enforced relocation (ibid.).

All of these different factors seldom act in isolation instead they interact with each other and therefore it is complicated to label and define the migration (Biermann, Boas 2010. Black et al. 2011). As a consequence the risk of oversimplify is inherent but operational definitions are essential because countries need to develop informed policies to counter people affected by climate change (Dickson, Webber, Takaro 2014).

In 1985 the UN Environmental Program (UNEP) released a report which popularized the term "environmental refugees" the definition were "people who have been forced to leave their traditional habitat, temporarily or permanently, because of a marred environmental disruption (natural and/or triggered by people) that jeopardized their existence and/or seriously affected the quality of their life" (Dickson, Webber, Takaro, p.

10, 2014. Biermann, Boas, p.62, 2010). Another common used and influential definition of “environmental refugees” has been made by Myers and Kent in 1995 when they provided some early assessments of environmental refugees. They defined “environmental refugees” as persons “who can no longer gain a secure livelihood in their traditional homelands because of environmental factors of unusual scope, notably drought, desertification, deforestation, soil erosion, water shortages and climate change, also natural disasters such as cyclones, storm surges and floods.” (Myers, Kent, p.18-19, 1995. Biermann, Boas, p.62, 2010). As a replacement for “environmental refugees” several organisations use more politically neutral terms as “migrants” or “displaced people” (Dickson, Webber, Takaro 2014). The current direction when conceptualizing an “environmental refugee” often include perspectives on whether the migration is voluntary or forced (Bates, 2002. Biermann, Boas, 2010). If the decision to relocate is made at the individual or household level the migration is characterizes as voluntary (Bates, 2002).

According to the report Preparing BC for Climate Migration released in 2014, the label which is chosen to define people who are being displaced by the climate might have an embedded meaning that can have unintentional implications. As an example, by using the term “migrants” it might imply that the movement is based on free will and the term “refugees” implies migration is forced and they may have the right to claim protection under the 1951 Convention relating to the Status of Refugees (Dickson, Webber, Takaro 2014). Currently the Convention does not include a consideration towards people who are being displaced by the climate, to be classified as a refugee and thereby have the legal right for protection the person must have well-founded reasons to fear persecution due to:

- Race
- Nationality
- religious or political beliefs
- gender
- sexual orientation
- associated to a particular social group

This study will use the term climate change induced migration when investigating the chosen institutions adaptation ability. The term “climate refugee” will appear in the text but only when referring to conversational and quoted sources.

## 7. Results

This study has investigated the adaptation ability in four Swedish institutions; Statistics Sweden, The Swedish Migration Agency, The County Administrative Board of Skåne and the City planning Office at the municipality of Malmö (City of Malmö). Three of four institutions are public, but all are somehow connected to each other and contribute to the institutional community planning in Sweden. To learn about the adaptation ability the institutions have been questioned and investigated regarding their stance regarding climate change and migration and concerning their current adaptation. The following section will present discovered results which will be divided into three levels where an establishment and integration of adaptation is important according to Wamsler's process oriented tool.

- The Inter-institutional level will present the reviewed institutions cooperation and association with external actors to improve their climate adaptation, in other words the adaptation concerning climate change induced migration.
- The Institutional level will present the study's conducted investigation of the adaptation within the institutional frameworks, planning strategies and visions.
- The Local level will present the operative measures on site each institutions has been conducted or are planning to conduct related to adaptation for climate change induced migration.

### 7.1 Inter institutional level - the cooperation with external actors

#### 7.1.1 Statistics Sweden

Statistics Sweden is an administrative agency that produces and communicates statistic data. The agency's services are mainly requested by the Swedish government and public institutions for decision making, debate and research (Statistics Sweden, 2013).

Statistics Sweden support and coordinate the Swedish system for official statistics and participate in international statistical cooperation. The agency contributes with updated analyses and reports regarding e.g. population growth and potential affecting factors (Ibid). The analyses and reports are regularly requested by The Swedish Migration Agency and The County Administrative Board to act as a base for their operations (Ernstén, Sahlström Negash, 2016. Migrationsverket C, 2016).

#### 7.1.2 The Swedish Migration Agency

The Swedish Migration Agency considers applications from people who seek protection from persecution, permanent residence or citizenship in Sweden. During the waiting period, when the application is reviewed, the agency is responsible for housing and food allowance. Once the asylum application has been granted the responsibility for housing, education and healthcare is placed on Swedish municipalities, county councils and the Swedish Public Employment Services (Migrationsverket B, 2016).

The Swedish Migration Agency conducts analyses, forecasts and plan for the need of reception places within the municipalities, administrating economic compensations to the municipalities and county councils based on their costs considering asylum seekers (Migrationsverket, 2013).

According to the agency they have an extensive international cooperation with the EU and organisations such the UNHCR and the International Organisation for Migration (IOM) to obtain information regarding

international recommendations regarding migration and to find support when it comes to resettlement of quota refugees. The general objective for the Agency is to hold a leading position within the EU and internationally regarding migration issues (Migrationsverket D, 2016).

### **7.1.3 The County Administrative Board of Skåne**

The County Administrative Board of Skåne is a government authority that exists nearby the people in each county. The board plays a significant role in the relationship between the inhabitants and the municipal authorities, the government, parliament and central authorities. The development in the county is supervised and reported to the government by the County Governor and thereby informing the government regarding the county's needs (The County Administrative Board A, 2016).

The County Administrative Board of Skåne and all other County Administrative Boards in Sweden are obligated by law to support and inform the municipalities regarding their current state of housing planning and construction. The Board's consultative role regarding the municipalities housing situation is supposed to lead to that nobody in the country is without a home (The County Administrative Board B, 2016. Sahlström Negash, 2016). Within the county and among the municipalities the Board has an important role in environmental and climate initiatives; they coordinate the regional effort to adapt society to a changing climate and informs about climate change and its consequences. They are also a communication channel to encourage measures to avoid future problems related to climate change (The County Administrative Board C, 2016).

