LUND UNIVERSITY
Faculty of Social Sciences

What's the Problem of 'Climate Migration' Represented to be?

A Discourse Analysis of Policies in Bangladesh

Shangchanhui Feng

Abstract

This thesis aims to understand the discourses of 'climate migration' represented in the policies of Bangladesh, based on the conceptual framework created by existing discursive debate on 'climate migration' and migration theories. With the guidance of 'What's the problem represented to be?' (WPR) approach proposed by Bacchi (2009), six national policies of Bangladesh are selected and a full-dimensional analysis on their political discourses is made, answering the research question: *how is 'climate migration' problematised in the policies of Bangladesh?* The analysis has shown that the problem representation of 'climate migration' is not homogenous but conflicting and changing, which is politically rational considering its discursive effects. But based on these conflicts and tensions identified in the discourses, other alternative discourses can be suggested.

Key words: climate migration, climate change, migration, Bangladesh, discourse, WPR approach

Words: 20147

Acknowledgements

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1. Introduction

1.1 Background: climate change, environmental change and migration

In most of the modern migration theories, social, economic and political factors are usually the main considerations when assessing migration patterns. But in the past three decades, environmental change has started to be considered as another factor that may affect the patterns and behaviours of population movement in the world. Although it has been recognised that migration due to seasonal flood and drought and environmental degradation have had a long record in human history, they have never drawn as much attention in the political sphere and academia as it is today. What makes it prominent is the increasing impacts of climate change, which make environmental changes happening unprecedentedly in more extreme situations and larger scales, hence causing large-scale displacement of population. As the impacts of climate change continue to rise, the environmental factors tend to be increasingly influential on migration patterns (Foresight, 2011).

In a report published by International Organisation of Migration (IOM), the impacts of climate change on migration patterns are summarised into four ways: 1. natural disasters, both sudden- and slow-onset ones, leading to migrations; 2. the adverse impact of climate change on 'livelihood, public health, food security and water availability'; 3. sea-level-rise making coastal regions uninhabitable; and 4. competing for limited resources such as land and water giving rise to conflicts and hence displacement (Walsham 2010, p. ix). Therefore, 'climate migration' can be triggered both directly by environmental hazards, and indirectly through social, political and economic factors that are altered by environmental impacts.

1.2 Problem formulation

The topic of 'climate migration[1]' has received much public attention over decades, yet consensus is rarely achieved, neither on the conceptualisation of the problem, nor on the attitudes conveyed. Some discourses create the concept of 'climate migration' and address it as an alarming and threatening issue, some may consider it positively as a way of adaptation, some may question its very existence, while some refuse to accept it as a 'reality'. Discussions are formulated and affected by different disciplines and different interest groups, and the discourses formed from these debates have profound but distinct social and political implications on migration patterns in the world.

The debates on 'climate migration' have not achieved a consensus internationally in academia nor political sphere, therefore, a hypothesis is given here that the discourse on 'climate migration' from a national perspective is also unsettled. Due to the multi-faceted dimensions of issues national policies may address, it is also likely that national discourse of 'climate migration' is not homogenous, but coexisting and conflicting, just as how it has been like in the international debates mentioned above. The national discourses on 'climate migration' are rarely studied, yet worth investigating, especially on the countries that are considered as experiencing large amount of 'climate migration' now and in the future, and Bangladesh is a case of such.

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[1] Climate migration: there have been various terminologies to address this issue. 'Environmental refugees' appears to be the first one introduced to the public, originated in the mid-1980s, although the provenance is uncertain (Gemenne 2009, p. 114). Then various terms emerge to follow: 'forced environmental migrants', 'climate-change-induced migration', 'environmental displaced persons', etc. (Boano, Zetter. and Morris 2007, p. 6). These terms are invented similarly to describe the bigger issue of environmental and climate change's effect on migration pattern, with nuances in the purposes and scope of the terms, yet none has gained a public consensus, neither in definition nor in the choice of terminology. The term 'climate migration' will be used through the thesis, for the emphasis of climate change as a major influence to environmental changes, and to show a more neutral political stance in the discussion by avoiding using terms of 'refugees' and 'forced'.

Bangladesh is considered *the* most vulnerable country to the impacts of climate change. Its special geographical location that makes it prone to hydro-meteorological hazards, accompanied with development challenges such as high population growth and density along with environmental degradations, all make it extremely vulnerable to climate change. These natural events and vulnerable situations have intricate but visible impacts on migration patterns in Bangladesh, and in the long run, climate change may aggravate the current situation and will continuously affect the migrations especially of those vulnerable regions in the country (Walsham 2010, p. xii).

When considering the significance of studying 'climate migration' discourses in Bangladesh, the way government of Bangladesh forms its discourses on 'climate migration' is especially important, since they will have significant political and social implications on the movement of its own population; and as a major actor in global 'climate migration', it has a leading impact on the flow of 'climate migration' in the world, affecting the neighbouring countries as well as other receiving countries in the world. In addition, discursive formation in national policies can reflect the existing international academia and political knowledges and discourses, and may give a hint to scholars and politicians of how the knowledges they create may inform the policy making process of other countries, and hence influence the 'climate migration' agenda globally.

1.3 Research question

To study the discursive formation of 'climate migration' in Bangladesh, one good entry point is through analysing the *problem representations* in its policies. From a Foucauldian perspective, there is no 'problems' in realities, but rather created through policy-making. By defining things as 'problems' in the policies, the policies can then be justified to take actions to 'fix' the 'problems', hence the mentalities of rule ('governmentalities') are formed. Therefore, rule takes place through the discourses created from 'problematisation' in policies (Bacchi 2009).

In order to study the discourses of 'climate migration' in polices of Bangladesh, this thesis will use the following research question as a guidance to discussions:

How is 'climate migration' problematised in the policies of Bangladesh?

This thesis will take Carol Bacchi's (2009) method on discursive policy analysis, 'What's the problem represented to be?' (WPR) approach, to answer the question. WPR approach has a special focus on the role of *knowledges* in forming discourses, and it allows researchers to study on the connection between knoweldges and discourses from various actors such as experts and professionals, which makes it most fit for the need of this thesis, which is to draw a connection between existing discourses and knowledges with the discourses in Bangladesh (Bacchi 2009, p. 25-26). It also provides a well-structured question list to answer the research question comprehensively. To answer the question on how 'climate migration' is problematised, the first step is to identify what the 'problem of climate migration' is represented in the policies of Bangladesh, followed by a further discussion on the formation of these 'problematisations' in the policies, drawing its connections to the existing knowledges and discourses on 'climate migration', then proceeded by discussions on possible consequences of such ways of 'problematisation', and eventually explore other possible alternatives to the current discourses.

The thesis will start with a review of existing discourses and knowledges on the issue of 'climate migration' and modern migration theories that have shown connections to formation of 'climate migration' discourses, which will become the conceptual bases for the discussion in the analysis of discourses in policies of Bangladesh, and followed by a literature review on the existing studies on 'climate migration' in Bangladesh. The next chapter will introduce the methodology developed based on Carol Bacchi's (2009) 'What's the problem represented to be?' (WPR) approach, proceeded by research design. Then in Chapter 4, analysis will be given to the selected documents and further discussion will be presented through

answering the 'six questions' structured by WPR approach. Then the thesis is concluded by a summery on the result of analysis and an outlook on further research.

2. Introducing the Existing Discourses and Knowledges: Climate Migration, Migration Theories and the Case of Bangladesh

This chapter aims at setting up a conceptual framework and contextual background for the coming discursive policy analysis, so that it can inform the research design and also connections can be drawn from the discursive formation in policies of Bangladesh to the existing discourses and knowledges in the international sphere on 'climate migration', and discussion can be developed on how the problematisation of 'climate migration' in policies of Bangladesh has reflected these existing knowledges. This chapter is consisted of three parts. The first part will give a background on the existing discourses on 'climate migration' in academia and political sphere. Due to the multidisciplinary nature of 'climate migration' issue, the theorisation of this issue can be grounded in different academic disciplines, environmental studies, security studies, migration studies, etc. This thesis will set its theoretical basis on modern migration theories, to explore the issue with the theoretical base from migration studies. Therefore, in the second part, I will introduce three migration theories that have shown relevance in theorising 'climate migration'. The third part will give a literature review of the existing studies of 'climate migration' in Bangladesh, which sets a contextual base for the upcoming policy analysis.

2.1 Discourses on 'climate migration'

There are various discourses existing simultaneously nowadays in academia and international political field. With different points of departure, they have formed

their own debate in the field, mostly around two major topics: the existence of 'climate migration' and the attitudes towards it. There has been a heated debate on whether, or to what extent, the issue of 'climate migration' should be formulated, where the 'alarmists' believe in the 'urgency' and 'reality' of 'climate migration', while the 'sceptics' question both the definition and prediction of 'climate migration'[2].

The major debates on attitudes are mostly built in the 'alarmists' branch, since they hold the basic assumption of the existence of 'climate migration', and their dissidence lies in the 'solutions' to the problem, either to prevent it or to engage in it. To be more specific, the debate on attitude can be generally divided into two camps: on the one side people consider it as a security (if migrate internationally) and development (if migration internally) *challenge*, while the other side suggests to consider it positively to build up resilience for people against impacts of climate change. Another discourse also emerges from the countries affected by 'climate migrations', and they refuse to accept the 'reality' of 'climate migration'. Yet with differences compared to the 'sceptics', which is derived from academia, this discourse is formed out of a right-based political purpose, with less academic basis. They acknowledge this disastrous effects of climate change, but refuse that the global society is taking it for granted and only focusing on solving the problems it has created, rather than stopping it from the origin.

These discourses are formulated on different levels as well as field, local, global, academic, political, etc. They can be first formulated in mere academic discussion then enter international politics, there they can be reformulated and developed, like the 'alarmists' discourse. They can also be formed in the context of political-academic cooperation, like the 'resilience' discourse, as well as purely in political context, like the 'rejecting' discourse. But it is important to be aware that they

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[2] The two coalitions of 'alarmists' and 'sceptics' is conceptualised by Gemmene (2009), are also called 'maximalist' and 'minimalist', invented by Suhrke (1993), which manifests the acceptance of the discourses nowadays.

themselves are not homogeneous discourses. There could be tensions, and different discourses could be interrelated, overlapping and evolving with each other, and none of them have achieved consensus internationally. Below, I will have a detailed review of the formulation of these discourses.

2.1.1　The 'alarmists'

'Alarmists' coalition, usually made up of natural scientists, security experts, NGOs and activists, shares the basic claim that environmental degradation has already and will continue to displace large amount of population in the world, so they believe in the strong linkage between environmental change and migration, as well as the large amount of population involved. Norman Myers (1997, 2002) is a prominent scholar in the alarmist coalition. He publishes large amount of research papers on environmental issues especially on *environmental refugees* [3] . He considers environmental factors as dominant factors that induce migration. Based on available data and large amount of assumptions, he calculates that there were at least 25 million environmental migrants in 1995, and he predicts that there would be at least 25 million more in year 2010, and in 2050 the number can amount to 200 million (Myers 2002, p,609-611; Myers 1997, p.167-168). These calculation results have drawn immense attention internationally, and are largely quoted in academia, media and political arena nowadays, including being cited in IPCC report and other working documents in the United Nations (Methmann & Oels 2015, p. 56; Gemenne 2009, p. 123).

Myers (2002, p. 612) admits the difficulties to differentiate migrations that are driven by environmental change from those driven by other factors like economic factors. He explains this with what he called 'gradient of factors'. On one side, there

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[3] Environmental refugees are defined as 'people who can no longer gain a secure livelihood in their homelands because of drought, soil erosion, desertification, deforestation and other environmental problems, together with the associated problems of population pressures and profound poverty' (2002, p. 609).

are migrants who have enough economic capability for migration that migrate out of pure economic reasons; one the other side, there can be migrants who are in poverty that migrate out of single environmental reasons; between the two extremes, there are large number of people in a 'grey zone' that migrate for a combination of environmental and economic reasons, which may be difficult to distinguish. This difficulty in classification of migrants rightly implies his assumptions behind prediction and calculation of environmental refugee can be too bold to be accurate.

Myer's calculation is criticised to be methodologically unsound that he simply estimates the population growth in the coastal and flooded areas in the world and generalised them as potential environmental refugees, regardless of the fact that firstly, people may migrate out of other reasons alongside environmental reasons; secondly, those who migrate with environmental reasons may not become 'refugees'; thirdly, not all the people in the calculated area will migrate (Black 2001, p. 1; Methmann & Oels 2015; Gemenne 2009).

