



## **Responding to Climate Change in Vietnam**

*A Study of Climate Action Planning at Provincial Level*

*A thesis submitted in fulfilment of the requirements for the degree of  
Doctor of Philosophy*

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## **Declaration**

I certify that except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis is the result of work which has been carried out since the official commencement date of the approved research program; any editorial work, paid or unpaid, carried out by a third party is acknowledged; and, ethics procedures and guidelines have been followed.

**Nguyen Sy Linh**

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## Peer reviewed papers

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## **Abstract**

Climate change is a global issue, but its impacts are localised. It is also a ‘wicked’ problem that requires innovative approaches to formulate and implement policies and measures that respond to the impacts of climate change effectively. Vietnam is extremely vulnerable to climate change and has been identified as among the five countries, globally, that are most affected by the impacts of climate change. In addition, Vietnam has limited resources to prepare and respond to such impacts.

This PhD research brings a new understanding to climate action planning processes, particularly at provincial level in Vietnam. The aims of the research were to identify and analyse the patterns and procedures in climate action planning in Vietnam’s provinces and major cities between 2011 and 2013, and to explain the reasons behind the choices that were made with a view to recommending ways of improving policy making processes in the future. The research involved analysing the content of 40 climate action plans, and then conducting qualitative research into the processes of climate action planning or plan-making in three sample provinces.

Results of the research indicate that the objectives, priorities and activities in the provincial action plans were strongly influenced by national climate policy prescriptions. In addition, those approved in 2012 and 2013 adopted more innovative approaches to climate change and requested larger budgets than the action plans approved in 2011. The timelines for the implementation of action plans also varied among the provinces, with the provincial climate action plans that were developed and approved in the later years having longer implementation timelines than those approved earlier.

The findings of the research also reveal that climate change policy making in Vietnam is quite dynamic, and tends to be more innovative than other areas of public policy of the country. The policy-making process at national level indicates two approaches: strong political commitment in the early stage; then moving forward to a more mainstreaming approach. The study also reveals that capacity of the provincial government is critically important in designing a climate action plan and delivering the proposed measures. The national climate change policy framework provides a direction for reframing the action plans at provincial level; but the local context and local capacity influences the plans that are made. At provincial level, due to limited resources (both technical and financial), climate action planning has inherited a traditional plan-making process, in which the participation of civil societies and the private sector are very limited. Budget allocation for implementing action plans is still heavily reliant on the state budget, and some provinces did not even propose any budget estimation in their action plans. Furthermore, 70% of provinces set out the objectives of ‘improve and strengthen capacity’ and ‘increase awareness and responsibility’ although the budget allocated for these capacity building and awareness

raising was very limited. This means that, in order to implement their climate action plans, provinces have to prepare other action plans or adopt further budget planning. In addition, the lack of staff time and capacity has created challenges to the transformation of conventional plan-making practice into more robust and interactive planning, in which more resources can be mobilised from interested stakeholders, and necessary resources can be secured for implementation.

This research found that even in the centralised-orientation policy-making system of Vietnam, sub-national governments still have a certain level of autonomy in developing their climate action plans based on the general guideline of central government. The differences in institutional setting, participation and budget planning, as well the plan adoption of the provinces, appear to be influenced by factors such as motivation, institutional capacity, and knowledge of local governments.

This study suggests that, in order to improve the effectiveness of a new policy in general and climate action plan making in particular, it is essential to have an appropriate institutional setting that can mobilise human and financial resources to support the formulation and implementation of a new policy. Policy network should be established as soon as the policy issue is initially raised and put on an agenda. Networking with NGOs and private sectors should be put in place as soon as possible, to leverage contributions of technical and financial supports, particularly for climate change adaptation. Leadership and autonomy of provincial governments on the climate change issue should be strengthened, as these are important in proposing activities to respond to local climate change impacts effectively. A mainstreaming approach in climate action planning should also be promoted, as the political-commitment approach is not effectively applicable, as it requires clear allocated resources that, in the context of Vietnam's limited resources, are not able to be allocated in full amount for climate change activities at local level. Provincial governments, therefore, should be more active in diversifying budget sources to undertake their climate activities.

Future studies should be undertaken to examine the dynamic of multi-level climate action plan making in other policy-making systems and in the other socio-economical contexts, and to understand the evolution of climate change policy-making within a country in relation to the international climate change policy agenda. Studies on factors that influence learning processes across borders should also be recommended. In addition, future research should seek to identify the role of wider participation, particularly NGOs and the private sector, in reframing national climate change policies at the provincial level, in order to better mobilise resources to improve the design of policies and implement them more effectively.