### **7.1.4 City of Malmö**

Every municipality in Sweden has a City Council which is the highest decision-making body within the institution and is the municipality's own government which has been selected through a general election. Within the City Council the municipal budget is established and the future appearance of the city are also developed and described there. The City Councils plays a significant role ensuring that the will of the people is transmitted within the municipal organisational structures. The strategic work for development issues regarding the City of Malmö is placed on The City Office which is the city executive board's civil service organisation, they express which direction the city is supposed to be headed and have the organisational responsibility for all 18 departments within the municipality (Malmö stad, 2011. Malmö stad A, 2016).

This study has placed its focus on the City Planning Office which is a department who has the collected responsibility for structure planning, detailed planning and building within the municipality. The department is divided into six units and one of them is called The Strategy unit which is responsible for strategic and comprehensive planning issues e.g. the comprehensive plan for the municipality. The unit is involved in the formation of overarching work values within in the municipality, engaged in regional planning issues, Swedish regulations issues and have collaborations with the EU.

## **7.2 Institutional level - strategic measures within the organisation's administration and management**

### **7.2.1 Statistics Sweden**

This study has been in contact with Statistic Sweden and its Forecast institute concerning an inclusion of migration and climate change within their current strategic measures, institutional frameworks, planning strategies and visions.

“When it comes to climate change and migration future scenarios is based on available research and literature within the field” – Forecast institute, Statistics Sweden

Statistics Sweden focuses on producing and communicating statistic data and when they are to make assumptions and estimations regarding future migration to and from Sweden assumptions regarding how

potential climate-induced migration would affect the immigration to Sweden has not been included or considered. The assumptions and estimations conducted by the agency are based on reports from the UN climate panel IPCC and current research literature found (Forecast institute. 2016).

The IPCC report from 2014 indicates that climate change may increase the migration (Field et al, 2014). The Forecast Institute means that no attempts are being made to quantify the migration flows because of the broad array of social, economic and political conditions along with the environmental conditions interact and constitute the reasons why an individual decides to migrate. Furthermore, the institute's statistical work concerning migration and climate change is also limited by the fact that there seems to be no consensus in the research regarding the definition of "climate refugees" and the UN climate panel emphasizes with the difficulty to categorize individuals as climate refugees (Forecast institute. 2016).

## **7.2.2 The Swedish Migration Agency**

The Migration Agency is commissioned by the government to contribute with operational and process support to Sweden's missions abroad and to coordinate and control international and domestic stationed Immigration Liaison Officers. The Immigration Liaison Officers gives the Agency an opportunity to gather current information from primary sources which contributes to a better basis for the work regarding future migration flow scenarios. In 2015, the Immigration Liaison Officers contributed with analyses of the situation of migrants in countries such as Turkey, Pakistan and India. The Immigration Liaison Officers contributes with information which facilitates the Agency's work significantly and has also been used in planning and forecasting the coming number of asylum seekers. The Migration Agency and the Swedish Ministry of foreign Affairs are planning to employ additional officers and deepen the contextual analyses and quality issues (Migrationsverket E, 2016).

The Swedish Migration Agency is also commissioned to consider applications and grant residence permit in accordance with the National Aliens Act, EU regulations and UN Convention Relating to the Status of Refugees. Sweden has signed the UN Convention Relating to the Status of Refugees and shall grant a residence permit to a person who is a refugee in accordance with the UN Convention but also to individuals in need of "subsidiary protection" in accordance with joint EU regulations as well as "other protection" in accordance with the national Aliens Act (Migrationsverket A, 2016).

A person who is not a refugee according to the UN Convention Relating to the Status of Refugees may instead be qualified for a residence permit as a person in need of protection in accordance with the Swedish Aliens Act. There are two categories of protection in the Aliens Act: subsidiary protection (in accordance with EU regulation) and other protection (in accordance with Swedish legislation). The Third "Exceptionally distressing circumstances in exceptional cases" are written in the Aliens Act but since these cases do not concern needs of protection the recipient of the definition cannot get any refugees status declaration (SFS 2005:716).

### **Subsidiary protection**

A person granted a residence permit as a person in need of subsidiary protection may receive subsidiary refugee status declaration based in EU regulation. For a person to be considered in need of subsidiary protection are:

- at risk of being sentenced to death
- at risk of being subjected to physical punishment, torture or other inhumane or demeaning treatment or punishment
- a civilian at serious risk of injury due to armed conflict.

### **Other protection**

Other protection is a category that only exists in the Swedish Aliens Act and it has no counterpart in international conventions and in EU legislation. An asylum seeker may be considered as a person in need of other protection if she or he:

- cannot return to their native country due to armed conflict or due to serious opposition in the native country
- feels a well-founded fear of being subjected to serious violation cannot return to their native country due to an environmental disaster.

### **Exceptionally distressing circumstances in exceptional cases**

Asylum seekers may in exceptional cases be granted a residence permit regardless if they need protection from persecution or not. When the asylum is concerning personal circumstances such as an exceptionally serious health issue, the adaptation in Sweden and the situation in their native country it can be deemed as exceptionally distressing circumstances. A residence permit may be granted when a collected assessment of the circumstances has been made but due to these cases seldom is a matter of offering protection the applicant cannot receive any refugee status (Migrationsverket A, 2016).

The Swedish Migration Agency conducts analyses based on the current social, political and economic state around the world to determine potential migration to Sweden. Their international development cooperation beyond the borders of the EU contributes with important aspects and information which forms a base for their analyses. The analyses give the Migration Agency an opportunity to probe the need and demand for their services and based on that an evaluation can be made where and when their operational efforts should be inserted (Migrationsverket, 2015).