Myer creates his discourse based on the stand of calling for political and legal recognition of environmental refugee (2002, p. 612). While other scholars (Homer-Dixon 1991, 1994; Swain 1996) further develop the discourse from the stand of receiving regions and based on a neo-Malthusian perspective, they claim that environmental change has a threatening effect on the receiving society, causing conflicts and security problems, 'climate migration' is hence considered a security issue. Homer-Dixon advances that 'waves of environmental refugees that spill across borders with destabilizing effects on the recipient's domestic order and on international stability', which he specifies that 'group identity' especially ethnicity differences will be the main inducement for conflicts (1991. P. 77; 1994, p. 6-7). Swain (1996) emphasises the challenges environmental migrations will pose to the developing communities. Besides, many governments such as USA, Canada and Germany have already represented 'climate migration' as a threat to international and national security in case of abrupt environmental change induced by climate change. This is also how 'climate migration' has gained much more political

attention internationally in the first hand (Gemenne 2009, p.120-122). Therefore, the 'alarmists' discourses, although being criticised harshly, are still the dominating discourses nowadays, taking influences in academia, media and political field.

2.1.2   The 'sceptics'

While 'alarmists' discourse can be widely accepted and referred to in media and political occasions, it has triggered big debate in academic sphere, with opponents (Kibreab 1997; Black 2001; Castles 2002) mostly from social science and migration background, forming a 'sceptics' coalition.

Kibreab (1997) contests the claim to define 'climate migration' as a threat to international security, however, he does not question or deny the role of environmental change and climate change in changing migration patterns (Gemenne 2009, p. 127). Out of academic interests, Black (1998; 2001) takes a step further in questioning the conceptualisation of 'climate migration', and suggests that the term 'environmental refugees' might be no more than a myth. He claims that Myer's conceptualisation is 'unhelpful, unsound intellectually, and unnecessary in practical terms'. Migration decisions can be made under specific social, economic and political context, and environmental change may have an impact on these factors, though it is difficult to separate the reasons and set a standard to categorise some as environmental migrants instead of the others (Black 2002, p. 1). He researches on empirical cases on national and local levels, and concludes that there are no evident linkages between environmental change and forced migration. He emphasises the complexity of migration process and is against isolating environment as the prominent factor that triggers migration, nor should migrants take the blame for environmental degradation (Black 1998). Castles (2002, p. 4) summarises the debates between Myer and Black, and adds to the debates that forecasts and building direct linkages cannot forward the understanding of 'climate migration', focuses should be shifted to localised empirical cases.

2.1.3 The 'resilience' discourse

Pendall, Foster and Cowell (2010, p. 82) defines resilience as to respond to a challenge 'in ways that maintain or even increase good outcomes'. In the context of climate change and sustainable development, the mechanistic way of interpreting resilience as 'bouncing back' to a normal state could no longer suffice, due to the complex and constantly changing nature of human-environment system. Resilience should be instead considered as constantly and actively adapting and responding to meet the need of the functioning system (Becker 2014, p. 144; Pendall, Foster and Cowell 2010). Therefore, migration as a resilient strategy means that it is a way to actively adapt to the impacts of climate change, and may facilitate an even better outcome of human development.

The 'resilience' discourse is well-represented by the Foresight Report on *Migration and global environmental change: future challenges and opportunities*, published by the government office for science in UK in 2011. It demonstrates a close cooperation between academia and political sphere in forming 'climate migration' discourses. It also shows overlaps with both sides of the coalitions above: on the one hand, Richard Black is the chair of expert group supervising the project report, which has indeed reflected his claim that migration can be considered a coping strategy in the face of environmental change (Gemenne 2009, p. 128), but on the other hand, it also shares some basis with the 'alarmist' discourse that it considers the climate and environmental changes as an important driver for migration. As it is stated in the report that 'evidence (…) shows that future environmental change is likely to interact with future migration drivers to lead to certain kinds of human mobility outcomes (Foresight 2011, p. 133).'

The report concludes that 'some migration in the context of global environmental change is inevitable in the future', and '*no migration' is not an option* in the context of future environmental change: migration will continue to occur in the future and can be either well managed and regular, or, if efforts are made to prevent it,

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unmanaged, unplanned and forced.' Since migration is considered an unavoidable future *reality,* hence it is people's choice whether to make good use of it, or to deny the trend and trigger it into bigger displacement or trapped scenarios (Foresight 2011, p. 17). Therefore, trying to curb migration with various ways is not an appropriate *long-term solution*. 'Enhancing livelihoods and promoting insurance' are better solutions to increase long-term resilience to environmental change, which are largely contributed by migration. Migration is thus considered a 'transformational adaptation strategy' to reduce the impact of climate change (Foresight 2011, p. 133).

However, this discourse has also received doubts and arguments, especially on its political implications. Methmann and Oels (2015, p. 60, 62-64) point out that this 'transformational resilience' discourse rejects all 'right-based language', and it symbolises the replacement of global responsibility by a 'neoliberalized care of the self' attitude. It leaves the responsibility and choice to the affected ones, thus giving the developed countries an escape from their responsibilities in climate change issues. Especially in the current situation that majority of the cross-border climate migrations these days are between neighbouring developing countries, which brings huge stress to these receiving developing countries, while most developed countries are spared from the direct impact. In addition, this discourse suggests the existence of climate change as 'beyond human control' and an 'unavoidable reality' that people must accept and live with. The migrants involved are hence rendered 'normal' migrants that migrate out of their will and rationality, which may silence the needs of the affected.

2.1.4   Rejecting the discourses of 'climate migration'

From a post-structuralist perspective, conceptualisation is not a presentation of objective existence, but a way to *construct* the 'objectivity' of knowledges (Turton 2003, p. 2). Conceptualisation shows the specific social situations of the definers, and the ways they define things have implications on the way they will act and the

consequences they create in reality, hence decides the discourses formed. Therefore, questioning the conceptualisation of things is a way of rejecting the current discourses.

A group of people that may start to question the conceptualisation of 'forced migrants', 'displaced people' and 'climate refugees' can be the migrants themselves. Methmann and Oels (2015, p. 64) have proposed to reject all the terminologies in relation to 'climate migration', whose conceptualisation can be questionable from different angles. It can be questioned that the standpoints of these definitions are usually from the ones who research on or accommodate the migrants, from a 'sedentary and state-centric perspective'. It is a language which '*we* use to talk about *them*', thus a voice of their own is also needed (Turton 2003, p. 4). Another aspect can be questioned is the terminologies used to describe 'climate migration'. By categorising a group of people as 'environmental refugees' or 'climate migrants' tends to define individuals into a massive and homogenous phenomenon, which may 'de-humanise' and 'de-personalise' the individuals, and they are more likely to be treated as a threat to the receiving countries. Their agencies are also easily neglected, instead, they tend to be pictured as needy and passive victims (Turton 2003, p. 5-7).

Another reason to reject the definition of 'environmental migration' or 'climate migration' is that these definitions suggest that nature and environment are at fault, and this can be a way to depoliticise the causes of migration, hence allowing states to escape their role of providing assistance and asylum (Boano, Zetter and Morris 2007, p.8-9; Gemenne 2009, p. 126-127). However, other scholars may argue that these definitions render too much international focuses on providing assistance to manage 'climate migration', that they may 'normalise' 'climate migration' as an unavoidable reality, hence shifting the political focus on coping with the problem instead of on emission reduction that may mitigate directly the consequences of climate change (Methmann & Oels, 2015).

As we could see, most of the discourses on 'climate migration' above are not homogenous themselves, with conflicting and overlapping perspectives within and between themselves. To develop a deeper understanding of the 'climate migration' discourses, no matter it is to understand the international ones mentioned above, or it is the national discourse of Bangladesh we will identify later, it is helpful to find a theoretical base to identify the similarities and tensions among different discourses. The discourses on 'climate migration' are formed from multiple studies and theories, among which migration theories have played an indispensable part. It has not only supported the debates on the causes of 'climate migration', but also affected the formation of attitudes towards 'climate migration'. Therefore, in the next section, I will introduce the migration theories showing relevance to the discourses of 'climate migration', which will set a theoretical base for the upcoming discourse analysis on policies of Bangladesh. These migration theories will be considered as 'expert knowledges' that are expected to be reflected in discursive formation in policies of Bangladesh.

2.2   Migration theories

Migration is a highly complex process that involves all dimensions of social aspects, and researches on migration have been inherently interdisciplinary, which allows migration to be studies with various perspectives and approaches (Castles & Miller 2009, p.21). Therefore, different migration theories can have their specific focuses, economy, political institutions, social networks, history, as well as from different levels, micro, macro or meso. Based on different assumptions, perspectives and levels, theories of migration are fragmented and each have its own specialities and limited practicalities. It is impossible to claim one as the omnipotent theory that can explain migration in general. But only by studying and comparing them as a whole, will we be able to see a bigger complex nature of migration. Here I will introduce three types of migration theories that have shown high relevancy in affecting policy makers to manage migration flows.

2.2.1 'Push-pull' model and Neoclassical migration theory

Most of the traditional migration theories are based on economic theories, started from Ravenstein (1885)'s classic 'push-pull' theory in the 19th century, which is the earliest systematic theory to study in general 'the laws of migration'. The model explains migration flows through a combination of 'pull' and 'push factors' and concludes that economic factors are the major drivers of migration. This model has inspired the analysis mode of many coming modern migration theories, and has been modified by theories that have focuses on social and political factors. Its basic assumption is that migration tend to lead to an economic equilibrium between the sending and receiving places, hence it considers migration as an inseparable part of development (Castles & Miller 2009, p. 21-22).

Taking the assumptions and model of 'push-pull' as its departure point, it is claimed in *neoclassical macroeconomics theory* that differentials in wages and employment opportunities in different places tend to drive people to move from labour-surplus or low-pay areas to labour-scarce or high-pay areas. Capitals, including human capitals, also tend to flow from capital-rich to capital-poor regions. Until eventually the migration flow stops when the regions are in balanced conditions. Therefore, it suggests that regulating labour markets is the way for government to manage migration flows. (Massey et al. 2008, p. 17-19; Gemenne 2009, p.67) On the other hand, *neoclassical microeconomics theory* focuses on individual choice in migrations. It assumes that migration decisions are driven by individual economic interests. Individuals make their migration decisions through a rational cost-benefit calculation, and they will always aim to maximise the net return, usually monetary, from migration (Massey et al. 2008, p. 19-21; Gemenne 2009, p.67).

Neoclassical migration theories are one of the most well-known migration theories nowadays, but they also attract criticism. They are criticised for their too perfect and unrealistic assumptions: people are rational and utility-based individuals; potential migrants have perfect knowledge of the situation at destinations; markets

are perfect and accessible for the poor, etc. They don't give concerns to human agency, nor to social factors, structural constraints, especially the role of states in affecting migration flows. Therefore, they are considered too far from the actual movement and incapable to predict future migration (Massey et al. 2008, p. 23). Despite this, these theories are still deeply taking effects on the migration policies today that migration policies, especially those on urbanisation and international migration, are largely considered in relation to economic development purposes, and labour markets are commonly used as an adjuster in policies for directing migration flows.

2.2.2   New economics labour migration theory (NELM)

Different from neoclassical migration theories, NELM theory considers migration as a decision made by a group of people that are related as households, families or communities, instead of individuals. The purpose of migration is not merely to pursue income and capital gains, but also to diminish risks through multiple livelihood. The risks are derived from the assumption of imperfect markets and insufficient institutional insurance mechanism in developing countries. If a household's livelihood is restricted to single production mode, especially to agriculture production, it faces high risk of losing the only income resource under abrupt situations, such as the impacts of climate change. Therefore, families under distress may diversify their income resources through migration, so the remittances from the emigrated members can still secure their lives, hence, migration works as a form of insurance for households (Massey et al. 2008, p.17, 21, 22; de Haas 2010, p. 242-243). This theory can explain more about the migration decision-making process in developing countries or poorer regions than developed countries. It emphasises the collective agencies of households when making migration decisions, and values the benefits of remittances.

The idea and concept of NELM has been practised by many developing countries' governments these days, due to its significance in drawing connection between rural

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development and migration. For example, in Chinese central government's guidelines for poverty reduction, households are suggested to send at least one family members to cities to pursue a non-farming livelihood so that a family life without poverty can be assured (Murphy 2009, p.60). In the context of increasing threat to development from climate and environmental change, this theory also provides a possible solution to the challenges, that migration can be a coping strategy to increase resilience for families under economic and environmental distress, which fits with the current 'resilience' discourse (Adger et al. 2003; Gemenne 2009; Martin et al. 2014, p. 104).

However, this theory is argued to have left out those who cannot afford to migrate. As De Haas (2005) points out, the poorest in the society were actually lack of the ability and resources to migrate, due to their lack of economic ability, social network or structural confinement. Instead, those who have achieved a certain level of socio-economic development, with the incentive of a relative inequality of development opportunities, are the ones who migrate and may develop. This also poses a debate on the role of migration in adaptation to climate change. As Adger (2006, p. 276-277) pointed out similarly that, adaptation to climate change often decrease the vulnerability of those who are best at utilising their resources, while the most vulnerable ones may remain marginalised by being excluded from decision-making process and from accessing power and resources.

2.2.3   Dual (or segmented) labour market theory (DLM)

DLM theory exists in contrast to neoclassical migration theories. It assumes that migration will lead to disequilibrium instead of equilibrium, due to institutional and structural constraints and inequalities in the formation of the segmentation in destination labour markets. Piore (1979), a proponent of this theory, argues that migration is structured by the demand of two labour markets, the primary (capital-intensive) and the secondary (labour-intensive). The secondary labour market tends to attract the ones in disadvantaged social and economic status, hence forming an

occupational hierarchy through a high-to-low wage system, whereas the migrants who don't care much of the local hierarchy system will usually take up the lowest positions. Due to the structural confinement and employers' low interests in investing in labour-intensive workers, these migrants are often structurally confined in a low-status and poor condition in the destination of migration without upward mobility. Thus, migration will not lead to equilibrium but disequilibrium by reinforcing inequality.

DLM theory raises awareness of structural constraints in migrations and argues against the over-optimistic expectations on migration's role in development. It also shows the responsibility of government and policies in eliminating institutional constraints and protecting labour migrants, even though the hierarchical structure persists. However, it is also questioned by its way of portraying migrants as 'passive victims of capitalism', that the agency of migrants and the positive contribution to the life back at their place of origin is neglected (Massey et al. 2008, p.28-34; Castles & Miller 2009, p. 23-24).

These theories, as produced knowledges, have not only inspired and developed the academic debates on 'climate migration', but can also inform and affect policy-makings and their discursive formations in one way or another, which is why I have facilitated a deeper discussion of them as a theoretical foundation of identifying the discourse formations in policies. Although none of these modern migration theories have directly addressed environmental or climate change as a key factor that influences migration flows, but I argue that these theories still have profound implications in the general migration policies nowadays, which also shape people's perceptions of various migration issues, hence the formation of the relatively new concept of 'climate migration' will also be affected by these dominant migration theories, especially when the outcomes of climate change already have direct implications in many of the 'traditional' migration factors such as living conditions, livelihood, income, etc. Therefore, studying theories of migration is necessary in understanding the 'climate migration' discourses in Bangladesh. It is also a

genealogical way to discover how the academic migration knowledges have informed the discursive formation process of the problem of 'climate migration' in policies of Bangladesh.

2.3 Bangladesh under the effects of 'climate migration'

2.3.1 Assessing the risk of Bangladesh under the impact of climate change

In 2011 Climate Change Vulnerability Index (CCVI), Bangladesh is ranked the first among 'countries under extreme risk' considering social economic and environmental factors (Maplecroft 2011). To understand risks of Bangladesh under the impact of climate change, two elements are indispensable: the occurrence of hazards and the local vulnerabilities. A hazard is what can trigger deviations from the expected development trajectory, but hazards along won't cause risks, only when they hit populations and environment with certain vulnerabilities, and when what people value can be potentially harmed, then the risks are formulated (Coppola 2011). Therefore, I will introduce below the risks climate change poses to Bangladesh around these two aspects.

<u>The occurrence of hazards</u>

Located on the northern coast of Bay of Bengal, Bangladesh is especially prone to seasonal cyclones, with intense precipitation from Indian Ocean and inducing more extreme meteorological hazards. The country mostly lies on the delta plain that is formed by three major rivers that run through the country – Ganges, Brahmaputra and Meghna Rivers, forming Ganges-Brahmaputra-Meghna (GBM) Delta. The alluvial plain has extremely fertile soil but at the same time, it is under large risk of seasonal flood, along with seasonal cyclones (MoEF 2015, p. 9-10). Around 80 percent of the country is lying on the floodplains, and averagely one-fifth of its land is inundated seasonally each year (Hassani-Mahmooei & Parris 2012, p. 764). There are some regions in Bangladesh that are specifically sensitive to natural disasters and climate change effects. The North-western region is Monga-prone

under the effect of seasonal drought, the North-eastern Haor region is affected by severe seasonal flood, while the southern coastal areas are more prone to cyclones, sea water intrusion, salinization and tidal surges (Bhulyan & Siddiqui 2015, p.15-16).

Under the effect of climate change, the precipitation in Bangladesh is likely to become more unevenly distributed throughout the year, leading to more extreme and frequent natural hazards. According to the Asia regional report of IPCC5, South Asia is experiencing more frequent heavy rain and lower chances of light precipitation, and tropical cyclones are also likely to be more extreme. Climate change induced sea level rise will also affect this low-lying country. Land erosion, increased salinity in coastal regions and threatened biodiversity are among the major challenges. Large amount of land will be inundated by sea water, causing loss of land and soil salinity (Bhuiyan & Siddiqui 2015, p. 15; Hijioka et al. 2014, p. 1331,1333-1334, 1342).

Local vulnerabilities
In document submitted to UNFCCC in 2015, Bangladesh calls itself as among the most vulnerable under the effects of climate change (MoEF 2015). With population of almost 163 million located in a total area of 147,600 km^2, Bangladesh is one of the most densely populated country in the world, with approximately 1252 residents per km^2 (World Bank, 2016). Among this population, around 60 percent leads livelihoods that are, completely or at least to some extent, depending on agriculture, forestry and fishery industry, which are highly vulnerable to the effect of climate change. For example, rice production is major agriculture production in rural Bangladesh, by 2010 around 75% of its agricultural land are cultivated for rice production. Climate change induced instability and extremity of precipitation, increasing climate-induced hazards, sea-level rise and soil degradation, can be very harmful for rice crop cultivation (Hassani-Mahmooei & Parris 2012, p. 764; Kartiki 2011, p. 28; Penning-Rowsell et al. 2013, p. 47). People will face high distress when their livelihood is damaged.

When a large amount of vulnerable population is exposed to the risks of climate change, huge economic and social consequences will come along, and migration are considered one of them.

2.3.2 'Climate migration' in Bangladesh

Hassani-Mahmooei and Parris (2012) propose that the migration flow in Bangladesh tends to move to east and north-east part of the country, which is under less threat of droughts, floods and other environmental hazards. Urban areas will still be the major destination, even though they are also vulnerable to climate change effects (Hassani-Mahmooei and Parris (2012, p. 776-777).

Researches on 'climate migration' in Bangladesh have been unveiling the complexity of this issue in Bangladesh. Some researches (Martin et al., 2013; Penning-Rowsell et al. 2013; Kartiki 2011) have shown that in Bangladesh there is a more direct correlation between migration and people's economic status, rather than between migration and climate change. Research done on a local scale has shown that 75 percent of the Bangladeshi households involved in the survey expressed 'climatic stresses', but they refuse to admit it as the main cause of migration over economic reasons. From a macro perspective, extreme weather caused by climate change might not necessarily lead to migration in big scale, instead, migration occurs only when the locals are lack of the income secure. Population growth within households may decrease their economic ability to tackle disasters, causing people to migrate to urban areas to diversify households' livelihood. Bhuiyan and Siddiqui (2015) also add on that migration patterns decide how much they are affected by climate change, and displacement and short term internal migration are the ones that are mostly affected, while the longer-term ones are more complex, and in general, it is hard to clearly distinguish the migration caused by climate change from migration triggered by economic reasons or the regular environmental variability. Penning-Rowsell et al. (2013, p. 55) take a step further in looking at the reason of people *not* moving. Field research indicates that

migration is often considered as an 'undesirable response' or a 'last resort' to climate change by the locals. Their reluctance concerns their lack of skills and resources in job competition, the poor living condition if they might end up in slams in urban area, alongside the attachment to current land ownership and investment.

It is suggested in some researches that migration can be viable strategies for Bangladesh to cope with impacts of climate change, and institutional factors are considered important but inadequate in Bangladesh (Poncelet et al. 2010; Kartiki 2011; Bhuiyan & Siddiqui 2015). Government and its policies can play a crucial role in modifying the incentives as well as 'anchoring' factors to migration flows in Bangladesh. Considering the essential role of government of Bangladesh in affecting 'climate migration', it is therefore necessary and rewarding to have a research on its governmental discourses on 'climate change'.

3. Methodology

To analyse the climate migration policies in Bangladesh, I will adopt a critical policy analysis method created by Carol Bacchi (2009), called 'What's the problem represented to be?' (WPR) approach. Inspired by and theoretically rooted in Foucauldian discourse analysis, the WPR approach suggests a poststructuralist approach to conduct discursive analysis on government policies. It aims to identify and understand the political discourses through problem representations in policies, focusing especially on the role of knowledges in discursive formation, while at the same time it makes visible the marginalised discourses and suggest possible alternatives.

In the following sections, I will first discuss about the Foucauldian theoretical framework through introducing and examining the three basic propositions of the approach. Then a justification will be given for using discursive policy analysis as the methodology for this thesis, including both reasoning for analysing discourses

in policies and analysing policies for understanding discourses. This is followed by a discussion on the case of Bangladesh and review on the existing research on this topic, then a research design will be given.

3.1 'What's the problem represented to be?' (WPR) approach

Once a government proposes a policy to address some issue, the underlying meaning is, there is some 'problem' that has gone wrong, and policy is naturally introduced to fix these 'problems', and the practices of the government is hence rationalised and justified by this problem-solving mentality. From a post-structural point of view, there is no objective 'problems' in reality, instead, they are created through problematisations in policy-making. The way in which they are problematised depends on the values and knowledges imbedded in the policies, and different problematisations will have different political, economic and social implications. However, these 'problems' are usually implicitly and unquestionably presumed in the policies, and scrutiny is often needed to identify them (Bacchi 2009, p.ix-x). These considerations set the points of departure of WPR approach, which is to study the problematisations of policies.

3.1.1 Understanding WPR approach: the three propositions

For a deeper understanding of the approach, I will introduce Bacchi (2009) 's three basic propositions of WPR approach, which set the theoretical basis for the approach:

1. *We are governed through problematisations.*
2. *We need to study problematisations (through analysing the problem representations they contain), rather than 'problems'.*
3. *We need to problematise (interrogate) the problematisations on offer through scrutinising the premises and effects of the problem representations they contain. (Bacchi 2009, p. 25)*

Before going further into discussions, it is important to develop a basic understand of the double-meanings of 'problematisation' in WPR approach. On the one hand, in proposition 1 and 2, 'problematisation', as well as 'problem representations', refers to 'the way/s in which particular issues are conceived as 'problems', identifying the thinking behind particular forms of rule', where policy, government or policy maker are considered as the subject of the action of problematisation; on the other hand, in proposition 3, '*problematise*' means to *interrogate*, talking from the perspective of researchers (Bacchi 2009, p. 30). Therefore, problematisation has two meanings in WPR approach. But in order to make the discussions below clearer, I will only use 'problematisation' and 'problem representation' to refer to the first meaning, and replace the second 'problematise' with other words to avoid confusion.

Propositions 1 and 2: Proposition 1 means that problematisation exists and is created naturally in every single policy. It asserts the ubiquity of problematisations in all policies, which is the basic presumption of this methodology. Proposition 2 reaffirms the purpose of WPR approach, which is not to solve or evaluate any of the problems stated in the policies, but to study how the policies rule through problematisation (or problem representation). Problem representations are elaborated in *discourses*, which are socially created knowledges[4] that draw boundaries on the possibilities to understand and express about a certain social object (McHoul & Grace 1997, p. 33). Discourses are created and rationalised through the 'knowledges', which are created by different actors under different historical and social context. These knowledges generate rationality and mentality for rule and governance, which Foucault has called 'governmentality' (Bacchi 2009, p. 26, 31, 35).

In this process of governing, states as policy makers play an indispensable role in creating the political document, the actual texts for analysis, which are taken as the

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[4] 'Knowledges' is used in a plural form to pinpoint their subjectivity, and challenge the authority people often award to 'knowledge'.

entry point of analysis, but their roles are also inseparable from many other actors such as activists, professionals and experts, etc., who could participate directly in the policy-making process, but in most of the cases, their influences are displayed indirectly in the knowledges they have created and spread through which the governance comes into being (Bacchi 2009, p. 25-26, 31). The government uses knowledges to produce a certain interpretation of the reality, where it has its own version of 'problems' and 'solutions', 'fault' and 'right', and through presenting them in policies, they will hence gain the power in governance. [5]

Thus, if we want to ask 'how rule takes place' and 'how we are governed' through policies, the best way to answer this is to start from studying the 'problems' in the policies, not in the purpose to solve them, but to identify and analyse how these 'problems' are presented in the policies.

Proposition 3: Proposition 3 takes the next step to problematise these problem representations, to interrogate how the discourses in policies were formed and to discuss the implications of these ways of representation. To identify how a problem representation is formed, we need to first investigate the representation in its current state, for example, what are the presuppositions or assumptions behind, what are the values and knowledges, etc. Then we can embark on studying its past, the formation of the knowledges. This is based on Foucault's methodology of 'genealogy', which rejects the claim that political rationality is natural and predetermined. By tracing back to the formation of the problem representation, we could have a chance to question the 'authority' of current representation, that things could have been presented differently (Bacchi 2009, p. 43) Then the approach can take a step further by assessing the possible effects of such problem representation. It is based on a presumption that the consequences of problem representation will reward some while at the cost of others. Discussion on the possible consequences

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[5] To clarify, the focus of this approach is not to study governmentality and power from the perspective of governments' intentional plotting and manipulation, but to just recognise the natural formation of the governance (Bacchi 2009, p. 30)

renders the drawbacks of current problematisation visible, and makes space for more debate and reflection on problem representation.