### **7.2.3 The County Administrative Board of Skåne**

The County Administrative Board of Skåne is a government authority that exists nearby the people in each county and understands the regional circumstances and conditions. The development in the county is supervised and reported to the government by the County Governor and thereby informing the government regarding the county's needs (The County Administrative Board A, 2016).

The Administrative boards have a responsibility to work towards strengthening the regional collaboration to increase the preparedness for the reception of newly arrived asylum seekers, and to create preconditions for settlements. This includes signing agreements with the host municipalities, support, coordinate and follow up operations conducted at local and regional level (Migrationsverket G, 2016).

According to the Board's climate adaptation coordinator, Therese Ehrnstén, the link between climate change and migration "- feels quite natural." Existing islands will gradually disappear under water and then most people will need to find accommodation elsewhere (Ehrnstén, 2016).

The strategic planning is complicated according to her, because of the refugee flows, how will it look like? Another factor that comes into play is that there are climate-related changes which are rapid onset disasters such as cyclones, floods and there are slow onset disasters e.g. droughts and sea level rise, these factors makes it even more complicated when dealing with the issue (Ibid).

According to the Swedish regulation (2011:1160) regarding regional housing market analyses and the municipal housing providing responsibility, the Boards are annually obligated to conduct a written rapport where they analyse the housing situation and market in the county. The rapport must then be submitted to the National Board of Housing, Building and Planning (Boverket) for review (Boverket, 2015, FOU 2011:1160). The County Administrative Board of Skåne conducts the report based on Sweden Statistic's figures regarding population growth rates in Sweden and specifically for Skåne and Malmö (Ehrnstén, Sahlström Negash, 2016).

At the County Administrative Board of Skåne's unit for Urban Planning Hanna Sahlström Negash also works and she conveys that the report contains an analysis that estimates the number of homes needed to be built in the region. The estimation is entirely mathematical and does not take into account the actual need for housing. In other words the analysis does not include factors regarding who needs housing, the expenses or the location. The Board's current estimation argue that 6000 homes needs to be constructed in Skåne every year until 2025 based on Statistics Sweden's calculation on 1% population growth each year. Additional to this, Swedish authorities are aware of that these figures might change because of last year's high increase of refugees (Sahlström Negash, 2016. Region Skåne, 2016), The report, conducted by the board, is also based on a housing market survey where the municipalities answers questions regarding how they comprehend the need of housing, how much have been built so far and how much they think will be built now and onwards (Ehrnstén, 2016).

"The municipalities are through the survey trying to predict the future." – Hanna Sahlström Negash, The County Administrative Board of Skåne.

## 7.2.4 The city of Malmö

The Swedish municipalities have a housing providing responsibility and are responsible for the reception of people who recently received a residence permit. Since 1 March 2016 all municipalities will receive people with recently granted residence permits after instructions by the government. The municipality's responsibilities include Swedish for immigrants, social studies, school, preschool and other programs for children and youths, as well as supplies for people who have no right to the establishment plan. Additionally the municipality are responsible for economic compensation for individuals in need residing in the municipality (Migrationsverket G, 2016. SFS 2001:453).

The City Planning Office at the municipality of Malmö has the collected responsibility for the comprehensive and detailed plans and the building within the municipality. The unit is also responsible for general planning in the areas of housing, energy, conservation, landscaping and traffic and location investigation. This Study has been in contact with the Head of Department for the Strategy Unit at The city of Malmö, Johan Emanuelson who says:

“Regarding the matter that we at the municipality would actively work with potential climate refugees brings the conversation to a wrong turn” – Johan Emanuelson, The city of Malmö.

According to Emanuelson, the City of Malmö do not include potential climate change induced migration or “climate refugees” in their detailed and comprehensive plans nor do they include a potential increased migration due to climate change when they are about to estimate the housing need within in the city.

## 7.3 Local level - operative measures on site

### 7.3.1 Statistics Sweden

This study has been focusing on the Forecast institute at Statistics Sweden due to its conducting of long-term analyses and forecasts. During 2015 they produced a demographic report called “*Sweden's future population 2015 - 2060*”, similar reports are released every third year. Within the report from 2015 the analyst contacted by this study contributed with assumptions regarding the migration to and from Sweden. According to the migration section in the report people who migrate because of “climate-related reasons” have no direct support in laws or policies that currently regulate the immigration to Sweden. Therefore climate change will not affect the migration to Sweden during the forecast period (Statistics Sweden, 2015).

Statistics Sweden does not conduct any on site measures but their analyses and reports plays a sufficient role when public institutions plan development and their organisation (Ehrnstén, Sahlström Negash, 2016. Emanuelson, 2016).

### 7.3.2 The Swedish Migration Agency

During 2015, Sweden received 162 877 asylum applications, a number twice as high than the year before. In 2014, 81 567 applications was submitted and was then considers as the highest number since 1992 in conjunction with the Balkan war (Migrationsverket, 2015. Akademikerförbundet SSR, 2015). Over the past two years the Swedish Migration Agency has in other words been in an economically strained situation and the operatives measures has been stretched thin.

The Swedish Migration Agency shall five times each year present forecasts containing an analysis of how their organisations can be conducted based on existing funds and any differences between the funds available and the need for funds shall be explained. The Authority shall also carry out an analysis of the potential scenarios in need of funds based on different assumptions.