3.1.2 Structuring the analysis: six questions in WPR approach

Based on these three propositions, Bacchi proposed a well-structured way of conducting a policy analysis with WPR approach. She lists six questions that need to be answered when studying problem representations in policies:

1. *What's the 'problem' represented to be in a specific policy?*
2. *What presuppositions or assumptions underlie this representation of the 'problem'?*
3. *How has this representation of the 'problem' come about?*
4. *What is left unproblematic in this problem representation? Where are the silences? Can the 'problem' be thought about differently?*
5. *What effects are produced by this representation of the 'problem'?*
6. *How/where has this representation of the 'problem' been produced, disseminated and defended? How could it be questioned, disrupted and replaced?* (Bacchi, 2009, p. 2.)

Question 1 (Q1) aims at identifying the problematisations in the policies, as well as at having a better understanding of the context upon which the problematisation/policy was formed. Q2 seeks to unveil the 'underlying conceptual logics' of the problem representations, which might set limitations to our way of seeing the problems. The common logics to identify are the dichotomies, concepts and categorisations that are taken for granted in the policies (Bacchi 2009, p. 7-9). Q3 uses the method of 'genealogy' to trace back to the knowledges that have reflections in the formation of problematisations, hence to answer the question of how rule gained its legitimacy and was formed to its current status (Bacchi 2009, p. 43). Q4 explores other dimensions to look at a reality, so that the neglected discourses are brought into sight again and alternatives of governing can be hence suggested. Q5 takes one step further to reveal the consequences of certain problem representations. It can be understood as a special form of 'policy evaluation', but

unique in a way that it does not focus on the statistical calculations and analysis, but works more on provoking a political conversation and reflection, on the discursive effects that some may benefit from it and some can be neglected and sacrificed (Bacchi 2009, p. 40, 43). Q6 is a continuation of Q3. It focuses on the 'practices and processes' that form the domination of certain problematisation, so that to further answer the question how the rule happens and gains its legitimacy, and then multiple discourses can be used as 'resources for re-problematisation' (Bacchi 2009, p. 19). This thesis will adopt this structure for the discursive policy analysis in Chapter 4.

3.1.3   Ethical awareness

Reflexivity is one of the WPR approach characteristics. A self-scrutiny is insisted for WPR approach, since values are unavoidably imbedded in every knowledge produced by researchers. Therefore, to situate itself politically and ideologically, with the presumption that problem representations can be beneficial to some while at the cost of the others, this approach stands on the side that are silenced and marginalised. By identifying what was hidden and rarely questioned in existing problem representations, it reminds researchers to be critical to what has been taken for granted, to be aware of what might be neglected, and perhaps it can bring marginalised discourses into our sight, which become possible policy alternatives (Bacchi 34-36, 44; Feindt & Oels 2005, p. 169).

From a post-modernist view, the reality we are living in is highly complex and our interpretations and knowledges of it is inherently subjective. According to Heylighen, Cilliers and Gershenson (2007, p. 17), 'we can never give a complex description of a complex system'. It is impossible to avoid the 'moment of choice' when dealing with a complex system, and our subjectivity is constantly affecting the choices, in which our own discourses are created and imbedded. To face these unavoidable 'limitations', what can be done is to make these 'normative considerations' more visible in the researches. One effort of it is made in the

following section 'research design', the selection process of documents is introduced detailed and openly, and in the analysis, the information extraction and interpretation process is also made as visible as possible.

3.2 Justifications for discursive policy analysis

Bacchi (2009) defines WPR approach as an approach to discursive policy analysis, so here I will initiate two basic conceptual discussion on discursive policy analysis: how discursive policy analysis distinguishes and situates itself among all the policy analysis, as well as the role of policies in initiating discourse analysis. Then I will make a justification of choosing Bacchi's discursive policy analysis for the case study of Bangladesh.

3.2.1 Discourses in policy analysis

The discursive way of looking at policies is what makes WPR approach distinct from other forms of policy analysis approaches. Unlike the majority of policy analysis that evaluates the effectiveness of policies and offers advices for policy-making process, WPR approach shows a significant shift of focus, from analysing the 'problems' themselves to studying 'problematisations', or to be more specific, 'problem representations' in the policies.

To better situate WPR approach in various policy analysis, it's worth looking at Colebathch's (2010, p. 24-33) categorisation of approaches to policy analysis. There are three ways to carry out a policy analysis according to Colebathch: first, 'authoritative choice' that treats 'policy-making as deciding'. This kind takes up the majority of policy analysis nowadays, where 'government' is taken as a very broad and general concept, it can be an authoritative individual like prime minister, or a collective body like the board, or any authorised documents like legislations. In this perspective, all these 'authorities' are collectively summed up to the concept of 'government', and this detached and dominant 'government' is the *only* actor

that defines the problems and policies are made to conduct the will of 'government'; second, 'structured interaction: policy-making as negotiating', where the 'connections and linkages' between different political actors are discussed. In this case, clear organisational boundaries are created for distinguishing different political participants. These participants (both inside and outside of the 'government') negotiate and dispute, and policies are created so that a more ordered organisational control is established. Here policy-making is based on *collective* problem-identification and problem-solving; third, 'social construction: policy-making as collective puzzling'. Here policy analysis is a way to question what has been taken for granted. This perspective emphases expertise knowledges in addressing problems and forming policies. It suggests that policy analysis can adopt an 'interpretive' approach to policies, addressing the 'social constructiveness' nature of policies. In this sense, policies are analysed as discourses.

This discursive perspective of analysing policies largely broadens the sphere of policy analysis. By regarding the policies as discourses, it means that the 'objectivity' and 'truth' in the policies are put into contestation. Knowledges are no longer considered objective as the modernists do, but become socially and historically situated that shape and limit social practices. What might be invisible and taken for granted in other policy analysis are now brought into sight by discursive policy analysis. It is also worth mentioning that there are also different types of discursive policy analysis. However, WPR approach is chosen to be fittest because it focuses on the *knowledges'* roles in forming discourses, while others may focus on the pure *language* aspects of discourses, which is not the focus of this research.

3.2.2 Policies in discourse analysis

Although unlike the 'authoritative choice' perspective that takes 'government' as the *only* one authority in policy-making, social constructionist policy analysis still recognises the significant and privileged role government plays in the governing

process. Its privilege is established through the power imbedded in the political document such as legislations and reports, where the government's own version of 'problems' is presented. These documents are then put into effect to inform the governance process, which makes the discourses 'institutionally sanctioned'. Discourses that are sanctioned in policies tend to have bigger impacts on reality than others, because the institutional practices can more effectively support the realisation of these discourses. They can 'take on lives of their own' and start to 'exist *in the real*', and re-establish their dominant status in reality (Bacchi 2009, p. 36).

That is why governmental policies are necessary to be analysed when it comes to discourse analysis, since they play a dominating role in creating discourses. On the other hand, policies are also incorporative. The knowledges they are reproducing are also informed by knowledges created by other actors such as professionals and scholars. Their knowledges interwove and interact, and are presented in the policies. So policies can be a good entry point to identify the bigger picture of discourse formation.

3.3   WPR approach and the case of Bangladesh

The case of Bangladesh aims to discover the problem representations of 'climate migration' in policies of Bangladesh, to interrogate the formulation process of these discourses and their political implications, and to identify alternatives to the current discourses. As discussed in Chapter 2, the debates on 'climate migration' in academia and political field is heated and unsettled. Different scholars, politicians, organisations and activists may take completely different knowledges and discourses in understanding climate change, migration and development, based on their own values and context, and therefore, contributing to the formation of governing process through policies.

With WPR approach, we can then analyse how these various knowledges and discourses that have been reflected in the formation of relevant policies in Bangladesh. Does the latter reflect any specific mainstream discourses on climate migration? Or is it a mixture of multiple influences from various discourses? To set an expectation toward these questions, it is prepared and expected that discourses embedded in a real policy-making process may not be as homogenous and clear as those taking different stands in academic debate. Discourses may contain 'tensions and contradictions' in themselves, even though the government or policy may claim publicly to have a homogenous standpoint, what was hidden behind can be far more complex, which is what makes them worth studying and questioning (Bacchi 2009, p. 20, 37). So the case study will be looking into this complex process of governance formation in the policy of Bangladesh.

3.3.1 Literature review on policy analysis in Bangladesh

It is not completely original to do a study on climate migration policies in Bangladesh. *Policy analysis: Climate change and migration in Bangladesh* was published in 2013, under the cooperation of University of Dhaka and University of Sussex (Martin et al.2013). It has reviewed several major documents of national projects and plans in Bangladesh. The coverage of policies in this policy analysis is impressive, including policies on climate change, migration, disaster management, development and poverty reduction etc.

It is concluded from the research that international migration gained much more attention than internal migration in these governmental documents, although the latter can be the mainstream migration pattern in Bangladesh. The attitude in the policies towards the former is more positive and it is considered a development strategy since it can increase remittances; while internal migration, especially rural-to-urban migration, is not only seldom mentioned but also mostly considered a negative problem that needs to be tackled, with the economic contributions of internal migrants unrecognized. Inconsistency exists in the attitudes towards 'climate migration'. Some climate change documents neglect the connection

between climate change and migration, some treat migration negatively as 'an undesirable outcome of climate change', while some suggest migration as 'a valid option' (Martin et al.2013, p. 14-15).

This policy analysis is significant in its wide coverage of selected documents, and as the only existing policy analysis on climate migration in Bangladesh that is of academic notability[6], it is instructive and can make a good guidance for upcoming researches. But it also has its own limitations that can be supplemented by new researches. The analysis of the policies in this research is relatively descriptive, maybe due to its large coverage of documents and limited length, as well as a main purpose of giving political suggestions to the authorities. It may partly situate itself in the 'authoritative choice' perspective that discourses may not be the major focus of this research. Though some quasi-discursive analysis is done, for example analysing the 'attitude' of government, but these analyses remain literal on what has appeared in the document instead of analysing deeper and more systematically into the formation of these 'attitudes'. So this is where a systematic discursive approach like WPR approach could supplement and be different. Moreover, this study was published in 2013, and new document like 7th Five Year Plan (2015) is available now. By doing an updated policy analysis of Bangladesh policies will give more time perspective to the understanding of the policies.

3.4   Research Design

3.4.1   Selection of policies

As Bacchi (2009, p. 20) suggests, the selection of policies itself is already an analytical and interpretive process, where the researcher's subjectivity takes place already in the analysis, and the selections of specific documents reflect the

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[6] Co-author Richard Black is a well-known scholar in the field of 'climate migration' and Tasneem Siddiqui is a scholar specialised in the issue of 'climate migration' in Bangladesh.

researcher's interests and concerns. Therefore, as mentioned in section 3.1.3, transparency is needed for the process, which is the purpose of this section.

Before moving further to the selection process, two concepts need clarification. If we plan to study the problem representations in government policies, 'government' and 'policies' both need specification. As discussed in 3.2.1, Colebathch (2010) describes 'government' as a very broad and general concept that is consists of various actors, which can be further divided, due to the nature of complexity. As this thesis focuses on the macro and national perspective on 'climate migration', therefore, 'government' or 'state' of Bangladesh is treated as a homogenous actor in forming discourses, in contrast to other governments and states, and the other actors such as scholars and politicians internationally. Consequently, any policy published under the authorisation of the government will be considered a representation of Bangladesh government, regardless of which ministries published it and which individuals participated in the drafting process. As for 'policies', I will also take it as a broad concept. I will refer them to what Foucault (1985, p. 13) has called 'prescriptive texts' and 'practical texts', which are 'written for the purpose of offering rules, opinion, and advice'. Therefore, any text written as a plan or a report by government will suffice such a definition of policies in this thesis.

As shown in the literature review in 3.3.1, there is not yet an individual political document in Bangladesh addressing the issue of 'climate migration'. Therefore, the 'climate migration' policies are usually addressed through climate change policies and migration policies, while the latter are usually addressed under the bigger theme of development. Therefore, six documents addressing development and climate change topics are selected for the analysis, and more justifications of selection and plan for analysis will be introduced below.

- Perspective Plan of Bangladesh 2010-2021 (GED, 2012) ('Perspective Plan' below)
- Sixth Five Year Plan FY2011-FY2015 (GED, 2010a) ('6th FYP' below)

- Seventh Five Year Plan FY2016-FY2020 (GED, 2015) ('7th FYP' below)
- SDG: Rio+20_National Report on Sustainable Development (MoEF, 2012) ('Rio+20 Report' below)
- National Adaptation Programme of Action (MoEF, 2005) ('NAPA' below)
- Bangladesh Climate Change Strategy and Action Plan (MoEF, 2009) ('BCCSAP' below)

The first three policies are more related in a way that they are general plans for national development, covering a wide range of topics, including environment, climate change, migration (urbanisation), development, etc. The Perspective Plan aims at making a vision plan for the coming ten years, and have directly guided the policy-making of the 6th and 7th FYPs [7]. These policies are selected because as general national plans, they *equally* address *all* the development issues the government of Bangladesh deems important, thus they could provide a broader perspective of the government's discourse towards 'climate migration' on where the government situates the issue 'climate migration', in comparison to the issues of 'migration', 'climate change' in general; they can also provide a time perspective of shifts in discourses, especially between the 6th FYP to the 7th FYP.

The last three policies are similar that they are documents that partly or solely address the problems of 'climate change' Bangladesh has been facing, among which 'climate migration' is expected to be suggested as one. The Rio+20 Report, prepared for Rio+20 conference, summarises the country's progress so far and its further commitment in pursuing the sustainable development goals (SDGs) proposed by UN, among which 'action to combat climate change and its impacts' is one of the goals (United Nation 2017). NAPA, drafted as a response for the 7th Session of the Conference of the Parties (COP7), along with BCCSAP as a 'knowledge strategy' built upon the former, can provide large information on how government of Bangladesh reflects on its own climate change situation. Dating back

[7] The 6th FYP was published in 2010, earlier than the Perspective Plan in 2012, but it was informed by the draft version of Perspective Plan in 2010 (GED, 2010b).

to as early as 2005, these policies will prolong the time perspective of the first three policies. In addition, these documents are all drafted under the background of international conference, they are thus expected to provide more international perspective towards 'climate migration'.

These documents will all be categorised as 'policies of Bangladesh' in this thesis, and the analysis drawn from these documents will eventually be presented in a synthesised manner as the discourses of government of Bangladesh, without no specifications on individual documents. However, the 'uniqueness' of each document, such as their different focuses on national or international level, on climate change or development in general, and their time of publish, will all play a big part in initiating key discussions.

3.4.2 Analysis plan

<u>Preliminary analysis</u>

The analysis will follow the six-question structure introduced in 3.1.2, but due to the massive amount of information the six documents contain, it is necessary to develop a preliminary analysis before answering the six questions, so that relevant content of 'climate migration' will be identified from the lengthy policies, and the unavoidable process of information selection, extraction and interpretation will be presented to the readers. Therefore, this part is expected to be more descriptive than analytical. Although Bacchi (2009) has provided analysis examples that have embedded the step of information extraction *within* the analysis answering the six questions, because in most of these cases, only one or two policies with moderate length are examined. But this policy analysis has a much wider and lengthier coverage of policies, therefore, a preliminary analysis is arranged.

The basic operationalisation of the preliminary analysis is grounded in the conceptualisation of 'climate migration' and conceptual framework of migration theories developed in Chapter 2. Based on the two major aspects of current

discourse debates on 'climate migration' mentioned in 2.1, I will also test the discourses of government of Bangladesh from these two aspects: the conceptualisation of 'climate migration' and the attitudes towards it. To identify how government of Bangladesh conceptualise 'climate migration', the most obvious way is to check its direct mention of 'climate migration' and the potential concept it has hinted through problem representations, if not given directly; another way is to compare its 'climate migration' polices to its *general* migration policies, especially the attitudes towards the latter, to see how much it has separated (or related) 'climate migration' from the general migration patterns, considering many arguments mentioned in 2.1.2 (the 'sceptics' discourse) and 2.3.2 ('climate migration' in Bangladesh) have claimed the impossibility and impracticability to separate climate change from the other drivers of migration. To analyse the government's attitude towards 'climate migration', similarly, one way is to identify it from direct textual descriptions, if it's described as an opportunity and option, or a challenge and threat, as well as from more implicit problem representations in policies, for example, did the 'solutions' proposed in the policies aim to support it or control it? To facilitate a deeper understanding of its attitude, a comparison can also be made with the attitude government conveys towards general migration.

Therefore, the preliminary analysis will have major focus on the following two aspects:
1. 'climate migration': what has been addressed directly of 'climate migration' in the documents? (both conceptualisation and attitudes) If not, is there any indirect connection between climate change and migration hinted in the policies?
2. general migration: what has the document addressed of general migration? (only for documents that have a coverage of general migration issue, namely the Perspective Plan, 6th and 7th FYP only)

The analysis will focus on two major types of policies in the documents: climate change and migration. Policies on climate change (usually in conjunction with

environmental change, due to their strong connections) are relatively easy to identify, either the whole document is addressing it (such as NAPA and BCCSAP), or existing in individual sections. Any climate change policies in relation to population movement will be considered, keywords for selection are: population, refugee, migration (migrate), movement (move), displacement (displace), etc. Migration policies can be more scattered in the documents, especially in the national plans, concerning aspects of demography and population, urbanisation, economic development, etc. Therefore, the whole documents will be screened to identify migration policies, and the ones directly and indirectly related to environmental and climate change will be given special attention.

Answering the six questions

The second part of the analysis is structured by the six questions of WPR approach. In her book, Bacchi (2009) has offered several examples in how the applications of the approach can look like, among which there are mainly two types. One is to divide the analysis into six parts to answer the questions individually; the other way is to prioritise the logic of analysis and to integrate the questions within, with notations like '(Q1)' and '(Q2)' inserted to the end of some sentences indicating when a specific question has been answered. Either way will work, with their specific suitability and disadvantages. The first form is more systematic in presentation of analysis result through answering the questions one by one, but it is unavoidable to have repetitions and the related content can be also split into different parts; while the second form is systematic in a way that it prioritises the cohesion of the analysis in sacrificing the presentation, but it is most suitable for analysis that has specific focus on answering several of the six questions but not all.

I choose the first way of structuring my analysis, because this analysis focuses on all the six questions in order to have a comprehensive understanding of problematisation of 'climate migration'. Also because this policy analysis is different from the example analysis provided by Bacchi due to the large amount of content and multiple policies being processed instead of a single policy. A well-

structured analysis and a clear presentation of result is thus even more important in this case.

4. Analysis

In this chapter, policy analysis will be conducted on the six selected policies. The first section will screen the six policies one by one, focusing on extracting the relevant content of 'climate migration' from the policies, while at the same time some basic analysis like comparison and interpretation will be included. The second section will answer the six questions proposed by Bacchi (2009), for a further discursive analysis on the policies.

4.1 Preliminary analysis

4.1.1 Perspective Plan of Bangladesh 2010-2021

On 'climate migration'

In Perspective Plan (GED 2012), the only direct comment on the connection between climate change and population movement is in chapter 13 'environmentally sustainable development', where the impacts of climate change are listed. It is stated that 'as a result of rising sea levels, a significant part of the coastal areas may be permanently inundated, displacing large numbers of people' (p. 95). This shows that the government's understanding on the causes of 'climate migration' remains on the level of population displacement from physical sea level rises, and it is the only occurrence of 'climate migration' in the whole document. However, more indirect connections can be drawn from the chapters on food security, urbanisation and poverty reduction policies.

In the chapter on food security, it is stated that climate change has an impact on environment and natural disasters, which are one of the contributors to crop losses

(p. 26). Then it was mentioned in the chapter on urbanisation that agriculture sector's surplus labour is one major reason of rural-urban migration, which can be caused by loss of agricultural livelihood out of environmental reasons like environment and natural disasters (p. 73-74). As we could see, the connection drawn is indirect and vague, and it shows that the connection between climate change and migration is not much a concern in this policy.

However, it is still worth looking into this indirect bridge between climate change and migration: food security. As it can, to some extent, give a hint to the conceptualisation of 'climate migration' in Bangladesh policies. The issue of food security has been given quite amount of attention in Perspective Plan by being discussed individually as one of the chapters. In Chapter 4 on 'strategy for food security: agriculture and rural development', several factors were listed as contributors to food insecurity, for example food storage, food prices and unstable food market, as well as insufficient food production. It was also both directly and indirectly acknowledged that climate change may affect the food production factor. For example, it was mentioned that *water management* was under the effect of climate change, the crop production is hence influenced. 'Natural disasters and consequent crop losses' are admitted as one of the causes of food insecurity, along with the decrease in amount and fertility of farming land (p. 35, 27). Since climate change is one factor that causes and aggravates natural disasters, sea level rise and salinization, and there shows a connection between climate change and food insecurity. As for the strategies proposed to address the food production factor, they have a strong focus on increasing production efficiency through 'modern methods of production', including 'water resource management', 'high yielding drought and submerge resistant seeds', 'efficient irrigation', 'flood control and drainage', which are all direct or indirect responses to the influence of climate change (p. 27). It is also worth noticing that all these 'solutions' to food security challenges, are proposed from a technological perspective.

In the policies on pursuing poverty reduction and economic development, indirect relations between migration and climate change can also be drawn. In Chapter 12 on 'addressing challenge of poverty eradication', climate change is recognised as a serious threat to poverty reduction, because 'climate change will exacerbate the vulnerability of poor people to environmental shocks, with the predicted increase in extreme climate events'. Therefore, *social protections* methods to address risk and vulnerability, especially those on disaster management, are suggested (p. 91-93). In addition, in the earlier of this chapter, another solution is suggested for poverty reduction, where the positive impact of remittances from migration is praised (p. 89). Remittance plays a big role in economic development in Bangladesh. In 2011, the remittances inflow contributed ten percent of the GDP in Bangladesh (p. 47). Although not talked about in direct relevance, climate change and remittances are addressed together to the same issue of poverty, where migration can be a solution for the problems caused by climate change.

On general migration

In policies on development and migration, government of Bangladesh conveyed multiple attitudes. On the one hand, migration, especially international migration in the context of globalisation, and its accompanying benefits of remittances are repeatedly given high remarks, and it was proposed to enhance the institutional arrangement to facilitate remittances (p. 5, 12, 47, 89); on the other hand, among the phenomena of domestic migrations, only urbanization or rural-urban migration was mentioned, mostly addressed as a *challenge* to development. Environmental problem that comes along, inadequate access to serviced land, lack of housing and poor living condition are all listed as challenges (p. 73-74). Despite the challenges, it is expressed in the end of the chapter that the government is fully aware of the economic potentials and opportunities of urbanization that comes with the challenges, and admits that the transition is a natural but long-term process. It is suggested that proper institutions should be established to assist this transition (p. 75).

To compare with the outline of the Perspective Plan made in 2010 (GED 2010b) reviewed by Martin et al. (2013, p. 17), there is somehow a little shift in attitude towards rural-to-urban migration. The descriptions in the outline has conveyed an attitude to 'reverse' the trend of rural to urban migration, and rural development was suggested as a solution to 'weaken the forces of pull and push and inhibit rural to urban migration'. Therefore, the attitude towards rural-to-urban migration is negative in the outline. However, the attitude has weakened and a slightly more neutral position is adopted in the final version in 2012, since the specific sentences are deleted, and benefit of this migration process is also recognised as natural and beneficial. What becomes the problem that needs to be addressed is the by-product challenges, instead of migration itself.

4.1.2 Sixth Five Year Plan

On 'climate migration'

In the 6th FYP (GED 2010a), issue of 'climate migration' is directly addressed for four times. The citations are below:

- *'A rise in sea level, leading to coastal submergence (i.e. 17 percent of Bangladesh) would cause large-scale displacement of people'* (p. 8)*;*

- *'As projected, the impacts of climate change will force millions of people to migrate'* (p. 188)*;*

- *'Sudden breaches in embankments have been destroying standing crops, inundating crop lands with saline water, thereby diminishing economic potential of the coastal lands, and forcing poor people to out-migrate from the affected areas by destroying their livelihoods'* (p. 202);

- *'About 75% of all disasters are originated by weather-climate extremes and because of global warming and climate change, Bangladesh had already experienced some significant impacts especially in terms of coastal inundation*

and erosion, saline intrusion, deforestation, loss of bio-diversity and agriculture, and large scale migration.' (p. 475)

The second citation gives a crude prediction of the scale of 'climate migration'. 'Millions' addresses the alarming impact of climate change on population, and expresses the awareness of the government on 'climate migration'. However, no further explanation is given and no reference is made to this prediction, the number 'millions' is too ambiguous to be engaged in further discussion or practical use. The other citations reveal the government's understanding of the cause of climate migration from various aspects. The first indicates that the physical sea-level-rises can lead directly to displacement, the third shows climate change's destroying of livelihood which leads to migration, and the forth emphasises the influence of climate change related disasters on migration.

Despite the existing awareness of 'climate migration', the practical policy suggestions for climate change adaptation do not address directly to this issue. If anything in relation to migration is mentioned, then it is the setting up of *shelters* and *warning system*, as part of the plan for disaster and emergency response, to assure people's security (p. 206). These policies are of some connections with *short-term* migration like evacuation under emergencies of natural disaster. However, shelters are usually temporary residence built locally or nearby, and people will eventually move out to their own homes. All the 'climate migrations' addressed in the previous citations are more about rural-to-urban migration and longer-term displacement, but no policies are addressed straight to them.

Other policies on climate change adaptation suggest water management and protection like embankment, disaster management and emergency response, agricultural assistance such as water supplement and research support. The focus of these solutions is on the safety of local populations, such as those on emergency response, and the rest on the protection of the local livelihood, the agricultural activities, so that people can remain where they are.