The Migration Agency are describing that analyses regarding future challenges facing society, longer than 5 years are problematic and includes great uncertainty because of the hypothetical scenarios. In the Agency's latest forecast they make assumptions about the number of asylum seekers between 2018-2020, where focus

are placed on three different scenarios regarding the development of the war in Syria. One reason for this may be that the Syrian conflict was the main reason for the increase of asylum seekers last year (Migrationsverket G, 2016. Statistics Sweden, 2014). Statistics Sweden’s figures indicate on a slightly more versatile composition of asylum seekers and how asylum seekers from South Asia increased, see figure 2. There was an increase of asylum seekers coming from South Asia, they were coming from countries with high unemployment, weak economic development and in some cases from areas of conflict.

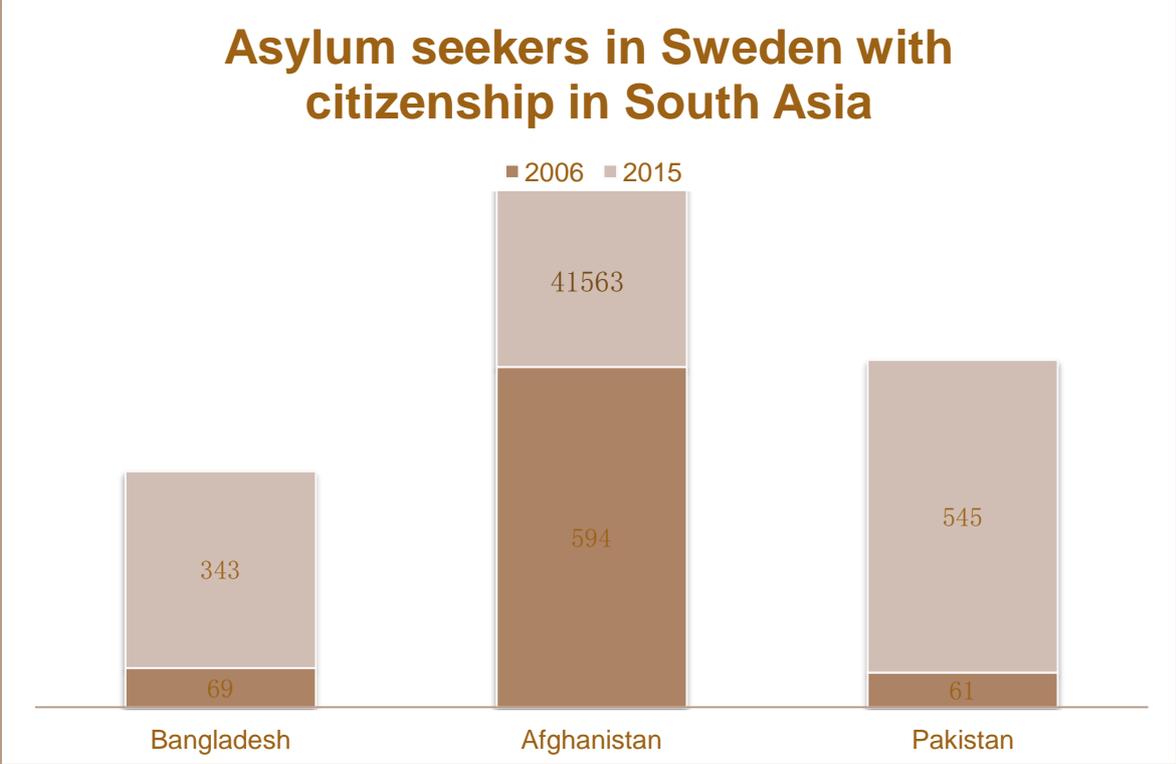


Figure 2. Source: Statistic Sweden, 2016

### 7.3.3 The County Administrative Board of Skåne

The conversations and preparations regarding potential climate change induced migration are not in any way deepened within the County of Skåne according to their climate adaptation coordinator, Therese Erhnstén. For the moment being the Board do not see any particular reason to engage in that kind of work, especially not since “climate refugees” have no right to asylum in Sweden (Erhnstén, 2016).

”You can’t get asylum in Sweden just because you say – the climate in my country are changing and the crops aren’t growing, or something like that” – Therese Ehrnstén, climate adaptation coordinator at The County Administrative Board of Skåne.

On the international level it is discussed if and how legal status should be given to “climate refugees”. Which consequently would lead to that they should be given the right to seek asylum based on natural disaster or something comparable (Ehrnstén, 2016). Ehrnstén means it is on the international level this has to be agreed upon and then Sweden will correct itself based on that agreement. Sweden will not give refugee-status based on climate change if nobody else is doing it. Sweden’s asylum regulations are not adapted based on this kind of “refugees”. People who come to Sweden are mostly escaping from persecution and conflicts. Additionally she says that you can see people who are running from the climate but then the escape often goes to a neighbouring country (Ehrnstén, 2016).

“It is seldom that they come all the way from Bangladesh to Sweden due to a flooded house” - Therese Ehrnstén, climate adaptation coordinator at The County Administrative Board of Skåne.

Based on Sweden’s asylum regulation the County Administrative Board do not see any problem for Sweden which would need an increased preparedness. The issue is today nothing that is being discussed or handled on the institutional level due to the fact that neither climate induced immigration or “climate-refugees” exist in the country right now. The Board has no knowledge concerning why people are applying for asylum in the country. The ones that have received a residence permit is ending up in the Swedish Statistics’ statistic for immigrated people and then in the analysis made by the Board that is investigating how many have ended up in Sweden over the years. Today the Board does not see, based on their areas of responsibility and specific missions, the need of creating a preparedness and thereby an adaption, therefore there is no reason to raise the question. The initiative has to be taken on an international level or by the Swedish Government granting “climate refugees” asylum. In a scenario like that the Board would start to think about what the consequences for their organization. (Ehrnstén, Sahlström Negash, 2016).