It also gives suggestions to foreign policies that cooperation with international society on both mitigation and adaptation shall be achieved (p. 31). Its strategy is to negotiate in different conferences with countries responsible for climate change. They should reduce pollution and compensate Bangladesh to mitigate the impact of climate change (p. 153).

On general migration

Unlike the Perspective Plan that lays more attention on the benefit of international migration and the challenges of internal migration (rural-to-urban migration), 6th FYP gives almost the same emphasis to the benefits of internal and international migration. Similarly, 6th FYP gives the same credits to international remittances on poverty reduction, domestically, it also proposed policies that show full recognition of the major obstacles for developing cities. But the difference lies in its clear emphasis also on the benefits that come along. There are two urbanisation policies that reflect the government's attitude towards migration, first, there is need of a better management of urbanization challenges, and second, there are not enough jobs in the more productive sectors of the economy, namely non-agricultural sectors. More specifically, the policy proposes to create jobs in manufacture, construction and service sectors. These sectors are deemed to take larger percentage of productions in urban area, and are much more productive compare to agriculture sectors. The development of these sectors can facilitate migration from agriculture sector to non-agriculture sectors. It can not only decrease underemployment in urban areas, but also attract and solve the surplus labour from agriculture sector. At the same time, due to the decrease of population in agriculture sector, the wages there may increase. So the implementation of the policy are especially helpful for the poor and landless workers (p. 72, 79).

4.1.3   Seventh Five Year Plan

On 'climate migration'

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Compared to the previous two plans analysed, 7th FYP (GED 2015) was unprecedented in a way that it has much more direct emphasis on the issue of 'climate migration'. It is no longer mentioned shortly under different policies, but stressed under independent sub-sections, and the length appears to be much longer. There are four paragraphs (sub-sections) that mainly address 'climate migration', in total nearly 600 words (p. 301, 413, 416, 417). One paragraph appears under the section on agriculture and water resources, under '7th Plan Objectives for Water Resources and Policies for Water Management' (p. 301), the others under the section of environment and climate change, each with subtitles of 'addressing climate change under 7th plan — climate change adaptation context of Bangladesh' (p. 413), 'activities under 7th Plan — Issue 10: Curbing internal migration and displacement' (p. 416-417) and 'adaptation to climate change in the context of migration and displacement' (p. 417).

Two of them are discussed from the specific perspective of water resources and management, and the climate change induced internal migration that is related to it. It is suggested in these two parts that the major rivers in Bangladesh should be 'effectively managed through channelization', using technologies like 'Remote Sensing', 'morphological prediction information' and 'Integrated River Management Plan'. The document introduces water management plan and technology to better manage rivers affected by climate change, so that the internal migration and displacement caused by river 'erosion' and 'unstable river morphology' can be 'reduced' and 'controlled to some extent', 'so that security of lives will be ensured' (p. 301, 416-417). Another section addresses migration caused by loss of livelihood under climate change, recognising marginalised groups are even more affected by it, and pointing out that this might 'lead to migration into dense urban regions, worsening living conditions in the process' (p. 413). The last section suggests a 'transformative adaptation' at all levels, instead of just bringing 'climate resilience'. The plans should identify and address the vulnerabilities, and climate change resilience plan should be incorporated in the bigger development process, and good protections on displaced people are needed (p. 417).

On general migration

7th FYP gives high remark towards migration, international migration especially, as well as the role of remittances on poverty reduction, and more logical explanations for the appreciation of out-migration from rural area are given. First, when rural labours migrate to other regions, the competition and pressure of excess population on rural labour market can be reduced, the remaining rural labours' income may hence increase; second, the households' income and consumption may increase due to remittances transfer; third, the rural economy can be hence boosted (p. 50). However, a conflicting analysis is given when the policy is addressing the challenges of urbanisation. It says that 'rural people have been migrating to urban areas for employment and better amenities, this will continue to cause a shortage of agriculture labour on the farm' (p, 272). It shows that the government may not have a consistent opinion towards the labour conditions in rural Bangladesh.

4.1.4 SDG: Rio+20 National Report on Sustainable Development

The Rio+20 report (MoEF 2012) gives the prediction that 'a 1.0 metre sea-level rise will inundate 15-20% of Bangladesh in the coastal region.' It also mentions that the current embankments are not effective enough in stopping water intrusion and salinity of land. Therefore, displacement will appear as combined effects of threated 'livelihoods, water security, health security and even human security'. Domestically, it shows a reserved attitude towards 'climate migration', because some people migrate to avoid the risks and damages connected to climate change, but they may end up in some more risky situations, both due to migration to urban slams that may not meet their basic living requirement, or they may move to 'riverine islands (charlands)' which are accreted in the coastal areas due to slow flow of rivers in lean seasons, and these places are mostly inhabitable and highly dangerous (p. 41-42). Therefore, solutions are posed 'to minimize the human displacement and find ways of rehabilitating those displaced' (p. 64). It is also aware of the problem of limited capacity in the urban areas, including environment,

space and job opportunities. Solutions are proposed to facilitate 'rapid industrialisation in different area of the country other than cities' to create more non-agriculture sector jobs for rural migrants (p. 77).

Other solutions proposed are from an international political perspective. It calls for 'international support…in terms of acceptance of out-migration of climate change induced displaced people from Bangladesh and transfer of resources and technologies', for the reason that 'Bangladesh has no land for large scale internal relocation and will strongly argue for relocation of its displaced people in land rich developed countries, which are responsible for the predicament that Bangladesh and many other countries face' (p. 64).

4.1.5 Bangladesh Climate Change Strategy and Action Plan 2009

In BCCSAP (MoEF 2009), people living in coastal areas are given the most consideration under 'climate migration'. Major causes of 'climate migration' are mentioned as 'sea level rise' and coastal polder failures, 'increased river bank erosion and saline water intrusion' and natural hazards like flood and cyclones, which can result in loss of livelihood and reduction in agricultural production, hence trigger short-term and long-term displacement of population (p. 2, 3, 14). It is also important to notice that BCCSAP is the only assessed document that terms these migrants as 'environmental *refugees*', which may have more political implications than 'climate change induced migration' or 'displacement' (p. 1-3). In the prediction of affected population, some specific numbers are used, for example, severe flood 'displace many thousands of people from homes' (p. 9), 'hundreds of thousands of people', 'six to eight million people could be displaced by 2050' due to sea level rise (p. 14), 'displacement of more than 20 million people in the event of sea-level change and resulting increase in salinity coupled with impact of increase in cyclones and storm surges, in the near future' (p. 17).

The document portrays the effect of 'climate migration' in a negative way that it will give 'huge adverse impacts on the livelihoods and long-term health of a large proportion of the population', and 'will pose a serious problem for the densely populated Bangladesh', so '[international] migration must be considered as a valid *option* for the country', and 'preparation…will be made to convert this population into trained and useful citizens for any country' (p.1, 17, 18). It clearly states 'climate migration' as a *challenge* for Bangladesh due to the limited capacity of the country to accommodate, so this 'option' is referred to *international* migration only. The solutions proposed in the document are to 'monitor [...] the free movement of natural persons', 'provide […] institutional support' and to build capacities. A whole programme-T4P6 was introduced under the theme 'research and knowledge management', to '[monitor the] internal and external migration of adversely impacted population and provide support to them through capacity building of their rehabilitation in new environment' (p. 2, 3, 59). As for the preferences on internal and international migrations, Programme-T4P6 addresses both on 'internal and external' migrants for their capacity building.

4.1.6   National Adaptation Programme of Action (NAPA)

NAPA (MoEF, 2005) is the document that mentions the least of 'climate migration'. It stresses the bigger vulnerability of coastal population compare to others (p. 22). In Project No.11 proposes to promote adaptation to coastal crop agriculture to combat salinization, and the cause of migration was mentioned as a result of malnutrition or threat to food security due to salinization (p. 35).

4.2   Answering the six questions

4.2.1   Q1: What's the problem of 'climate migration' represented to be in the policies of Bangladesh?

When identifying the 'problem' represented in a policy, I would like to re-emphasise the complexity of problem representations in policies, that there are

usually multiple proposals embedded in one policy, and therefore, there are also multiple problem representations in one policy. One problem representation may interweave with another, comprise another, or even contradict with other problem representations. Hence, it is a challenging task for researchers to identify problem representations from policies (Bacchi 2009, p. 4). It is also impossible to grasp the *whole* picture of problem representations. To better perceive and display *part* of the complexity of problem representations, I decide not only to consider the 'problem' of 'climate migration' in isolation, but also draw connections between problems of 'food security', 'poverty' and 'migration' whose problem representations have shown relevance to 'climate migration' in the policies. To identify problem representations, I will on the one hand look at the way policies *describe* the 'problems', paying special attention to the terminologies and tone of language, and on the other hand, through analysing the actual strategies and plans, which I call 'practical policies', that are proposed to 'solve' the 'problems'. The latter way is necessary even though there might already be a clear statement of 'problem' in the policies, as it may unveil hidden or 'the actual' problematisations that might be inconsistent from what the policies claim to be.

Identifying problematisation of 'climate migration' through language:

If we look at the direct description of problem 'climate migration' in the policies, and tell the language impressions as readers, words like 'large-scale', 'millions', 'hundreds of thousands' and even more specific numbers have presented 'climate migration' as an *alarming* and *serious* issue. Also, if we compare the 7th FYP with the 6th FYP, the length of texts is much longer, and the 'problems' are addressed under themes specifically of issue of 'climate migration', which shows the rising attention the government has given to 'climate migration'.

Terminologies are also a good entry point to identify problem representations from languages. How the issue 'climate migration' is termed in the policies of Bangladesh has strong implications on how the government understands it as a 'problem'. To list from a chronological order, NAPA uses 'migration' as the once

and only term to describe population movement affected by climate change. BCCSAP uses the most mixed terms of all, including 'displacement', 'resettlement', forced migration and 'environmental refugees'. 6th FYP uses once 'displacement', twice forced migration, and once 'migration'. The Perspective Plan and Rio+20 Report both use 'displacement'. 7th FYP either describes it with 'migration' or 'migration and displacement' together, without distinguishing the two. As we can see, there has been an inconsistency of terminology in the policies of Bangladesh, nor any certain definitions or explanations are given. In half of the time, it is termed as 'displacement' or 'forced migration' that can be considered similar concepts (more explanations will be given in Q2), while at other times, especially in the latest 7th FYP, it starts to bring the general term of 'migration' again into the discussions of 'climate migration'. This slight change of terminology usages also changes the scope of problem representation of the issue, that it tends to be broadened from the specific setting of 'displacement and forced migration problem', and starts to be integrated into the bigger picture of 'migration problem'. The assumptions and implications of using different terminologies will be discussed in the other questions below.

Identifying problematisations of 'climate migration' through other problematisations

General 'migration problems': If we look into the problematisation of the general 'migration problem', linkages can be found between the problem representations of 'migration' and 'climate migration'. To summarise the problematisation of general 'migration problem', international migration is highly praised in all the documents that have a coverage of general migration, due to the benefit of its remittances in poverty reduction and development and the decrease in population pressure. Many practical policies are proposed to provide social, economic and political support, to allow the process to be smoother and people to be more capable for international migration. In contrast, internal migration has been presented as a double-edged problem. On the one hand, side effects of urbanisation such as urban environmental degradation, bad living condition and livelihood challenges are highlighted in the

policies. Urbanisation is generally regarded as a *stressful* process for the country. On the other hand, it is also stated that urbanisation is an unstoppable trend, and its opportunities and benefits should not be underestimated. The practical policies to address urbanisation are mostly focusing on solving these challenges of urbanisations, including creating more institutional support to better manage this migration process, as well as to develop the rural areas to decrease the migration stress. However, these policies are more *reserved* compared to those on international migration, no policies show sign to encourage and facilitate the process from an individual level, they are more made to focus on coping with the stress of internal migration.

'Food security problem': In policies on food security issues, the impacts of climate change (such as environment and natural disasters) have been recognised as factors that limit food production, leading to crop production decrease and agricultural livelihood losses; whereas surplus of rural labour due to loss of agriculture livelihood or land scarcity is mentioned as a reason for rural-to-urban. Hence we could see that the problematisation of 'food security' gives a logical connection between climate change and migration, which matches also the direct conceptualisation of 'climate migration problem' in the documents, where 'climate migration' is described as coastal population movement due to the loss of livelihood, food security and other challenges posed by climate change. Therefore, the problem representations of 'food security' has a close relation with that of 'climate migration', that they may have informed and affected each other during the discursive formation process. The attitude conveyed in food security problematisation is that migration is a *negative* result of unwanted 'problems' of both 'food security' and 'climate change'.