### 7.3.4 The city of Malmö

During 2015, Malmö granted the highest number of asylum seekers in the county of Skåne and due to the high influx of asylum seekers The city of Malmö had to impose the first level of crisis mode called “disturbance”, and later during the same year raised the crisis level to number 2 on the three-point rating scale. The reason for increased crisis level was that the municipality saw the need of a better flow and reception at the city’s centralisation, where the primary amount of asylum seekers arrives (Malmö, 2015. Malmö B, 2016.)

Johan Emanuelson, the head of division for the Strategy unit at The City of Malmö, says that the municipality does not make any of its own assessments concerning the situation around the world.

“We have not conducted any sort of analysis that includes reflections regarding if or how climate change can act as some kind of migration trigger during the next 10-20 years, not at all”. – Johan Emanuelson, The City of Malmö.

Instead, the municipality rely on the analyses and forecasts conducted by The Swedish Migration agency. The high amount of asylum seekers last year lead to more intensified discussions within the municipality regarding the pressure on municipal services such as schools and kindergartens and how to enhance the construction of housing (Emanuelson, 2016). Emanuelson points out that Sweden has a problematic housing market where the need of housing is not prioritised instead it is the demand that determine if and where housing is going to be constructed. In other words the construction companies are building to those who can afford to pay and when new housing are much more expensive than current stock it is a great challenge to give newcomers housing, and even more today due to the past year (Ibid).

## 7.4 The adaptation ability and the possibility for asylum

The focus for this study is placed on the adaptation ability within chosen institutions and is investigated by conducting interviews, mail correspondence and reviewing official policy documents. The investigation was conducted on institutions that are a part of the community planning and the urban development for the city of Malmö. The results were divided into three organisational levels according to Christine Wamsler’s adaptation guide, below the results are compressed and related to the study’s question formulations.

*The Inter-institutional level* refers to create an understanding regarding the reviewed institutions cooperation and association with external actors with a purpose to improve their climate adaptation, in other words the adaptation concerning climate induced migration. One might think that the Swedish Migration Agency’s cooperation with the UNCHR and overall broad international participation would contribute with an inclusion of a consideration regarding climate change induce migration but the study could not find any indications on

that. Based on the study's results all of the institutions are assessed as grade one on the three-point grading scale, which means that the institutions approach is to not engage in any cooperation or are not associated with any actors who contribute with organisational work concerning climate induced migration, climate change induced migration adaptation are not considered.

*The Institutional level* refers to the adaptation within the institutional frameworks, planning strategies and visions.

Statistics Sweden has put together scientific written documentation based on their findings of current literature and studies regarding the topic climate change and migration. The scientific written documentation is then used as a base for the institution's conducted assumptions and analyses<sup>4</sup>. The studies used by the Statistics Sweden describe the lack of consensus within the climate change and migration literature regarding the definition of climate refugees; and the difficulties to quantify the migration flow because there are several factors which correlate to each other, such as social, economical and political aspects<sup>5</sup>. Statistics Sweden's selection of available research and literature within the field is perhaps something that is limiting the agency to conduct forecasts and analyses on the relation between and potential measures regarding climate change and migration and its potential effect on Sweden. This consequently leads the future challenges out of the agenda.

Within the Swedish Migration Agency the situation is quite similar to Sweden Statistics in terms of involvement of climate change and migration. Current institutional frameworks, planning strategies and visions of the Swedish Migration Agency do not involve how to prepare or manage potential climate migration. Tentatively there is a regulation within the asylum regulations which can be considered as a potential opening for future climate change migration as well something that can initiate a focus on the subject. The Swedish Migration Agency's asylum regulations are based on EU regulations and UN Convention Relating to the Status of Refugees and the National Aliens Act. According to the National Aliens Act (SFS 2005:716) you can get asylum in Sweden if the person cannot return to their native country due to an environmental disaster. This can be considered as an opening in the Swedish regulations, meaning that potential climate migration can be accepted partly due to the unclear definition of "environmental disaster" in the legislative text. Perhaps it could include increased sea-level, which gradually will make countries inhabitable until they ultimately disappear (UNEP, 2014. Nurse, 2014). The migration agency's Immigration Liaison Officers might in the future become more important due to this, when their analyses become more in-depth and the consequences of climate change intensifies and appears more frequently. Perhaps their analyses will include research about the increasing numbers of asylum seekers with citizenship from South Asia and consequently give indications to the Swedish Migration Agency concerning the growing need of refuge from far away countries where climate change is taking its toll today.

The Swedish Migration Agency is commissioned by the government and parliament, therefore the migration policy is much influenced by the information base within the government and among the politicians. During 2013-2014 the Swedish government had the Chairmanship of the Global Forum on Migration and Development (GFMD) which is a forum open for all State Members and Observers of the United Nations and the forum are intended to encourage practical and action-oriented outcomes concerning the subjects migration and development. GFMD is considered to be a unique, important and voluntary platform with around 160 participating states (GFMD, 2016. Regeringens skrivelse, 2013). The Migration Agency itself are describing their broad international cooperation with the organisations such the UNHCR, the International Organisation for Migration (IOM) and the EU to obtain updated information regarding the global migration situation (Migrationsverket B, 2016). The extensive international involvement of both the Migration Agency but also of their commissioning body, the government, one might think it would mean that the Agency's institutional frameworks and forecasts had an involvement of potential climate induced migration.

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<sup>4</sup> På flykt från klimatet? <http://www.scb.se/sv/Hitta-statistik/Artiklar/Pa-flykt-fran-klimatet/>

<sup>5</sup> Vil klimaendringer gi økt innvandring? <https://www.ssb.no/befolkning/artikler-og-publikasjoner/attachment/173632?ts=1458fae8370>  
Why the numbers don't add up: A review of estimates and predictions of people displaced by environmental changes. <http://www.sciencedirect.com/science/article/pii/S0959378011001403>

The forecasts and analyses conducted by the Migration Agency are monitored by the County Administrative Boards and are acting as base for their organisational work (Länsstyrelsen, 2016. Ehrnstén, Sahlström Negash, 2016).

On the institutional level the County Administrative Board of Skåne has several of responsibilities e.g. support, coordinate and follow up conducted actions regarding settlements and reception on the regional and municipal level (Migrationsverket G, 2016). The Board does not include any analysis on how climate induced migration might be a challenging factor in the future nor the relation between climate change and migration is mentioned within their frameworks. The linkage between and the consequences of climate change and migration are currently not considered as issues within the Board's area of responsibility (Sahlström Negash, 2016). A question that consequently arises is how they can fulfil their role as an enabling coordinator regarding housing and a supporting actor towards the municipalities when they do not include aspects concerning climate change and migration.

The municipality of Malmö was one of several municipalities in the county who turned to the Board of Skåne during the autumn of 2015 to receive advice and coordination since the amount of asylum seekers peaked and Malmö is the first stop in Sweden for people seeking refuge (Sahlström Negash, 2016. Emanuelson, 2016). The conducted interview with the Head of division for the Strategy unit at the City of Malmö, Johan Emanuelson, revealed no interest in integrating an adaptation within the detailed and comprehensive plans even though Emanuelson expressed an awareness regarding the linkages between climate change and migration. This study couldn't find any inclusion of potential climate induced migration or "climate refugees" within the City of Malmö's institutional frameworks, planning strategies and visions for the future.

It is the Swedish Migration Agency who has the primary responsibility for the reception and accommodation of asylum seekers, but the municipalities are obligated to support and help anyone who resides in the municipality according to the Swedish social services act (SFS 1994:137. SFS 2001:453). This could be one reason why all departments at the City of Malmö should include climate induced migration within their planning, which consequently leads to an adaptation with enough resources to counter the future challenge.

Based on the results for the institutional level the reviewed institutions are assessed as grade one on the three-point grading scale which means that the climate adaptation receives no attention within institutional strategies and visions for urban planning. The awareness of the linkage between climate change and migration appeared in all institutions, but within the formal frameworks, planning strategies or written visions for the future the linkage was either dismissed as an issue or not even mentioned.

*The local level* is the third and last level and refers to the reviewed institutions measures on site. The investigated institutions are currently not conducting any operative measures which could be related to adaptation towards climate induced migration.

Statistics Sweden and the Swedish Migration Agency are dependent on each other's reports, forecasts and analyses to pursue their missions. The Swedish Migration Agency is according to Statistics Sweden an important data collection source due to their registration of asylum seekers e.g. why they are applying and individual details (Statistics Sweden, 2005). The Migration Agency needs data concerning population growth rates and forecasts on the Swedish population in the future (Migrationsverket C, 2016). Further down in the public institution scale The Administrative board and the municipality of Malmö are both adjusting their operations and future development on Statistic Sweden's and the Swedish Migration Agency's forecasts. Perhaps is this why this study could not find any operative measures which could be related to adaptation towards climate induced migration within the institutions, even if they have responsibilities that require overall coordination, giving support and management regarding incoming asylum seekers.

In conclusion regarding the institutional levels the study's results show that the studied institutions ability to adapt to climate induced migration are minimal due to their currently stance within their institutional frameworks, planning strategies and visions. Even though there are an overall awareness among the contacted street-level bureaucrats regarding the connection between climate change and migration.

A question arises why the subject has not been given any greater focus within the institutions. According to the study *Preparing BC for Climate migration* by Stephanie Dickson, Sophie Webber and Tim K. Takaro public institutions on national and regional level are neglecting long term, future oriented problems in favour for more immediate needs. Which can be compared to the conducted interviews and other empirical results made by this study where it was expressed that the issue regarding climate change and migration is something that is placed on the future, when there have been a greater recognition by international organs. The authors

conducted a wide range of interviews with people who work in areas of housing, health, law, government and the non-governmental sector and similar to the result given in this study it appears that no one at any level of government is stepping up to initiate or lead a conversation regarding the changing climate's impacts on migration. Consequently, the lack of formalisation leaves the future challenges in a policy vacuum.

The reason why the conversation is neglected within the investigated institutions even though there is awareness can be explained by the control of the public sector.

The previous tradition where authorities and street-level bureaucrats were governed by the strict application of a detailed regulatory framework, a tradition that could have an impact on today's work within the institutions (Johansson, 2007). Although the governance today has shifted towards an ex-post control and Program Budgeting is still used and is a method that is clearly associated with the previously centralized governance. The method requires a presentation of a detailed clarification of the institutional goals and awareness regarding the costs, which possibly could hamper the introduction of a subject that relatively uncharted for example regarding the exact extent of people who will become displaced due to climate change and regarding how the migration flows will look like. There is also an uncertainty due to lack of previous experiences of increased migration due to climate. Perhaps the Program budgeting's goal-oriented effect in combination with the ex-post control is slowing the addressing of potential climate induced migration. Potentially though, could the street-level bureaucrat's discretion be seen as an opening to put the challenge on the agenda.

There is a consensus within the international bodies IPCC and UNHCR that climate change will lead to displaced people, people who already today are vulnerable and often lives in developing countries.

If the challenge was addressed and someone took the initiative and despite the relatively early stage it could create an understanding within the Swedish society and create a preparative basis for potential affected organisation. It could also generate greater international cooperation on the issue.

The possibility for a potential climate displaced person receiving asylum in Sweden based on currently Asylum regulations are minimal due to the lack of consideration of climate change and its consequences within the regulations. Tentatively there is a regulation within the asylum regulations in the "Other protection" paragraph which can be considered as a potential opening for future climate change migration as well something that can initiate a focus on the subject. Because according to chapter 4, 2a § in the Swedish Aliens Act (2005:716) you can get asylum in Sweden if the person cannot return to their native country due to an environmental disaster. The unclear definition of "environmental disaster" in the legislative text creates the possible opening, perhaps it could include e.g. people who are seeking refuge from increasing sea-level which could lead to a human-induced physical event and gradually will make countries inhabitable until they ultimately disappear (UNEP, 2014. Nurse, 2014).