'Poverty problem': In the development policies, 'poverty' is represented as a problem, within which climate change is problematised as an impediment to poverty reduction. On the other hand, the remittances from migration is proposed as a solution to 'poverty problem' due to its significant contribution to the country's

economic development, which means that there is also a problem of lacking of remittance, as well as not enough 'remittance-bringing' migrations in the country. Here another connection between climate change and migration can be drawn, though this connection remains unrecognised in direct problematisation of 'climate migration', it hints the possibility that the migration can be understood as a *positive* solution to the 'poverty problem' by both increasing income and minimising the economic loss caused by climate change.

Identifying problematisation of 'climate migration' from 'solutions':

To analyse the problem representations through the 'solutions' (or practical policies) proposed, three points are worth noticing. First, no matter under the problem of 'food security' or 'climate migration', solutions are aiming at keeping people as where they are and maintain their current production, so that the population movement can be 'diminished' and 'curbed'. Here 'climate migration' is presented as an *undesired* problem that needs to be controlled. While some difference can be found in Rio+20 Report that, those have already migrated shall be rehabilitated and supported, and in BCCSAP it suggests migration*, international* migration specifically, as a 'valid option' for the country, while its international policies also make similar claims to facilitate international 'climate migration'. But in general, the majority of the solutions proposed are suggesting 'climate migration' as a *challenge*, rather than an option (*opportunity)*. There are also some policies that stress the awareness of the 'climate migration' problem, yet not offering corresponding solutions that address directly to the problem (for example, 6th FYP). Second, many of the practical solutions offered domestically are focusing on the technical problems, such as enhancing technology and management for water resources, and increase agriculture technology to ensure food security. A technical problem needs technical solutions. Climate migration is hereby considered as a 'technical problem'. Third, the international strategies are suggested to emphasise the responsibilities of the global developed countries. It not only asks them to provide technical and resource support as well as to accommodate the climate

migrants that cannot be absorbed anymore domestically, but also addresses their responsibilities in mitigations.

In conclusion, the problem representations of 'climate migration' in policies of Bangladesh can be summarised as following: first and foremost, the policies of Bangladesh do recognise the existence of 'climate migration', which is represented as an alarming and increasingly important 'problem'. Second, the conceptualisation of 'climate migration' is not unified in the problematisations. Multiple terminologies are used to refer to the 'problem', with a tendency to be more related to the concept of general migration lately. There are also signs of problematising it as an *international* 'problem', as well as a *technical* 'problem'. Third, the attitudes conveyed in the problematisations are not homogeneous either. 'Climate migration' is problematised as both a *challenge* (for internal 'climate migration') and an *option* (for international 'climate migration'). The next question will provide deeper insight into understanding the meaning of such problem representations.

4.2.2   Q2: What presuppositions or assumptions underlie this representation of the 'problem'?

The common way of interrogating the presuppositions hidden behind the 'problems' is to start with identifying the key concepts, binaries and categorisations in the problematisation (Bacchi 2009, p.7-9). Terminology is an important element in forming concepts. Different terminologies used in the documents can contain different assumptions, which might lead to different discursive formations. Even though the policies have not defined any specific terminologies concerning migration, but by studying how the policies categorise them in the discussion, the conceptual logic behind the problematisation can be hinted. From a definitional perspective, 'displacement' and 'forced migration' are interchangeable in a way that they pinpoint 'passiveness' of movement. They can be understood as a specific type of population movement that can be either categorised as part of the general migration, since the way 'forced migration' is termed can be interpreted directly as

a kind of migration which is forced; or it can also be treated as an independent or even opposite population movement from general migration, which are usually considered 'voluntary'. The latter is where policies of Bangladesh situate themselves. As in the 7th FYP 'displacement and migration' is mentioned together in parallel, it can be interpreted as these two words are mutually exclusive, therefore 'forced migration' and 'displacement' tend to be treated as a type of population movement different from 'migration'.

This kind of categorisation reveals the assumptions that, there is one group of people who are *made* to move, out of some specific or even single cause (usually disasters or war related), and that they are passive, lack of choices and agency in their movement. If the government specifically stresses them as 'refugees', more meanings are endowed to them that they are the 'victims', therefore the international society should take responsibilities for them; on the other side, 'migration' is considered a population movement that involves migrants' agency and motivation, that is *voluntary*, usually under the effects of complex reasons. Therefore, by using the words like 'displacement' and 'forced migration', the government assumes the existence of single-factor-driven migrations, which distinct from the general migration phenomenon. But in 7th FYP 'displacement' start to be used without separation or even being replaced by 'migration' when addressing 'climate migration', it may indicate that the government may start to consider 'climate migration' as a multiple-factor-driven movement.

Several binaries in the policies are also worth mentioning. First, there is an 'opportunity-challenge' binary in describing 'migration problem' as well as 'climate migration'. To be more specific and strictly speaking, the dichotomy for the latter is 'option' and 'not-an-option' binary, which I have incorporated into the common 'opportunity-challenge' binary. 'Options' or 'opportunities' means that migration can be positive and should be pursued through policies, while 'non-options' or 'challenges' is negative and should be avoided and controlled through policies. Another dichotomy is 'internal-international' migration, since most of the

time, policies address internal and international migrations in a separate manner and the attitudes conveyed are also very different between the two. This binary can be studied in relation to the 'opportunity-challenge' binary (See Figure 1). Where internal migration (urbanisation specifically), is presented as both a challenge and an opportunity in the problematisation of general 'migration', whereas the internal migration under the 'climate migration' problematisation is deemed only as a 'challenge', while international migration is considered an 'opportunity' under both 'problems'.
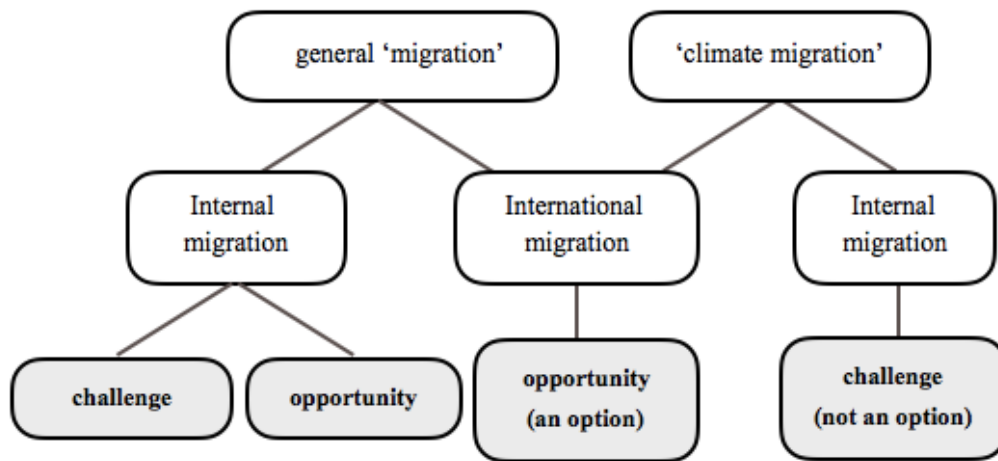

Figure 1: a presentation of dichotomies in the policies

But overall, no matter 'climate migration' is considered a challenge or opportunity, this dichotomy is based on the assumption that '*climate migration' exists*, which is an unstoppable trend in Bangladesh, and the country cannot avoid it but to accept this fact first, and then decide on either to cope with it or to avoid it.

Using dichotomy, either implicitly or explicitly, is very common in policy-making, and it is also a common way for researchers to structure their analysis on discourses. I also use it to guide my logic when identifying the problem representations in the policies. But I am aware of the implications and limitation of doing so, both for policy makers and researchers when using them. As Bacchi (2009, p. 7) points out

that hierarchies can be implied in dichotomies. When one side is valued, the other side may be overlooked. It may also simplify complex relations and leave out information and other discourses. Therefore, I will also have a discussion about the consequences of using these dichotomise in Q4. But before, we will first look at the formation of these problem representations and their assumptions in the next question.

4.2.3 Q3: How has this representation of the 'problem' come about?

Here I will reflect upon the 'history' (genealogy) of the problem representations. I will pay more attention to the role of knowledges in discursive formation in policies, rather than historical practices and events. I will interrogate the connections between knowledges and political discourses, specifically on how the academic knowledges and global discourses of 'climate migration' have informed and related to the political discourses in Bangladesh, or how the latter has reflected the former. The results of the discussion will be presented in Figure 2, which is based on the dichotomy structure formulated in Q2 (see Figure 1), where the genealogies of different discourses are added at the bottom.

From the analysis in Q1 and Q2, we could see the big tendency in policies of Bangladesh to problematise 'climate migration' (internal migration especially) as alarming and challenging. Large amount of predictions and numbers are quoted in the policies to address the urgency of the 'problem', and terminologies such as 'forced migration', 'displacement' and 'refugees' are used to describe this 'problem'. These representations of 'climate migration' can be partly traced to the first formation of 'climate migration', which is the 'alarmists' discourse. In this discourse, prediction and calculations of 'climate migration' are made, asserting the possibility in separation of number of displaced by climate change from the general migrants. The depiction of 'refugees', 'displaced' and 'forced' in the policies have reflected part of this discourse. It is worth specifying here that the 'refugees' in the 'alarmists' discourse means both a *threat* posed to international communities and a

group of *victims* that demand justice and protection. As the policies of Bangladesh are national policies from the perspective of a 'climate migration' affected country, it doesn't reflect the international perspective in the 'alarmists' discourse that 'national security' is a challenge caused by 'environmental refugees'. Instead, Bangladesh adopts these words only to emphasise their dangerous status and the responsibility of international communities.

The discourse of 'climate migration as a challenge' has also reflected knowledges from migration theories. As discussed in Q2, internal migration under 'climate migration' is represented as a challenge to the country. There 'climate migration' is suggested to be curbed, because it will put extra pressure to the urban areas, and will also endanger the situation of migrants themselves. Dual labour market theory can be referred here to explain the structural limitations in migration. Due to the structural and institutional constraints of labour market, climate migrants may end up in another vulnerable situation in the cities. Most of the rural migrants from agriculture sectors can only take the job from the secondary labour-intensive market in the cities, which may confine them in the bottom of the occupational hierarchy as well as a very low social status locally. Low wages, lack of institutional and legal protection, bad living condition and limited chance of development will render them vulnerability, especially women and minority groups will be among the most vulnerable. Similar challenges are found in the policies' problem representation of internal migration in the general 'migration' problem, which can also be explained through DLM theory.

On the other hand, International migration under 'climate migration' is describe as an 'option' (opportunity) for the country. Proposed first in BCCSAP, the policy focuses on facilitating this process with institutional support, later also set international political strategies to call on the cooperation with developed countries in international migration. This shares a similar stand with the 'resilience' discourse that migration is considered a possible 'solution' for the impacts of climate change. But their understandings on the role of migration are not completely the same. In

Foresight (2011), the benefits of migration are praised due to its role in diversifying livelihood and as an insurance to the households, which is why it doesn't consider migration differently between the international and internal migration binary, but approves it in general. However, the policy in Bangladesh only considers international migration as an 'option', because it can relief the domestic population pressure in the urban areas, and the benefits of remittances and livelihood diversifications are not the most important concerns under the problem of 'climate migration'.

Even though they are not mentioned directly in policies addressing 'climate migration', the government of Bangladesh is aware of these benefits of international migration (even for part of the internal migration) in policies on general migration, where they largely emphasise the benefit of international migration (and slightly on internal migration) to economic development. These policies can find theoretical reasoning from *neoclassical migration theories* and *new economics labour migration theory (NELM)*. International migration is valued because it can not only increase remittances and diversify livelihoods for households in Bangladesh, but also increase the income level through alleviating the labour-surplus pressure in the country. It is theoretically grounded in the neoclassical migration theory that migration will ease the competition in labour market in the sending regions, hence increase their wages, and eventually the condition will tend to equilibrium between sending and receiving regions. NELM theory also highly values migration's role in increasing family income through remittances, diversifying livelihood and providing a complement to the imperfect market and insurance system in the sending society.
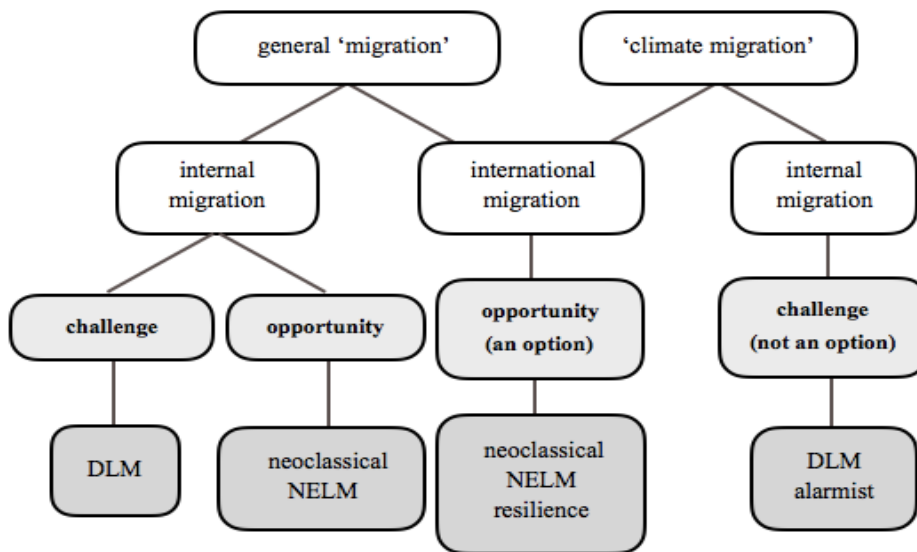
Figure 2: a presentation of the 'problem' in the form of dichotomies, and their relevance to the existing knowledges and discourses

To conclude, as we could see from the above analysis, the 'problems' represented in a country's policies are in fact not homogeneous. Tensions can be found from their underneath knowledges and discursive origins. These knowledges and discourses sometimes complement as well as compete with each other, so are the problem representations in the policies. The problem of 'climate migration' represented in policies of Bangladesh is a heterogeneous one. It reflects both the positive neoclassical migration and NELM theory as well as DLM theory that holds a negative outlook for migration. It not only takes upon the 'alarmists' discourse of 'climate migration', but also recognises the 'resilience' discourse. This verifies the prediction made before that there is no one and only 'authentic' rationality, nor a 'natural evolution' of problem understandings in policies. What do exist are the 'discourses' formulated from different knowledge's and through problem representations, with tensions and inconsistencies over time and across space (Bacchi 2009, p. 10). This allows possibilities to question the current discourse and to explore different paths for the current political discourses in the coming Q4 and Q5.