Regardless if the opening is possible or not Sweden and other member states within the EU are heading towards an increasingly restrictive immigration policies.

In July 2016 the Swedish parliament voted in favour for a legislative proposal which will change the Swedish Aliens Act temporarily for three years and removed the possibility to receive asylum according to the "Other protection" paragraph. The new legislative proposal will also introduce temporarily residence permits, the law are suggested to apply for three years and entered into force 20<sup>th</sup> of July in 2016 (Regeringen 2016).

The ongoing trend of restricting immigration policies can perhaps in the future be reduced due to a new proposal from The EU commission. The EU-commission presented in April of 2016 new ways to tackle the ongoing refugee flow to Europe by reforming the Common European Asylum System. The Commission has proposed new directives for the EU's asylum agency and suggested that the agency's operational role should be reinforced and as well fill a new position where it can play a new policy-implementing role. In more practical terms, the new directive would mean that people who seek asylum in Europe would automatically be redistributed to member states, where each state receives a proportional share (European Commission, 2016).

Within the discussion below the street-level bureaucrat's role is discussed, perhaps could their discretionary power be viewed as an opening to put the challenge on the agenda. Also in the light of Sweden's restricted asylum regulations the international organ, UNCHR, are trying to categorise refugees in problematical ways.

## 7. Discussion

This study aimed to present and illustrate the adaptation ability among relevant Swedish institutions with an intention of contributing with an understanding regarding the governmental and institutional approach on how they are supposed to manage potential larger-scale relocation due to climate change in the not so far reaching future. The selected institutions are a part of the general urban development of Malmö and as well influence and are involved in the reception of people who are seeking refuge in Sweden.

The obtained results from the investigated institutions were related to Christine Wamsler's adaptation tool to reveal the adaptation ability within the intuitions and focusing on three institutional levels: inter-institutional, institutional and local. This study has also included Roine Johansson (2007) to create an understanding for the investigated institutions organisational base and structure. By including Johansson (2007) and as well Ottosson et al (2012) a visibility of the existence of discretion among street-level bureaucrats within the public sector is done. The study then includes *Preparing BC for climate migration* to illustrate tendencies of passivity among street-level bureaucrats and organisational limitations within the public sector.

This study finds the currently adaptation within all levels of the investigated institutions to be graded as one on the three point scale, this might be surprising due to the expressed awareness regarding the relation between climate change and migration. Potential organisational measures were dismissed because lack of governmental directives and the need of further studies which present a clearer picture on how and if Sweden will be affected. The reason why no furtherer attention are given to the subject could perhaps be explained by the organisational structure which existed within public institutions before the decentralisation, then the public institutions and the officials were governed though a detailed regulatory framework and clear definitions of their area of responsibility. It can therefore be the goal-oriented effect from still existing rationalistic methods in combination with current ex-post governing that are preventing the addressing of potential climate induced migration. Additionally, moral perceptions among street level bureaucrats have not been identified, instead the lack of information and directives has left the climate and migration issue as a non-issue. The results indicate that the institutions ability to adapt is partly reliant on the power to act among the street-level bureaucrats but also much dependent on a greater international recognition and national legislative directions.

Currently there is an ongoing discussion among scholars and international organs, such as the UNCHR, regarding how to categorise people who are seeking refuge from climate change. The discussions concern how to make distinctions within the actual migration, if it is a matter of being forced to migrate or if it was an active choice. This categorisation and distinctions of the migration this study finds problematic and non relevant; today people are seeking refuge and becoming displaced because their basic needs such as clean water, shelter and safety are compromised. These needs are considered as human rights and it may somewhat be our responsibility to cater these needs, partly due to Sweden's ratification of the UN's human rights convention and partly due to our climate debt. A climate debt all well developed countries with relatively strong economies have towards countries bearing the greatest climate change impacts including the ones who are geographically closer the impact zones and will host and assist climate induced migrants.

The existing street-level bureaucrat discretion and interpretation of opportunities may provide a possible opening starting the conversation and placing climate change and migration on the agenda. However, that opening may be limited because the organisational work is based on evidence from past experiences which has been proved through evaluation and follow up. The evidence-based organisational work provide structured and rigid methods which can according to a recent published doctoral from the Department of Political Science at Umeå University in Sweden prevent flexibility and a holistic perspective within the organisation. Additionally, the doctoral points out that the organisational limitations that exist within the public sector contribute to an indifference and aloofness among social workers (Lauri, 2016).

The included street-level bureaucrats interpret their area of responsibility to not include a consideration of the relation between climate change and migration or even less an adaptation towards climate induced migration. If this can be explained by aloofness and indifference among them is hard to say. However, they are

asking for more experience within the area, international recognition and directives, meanwhile the international organs such as the UNCHR are focusing on definitions and categorisation of a group who obviously needs proper support measures not a label. Could this call for a categorisation, definition and recognition perhaps be a strategy used to avoid and renounce their general responsibility?

## 7.1 Method discussion

This study used Christine Wamsler's climate adaptation tool to present the obtained results and to identify the institutions adaptation ability. The study chose to change the presentation order of the investigated institutional levels, and start with inter-institutional level instead for the local level. The reason for this was to achieve a perspicuous presentation of the empirical material and based on the experiences from the conducted interviews which started of better from a broader perspective. Wamsler's guide may not be entirely applicable when trying to investigate the adaptation for climate induced immigration. Wamsler never express such adaptation is needed or even exists nor does her theory communicate anything regarding the connection between climate change and migration. Despite the lack of a distinction of adaption for climate induced immigration this study finds the theory usable due to its usability and the fact that the tool is relatable for officials and politicians. Wamsler's tool is as well a recognized tool for an investigation of climate adaptation.

The study included Roine Johansson (2007) and Ottosson et al (2012) that related to the bureaucratic constraints and the street-level bureaucrat's discretion. The comprehension and the interpretation of the discretion can differ substantially among street-level bureaucrats; therefore additional interviews with representatives from included and excluded institutions would have increased the study's validity.

The study met difficulties obtaining empirical material through interviews which could be explained partly by the approach used when contacting the potential interviewing persons but also due to the relatively unexplored subject.

The conducted interviews were somewhat hard to do because the interviewed persons was not very familiarised with the subject which created quite formal conversation merely without any reflections or visions for the future. By including viewpoints from an objective expert who currently work with climate adaptation projects in places where people are being displaced and migration patterns has stated too occur, this study had been given more substance and a contextualisation.

## 7.2 Suggestions for further research

During the time the study was conducted the lack of studies and data was expressed; when collecting empirical material on institutional websites, during interviews and within well cited studies. Mapping the migration patterns is a category which has been frequently asked for as well how to create an increased flexibility within public institutions, additional recurrent subject is as well the connection and interaction between the drivers for migration. Coming studies should also place focus on the relation between climate change and conflict.

## 8. Conclusion

According to several scholars an acknowledgment of the relation between climate change and migration in parallel with developments of policy within the field are needed. An increasing amount of people becoming displaced by the climate and according to the IPCC latest report extreme weather related events are projected to intensify, as a consequence more people are likely forced to migrate which will not only affect the nearby countries (IDMC, 2015, Field et al. 2015, Globalis, 2016). Based on the current situation, nations worldwide need to take steps towards deepening their knowledge and addressing the issue to increase their adaptation to the coming challenges.

Potential climate induced migration is something countries should take into account when they are conducting analyses regarding future potential asylum seekers, population growth figures, conducting structural planning and housing construction which consequently will lead to adaptation towards climate induced migration.

The climate change effects on migration are problematic in many ways and there are no simple solutions to address people who are displaced by climate change and climate change induced migration. There are several stages within the migration and some are currently in the run of becoming categorised which accordingly would simplify a grading and distinction of one refugee to another refugee. This study identifies several concerns for the future to come based on these classification tendencies which are moving towards distancing and a dehumanization of people who are in search for their basic needs. Another concern regards people who are chronic-displaced, which can be considered as an additional dimension of the climate induced migration. Within that dimension the search for refuge has been prolonged and when they succeed to find temporally shelter they might not be escaping a recently occurred climate change induced event; how will these people then be classified? As a final concern, addressing the challenges related to climate change and migration might be postponed because the consequences might not be seen in some countries that are geographically located far away from the impact zones. These countries will instead see the indirect consequences from climate change and migration, in others words an influx of people who are seeking refuge from conflicts. These conflicts will likely be associated with climate change but the people will not be classified as "climate refugees" or become a part of the climate induced migration because their place of origin is an area of conflict. Hopefully, the coming research on the relation between climate change and conflict will contribute to a development towards a holistic perspective on climate change and migration which consequently can lead to an adaptation towards climate induced migration.

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## Appendix 1: Interview guide

Starting point: It takes planning and action to meet the challenges of climate change and migration contributes.

### I. Operational measures: Local level

#### 1. Actions at local level

Which adaptation measures have already been implemented or are planned to be implemented?

### II. Strategic actions: Institutional level

#### 2. Overall planning strategies and visions

Are there any general strategies or visions of the planning that supports the integration and implementation of adaptation measures at the local and administrative level?

#### 3. Formal planning frameworks and tools

Promotes the formal frameworks for planning (detailed and comprehensive planning) integration and implementation of adaptation at the local level?

#### 4. Informal planning frameworks and tools

Is there a framework for informal planning as well as instruments that promote integration and implementation of adaptation at the local level?

#### 5. Internal organization

Is there an organizational structure that supports the integration and implementation of adaptation measures at local and institutional level? (Eg. Through appropriate collaboration, networking, work processes and communication)

#### 6. Human and financial resources

The business has adequate human and financial resources to promote the integration and implementation of adaptation actions on the operating level?

### III. Strategic actions: Inter-institutional level

#### 7. Cooperation and networking with external actors

Are there external collaboration objects and networks that support the integration and implementation of adaptation actions on the operating level?

Adaptive questions:

Do you, as an informed official, perceive that there is a link between climate and migration?

- How do you see the possibility of including people who are fleeing climate change in the housing need calculation / general climate adaptation planning?
- What do The Board/the municipality further need to include climate change immigration in their planning?

Be aware of during the interview with The Board:

Boverkets approach regarding housing needs. Boverkets approach equates all homes under the motto a home is a home. This means that the outcome of the calculation, the housing need, does not need to correspond to the housing demand. The method does not include the location of the property, condominium/rental, housing costs, or other factors that affect the demand.

It is needed to be built 6,000 homes annually to match a population growth of 1%.

The County Board carries out housing needs analysis, in these analyzes should one take into account the climate and migration?

"There is every reason to expect that the number of immigrants will continue to be elevated to the earlier average number of years to come. Skåne is an arrival region for many of the refugees coming to Sweden. "- Housing needs, planning position.

Be aware of during the interview with the municipality:

The current comprehensive plan of Malmö does not include words such as: immigration, migration, asylum seekers, asylum.

Migration patterns

The Plan Unit in the City of Malmö "...houses the investigations and statements regarding urban design, landscape, content, environmental, safety and security, traffic solutions, etc.