4.2.4   Q4: What is left unproblematic in this problem representation? Where are the silences? Can the 'problem' be thought about differently?

No matter 'climate migration' is problematised as an 'opportunity' or 'challenge' in the policies of Bangladesh, it is based on the assumption that Bangladesh admits and accepts the existence of 'climate migration', that the danger of climate change is a reality that cannot be avoided but to be faced and dealt with. This is what I have mentioned in Q2 about the limitation of developing dichotomies in policies. Binaries not only silence one another, but also tend to set an 'either-or' reality that leaves out other possible discourses. If we compare the discourses in the policies with the 'rejecting' discourse that emerges, this gap becomes visible. The latter underlines the 'futureness' of 'climate migration', that most of the 'climate migration' we are talking about nowadays are still in 'future tense', which means 'climate migration' is not yet a 'reality' but a possible future scenario with uncertainties. The level of seriousness it will pose in the future is not destined, but depending largely on how climate change will develop, which has big implications with the mitigation efforts in global society. This alternative discourse sets a whole different priority in dealing with the 'climate migration problem', from being reactive to this impact of climate change, to being proactive in stopping the cause of it. It allows more initiatives for the affected countries, and it is also possible to be used simultaneously with other discourses.

Another way to 'think outside the box' is to ask, from whose perspective are these discourses formulated? Among all the voices this thesis has focused on, there are academic voices, governmental perspectives, from developed countries unaffected as well as the developing countries highly affected by climate change. But all above are not from the perspectives of locals and individuals. What is *their* understanding of the 'problems'? Do the locals want to move? Do those moved identify themselves as 'environmental' or 'climate migrants'? What do they think of the 'refugee' entitlement? What solution do they suggest for the 'problems'? which

could have formed intrinsically different discourses. Due to the focus of policy analysis, this thesis only focus on the political and academic formulation of discourses on an international and national level, hence the local voices are mostly silenced in the analysis, except mentioned a little in the literature review done in 2.3.2. Other studies that have a micro-level focus may have the chance to explore the local views and bring more perspectives in understanding 'climate migration'

4.2.5 Q5: What effects are produced by this representation of the 'problem'?

By presenting 'climate migration' as 'forced migration', 'displacement' or under the discourse of 'refugee', the government pictures it as a 'problem' which is disconnected from the 'normality' of 'migration' in general. It means that these migrations are caused by a specific reason, climate change, a 'global problem', which renders the 'problem' and its responsibility *global* instead of national. These representations allow Bangladesh to gain more leverage when seeking for support and cooperation internationally and to address the international responsibilities in solving this 'problem', which is here represented as accepting the migrations, providing technical and recourse support for Bangladesh and mitigation responsibilities. Especially the term 'refugees' will bring the population under legal protection and assure them more rights. But they also have some undesired consequences. This way of portraying is victimising the migrants. It has a dangerous tendency to ignore one of the most important qualities of all the migrants, and all human beings, *agencies*. Turton (2003, p. 10) argues that even at the most 'passive' situations, people's agencies are much higher than we expect. But since discourses in policies have the power of creating practices in remaking realities, victimising discourses and policies may decrease people's agencies in migration. Furthermore, through these representations, diverse individual movements are pictured into a massive and homogenous phenomenon, which have a 'de-humanising' and 'de-personalising' effect. Consequently, migrants can be treated as a 'threat', as well as needy and passive, which might trigger xenophobia in the

receiving countries, which might render these migrants in a more disadvantaged and vulnerable position. In addition, this discourse tends to tackle the 'climate migration' from a reactive perspective, especially in a 'technical' way. The focus on 'solutions' blurs the most original *cause* of the 'problem': the continuously soaring emissions globally. Therefore, global society is likely to shift their efforts in reactive aid instead of mitigation responsibilities, which might be the most effective way to 'nip the problem in the bud'.

Though not as much as the 'climate migration as a challenge' discourse, policies of Bangladesh still convey some of the 'resilience' (or 'climate migration as an option') discourse, which also shares a lot of theoretical similarities with the general 'migration' discourse. This discourse puts human agency in a very prominent place and can better integrates 'climate migration' into the development plan of Bangladesh, which may ideally bring economic prosperity to Bangladesh while solving the 'climate migration problem' at the same time. But the more it gets integrated into the national development path, the more the 'problem' becomes localised and nationalised. 'Climate migration' will end up becoming a 'national development problem', where the international responsibility is diluted, and the government of Bangladesh will have less leverage or right in negotiating for international assistance.

Either it is to represent 'climate migration' as a challenging 'problem' that needs to be alleviated, or as an 'option' that needs more facilitation, or as a general 'migration problem' that needs to be incorporated into the national development 'problem', they all have the effects of diverging the international attention from the *cause* of 'climate migration', to the responsive solutions. More resources and efforts will be devoted to the response of climate change, while the latter can be continuously worsening due to the shift of attention.

4.2.6 Q6: Where/How has this representation of the 'problem' been produced, disseminated and defended? How could it be questioned, disrupted and replaced?

This question works as a summary that will overlook the development of problem representation in the policies, with both *time* and *space* perspective. It summarises the development and changes of the tensions in the problem representations unveiled in Q3, from which we could discuss the possibilities of shifting the existing discourses.

Since the policies analysed are within a time span of ten years (from 2005 to 2015), it allows the policy analysis to develop a time perspective of the changes and development of the problematisation of 'climate migration'. As identified in Q1, the tendency of problematising 'climate migration' from a 'refugee problem', to 'displacement' and 'forced migration' and then to a more blurred usage together with the general 'migration', the problem representation shift derives from the terminologies that 'climate migration' starts to be more related to the general 'migration problem' over the time. But at the same time, it always maintains a certain distance or distinction between these two 'problems', which is shown in the theoretical and discursive gap between the problematisation of 'internal migrations' in each 'problems'. International migrations under both 'climate migration problem' and general 'migration' problem are portrayed similarly as positive in response to the negative impact of climate change as well as in facilitating economic development, which, as found out in Q3, share similar theoretical basis in migration theories. But internal migration in the general 'migration problem' is presented as both a challenge and an opportunity, with two diverging discursive bases from migration theories, while the internal migration in the 'climate migration problem' remains dominated one-sidedly by the challenge and negative discourse. This tension in problem representation persists over time with no significant temporal change. Similar theoretical gap also exists across the 'space' dimensions between the dichotomy of internal and international migration, where international

migration is dominated one-sidedly by the 'opportunity' discourse and internal migration with a more complicated and divergent representation.

The existence of these tensions is a reminder that, fundamentally, 'climate migration' is represented differently from the general 'migration problem'. This allows the government to get support from as many international actors as possible, especially the developed countries. According to the answers in Q5, this way of problem representation allows the government to have more leverage when negotiating for international support, and at the same time partly merges it in the national economic development goals and benefit from this development process.

Although contradictions and tensions exist within the political discourses of Bangladesh, the rationality of the governance is still justifiable, which is to incorporate the benefits of migration to achieve national development goal, while at the same time to gain as much support as possible internationally. But the *variability* of problem representation of 'climate migration' lies right in these tensions, and adjustment to the current discourses may produce different effects. Possible alternatives can be suggested with the guidance of Q4, where the silenced and marginalised discourses are identified from the tensions. One possible change is to merge the theoretical bases of the problematisation of internal migrations under both 'climate migration' and general 'migration'. Because once the possible benefits of internal climate migration are recognised by the government, the domestic climate migrants, which are still the majority of migrants in Bangladesh, can be protected and supported also under the policies of improving urbanisation conditions, and this can endow them more opportunities and prevent the chance to be trapped or in high vulnerability during migration. Another possible change to the problematisation can be adding the awareness of challenges in international migrations. Existing policies on climate migrations are focusing on facilitating the international migration *to happen*, but not fully recognising the challenges and vulnerability migrants will face abroad, especially resistance they will face once they are called 'climate migrants', due to the concern of national security. Also, one

more angle can be added in parallel to the existing problem representation, that is to problematise the origin of 'climate migration'. Although the policies do stress the mitigation responsibilities of global society, but usually in a separated section from the problem of 'climate migration'. If policies in Bangladesh represent 'climate migration' also as a *future* 'problem', then the priority in solutions of 'climate migration' will be largely shifted to the international mitigation responsibilities rather than the current solutions.

5. Conclusion

The aim of this thesis is to understand the complex discourse of 'climate migration' in the policies of Bangladesh, based on the conceptual framework of existing discourses on 'climate migration' and migration theories. With the guidance of 'What's the problem represented to be?' (WPR) approach Bacchi (2009) has proposed, this thesis has analysed six national policies of Bangladesh and made a full-dimensional analysis to its political discourses, answering the research question: *how is 'climate migration' problematised in the policies of Bangladesh?* The analysis involves identifying the problem representations of 'climate migration', and interrogating the knowledges reflected in its formations, discussing the possible consequences of adopting specific discourses as well as making visible the alternative discourses.

The major findings of the thesis are as following: the policies analysed have shown that 'climate migration' is in general problematised as an alarming and increasingly important 'problem' for Bangladesh, though the problematisation does not manifest a homogenous political discourse. There is no unified conceptualisation of 'climate migration' throughout the policies. It has reflected the 'alarmists' discourse that 'climate migration' is isolated from general 'migration' problem, but recently there is a tendency in conceptualisation to draw some more connections between the two, which has to some extent reflected the 'sceptics' discourse. The attitudes towards

'climate migration' have also revealed conflicting discourses. The 'challenge' problematisation of 'climate migration' is manifested in the discussion on internal 'climate migration' that it is an undesirable result of climate change that needs to be controlled, mostly through technical methods, reflecting the 'alarmists' discourse, as well as migration knowledges on dual labour market migration theory; while the 'opportunity' exists in the international migration, which not only relieves the population stress domestically and brings economic development to the country, but also emphasises the responsibility of international community, reflecting partly the 'resilience' discourse as well as neoclassical migration theories and new economics labour migration theory. These problematisations can allow government of Bangladesh to facilitate its own migration process as part of the national development plan, while benefiting from the aids from international community at the same time.

However, contradictions and tensions can still be identified despite the rationality of the current discourses. Compared with problematisation of 'migration' in general and the genealogy of knowledges in each discursive formation, the government has understanding gaps between internal and international migration as well as between 'migration' in general and 'climate migration'. According to the limitations of such dichotomies, alternative discourses are hence discussed, either to unify some of the disparities between the dichotomies, for example to consider both opportunities and challenges of internal and international migration under both the problematisations of 'climate migration' and 'migration' in general; or to think outside of the dichotomies to question the acceptance of 'climate migration' and divert the attention to mitigation responsibilities.

Due to the limitations of this thesis, several suggestions are listed to inspire further researches on this issue. First, due to the language limitation of the researcher, all the policies selected are those with English versions. There is a large amount of policies written in Bengali left out from the research, but are potentially worth examining. Second, this thesis has a focus only on the national policies of

Bangladesh, and further researches could initiate a focus on local policies, so that discourses on other levels could be unveiled and compared. Third, choosing existing discourses and migration theories as the conceptual framework allows me to explore certain insight into the discourses of 'climate migration' in Bangladesh, but also exclude other alternative conceptual frameworks based on other studies, such as security studies, human right studies and resilience studies, etc., which may bring different perspectives to understand the discourses of 'climate migration'. Above all, as the impact of climate change continues, the discourses and knowledges of 'climate migration' are also rapidly evolving, so are the new policies proposed to address this issue. Therefore, it is worth following the development of the issue, and bring a longer time perspective to the problem representation of 'climate migration' in Bangladesh.

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