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## List of Abbreviations

AAA	Awareness, Analysis and Action
ACCCRN	Asian Cities Climate Change Resilience Network
ADB	Asia Development Bank
AfD	Agence Française de Développement
AusAID	Australian Agency for International Development
CAP	Climate Action Plan
CBOs	Community-Based Organizations
CCB	Climate Change Bureau
CIDA	Canadian International Development Agency
COP	Conference of the Parties
CPV	Communist Party of Vietnam
DANIDA	Danish Development Agency
DARD	Department of Agriculture and Rural Development
DFID	Department for International Development (of UK government)
DLA	Department of Legal Affairs
DMHCC	Department of Meteorology, Hydrology and Climate Change
DONRE	Department of Natural Resources and Environment
GDP	Gross Domestic Product
GHG	Greenhouse Gases
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit- the German Federal Enterprise for International Cooperation
HCMC	Ho Chi Minh City
ICEM	International Centre for Environmental Management
ISET	Institute for Social and Environment Transition
JICA	Japan International Cooperation Agency
LAPA	Local Adaptation Plans of Action
MARD	Ministry of Agriculture and Rural Development
MLG	Multi-level Governance
MoC	Ministry of Construction
MoF	Ministry of Finance
MoH	Ministry of Health
MOIT	Ministry of Industry and Trade
MONRE	Ministry of Natural Resources and Environment

MPI	Ministry of Planning and Investment
NA	National Assembly
NAS	National Adaptation Strategies
NCCARF	National Climate Change Adaptation Research Facility
NCCC	National Committee for Climate Change
NGOs	Non-Governmental Organizations
NISTPAS	National Institute for Science and Technology Policy and Strategy
NSCC	National Strategy for Climate Change
NSGG	National Strategy for Green Growth
NTP	National Targeted Program
NTP-RCC	National Targeted Program to Respond to Climate Change
OECD	Organization for Economic Cooperation and Development
PPC	Provincial People Committee
SCCC	Steering Committee for Climate Change
SEDPs	Socio-Economic Development Plans
SOCC	Standing Office for Climate Change
SP-RCC	Supporting Program to Respond to Climate Change
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
US	United States
USA	United States of America
USAID	United States Agency for International Development
USD	United States Dollar
VND	Vietnam Dong
WB	World Bank

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## CHAPTER I: INTRODUCTION

### 1.1 Background to the problem

The changing climate is no longer an abstract issue, and the realities of its impact are being observed across the globe. Climate change is affecting millions of people, and frustrating their efforts to escape poverty, particularly in developing countries (Munang et al. (2013). Climate change has been considered as the most critical challenge to human kind in the 21<sup>st</sup> century, and there is a real possibility that it will stall the progress of human development (UNDP, 2007). It is an issue receiving the attention of every government in the world (IPCC, 2007, 2012, 2014). UNDP (2007) outlines five specific risk-multipliers of climate change-induced barriers to human development: (1) reduced agriculture productivity; (2) heightened water insecurity; (3) increased exposure to coastal flooding and extreme weather events; (4) the collapse of ecosystems; and (5) increased health risks.

The annual Conference of the Parties (COP) on climate change has sought agreements on solutions dealing with climate change. At COP18 in Doha, Qatar, in December 2012, all participating countries agreed to detail their carbon emissions reduction six months in advance of the 2015 COP in France. They also committed, in total, over 6 billion USD to address climate change, mostly from European countries. At COP20 in Lima, Peru, governments of both developed and developing countries reached an agreement to further tackle climate change for both mitigation and adaptation purposes (IPCC, 2014). At COP 21 in Paris, France in December 2015, the United Nations Framework Convention on Climate Change (UNFCCC) adopted the Paris Agreement, in which it recognises that climate change represents an urgent and potentially irreversible threat to human societies and the planet, and thus requires the widest possible cooperation by all countries and their participation in an effective and appropriate international response, with a view to accelerating the reduction of global greenhouse gas emissions. The agreement acknowledges that:

“climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity” (UNFCCC, 2015, p. 1).

The specific needs and concerns of developing country parties arising from the impact of the implementation of response measures are emphasized. It also stresses the urgency of

accelerating the implementation of the Convention and its Kyoto Protocol, in order to enhance the pre-2020 ambitions. This recognises the urgent need to enhance the provision of finance, technology and capacity-building support by developed country parties in a predictable manner, to enable enhanced pre-2020 action by developing country parties, and emphasizing the enduring benefits of ambitious and early action, including major reductions in the cost of future mitigation and adaptation efforts. The Paris Agreement also agrees to uphold and promote regional and international cooperation, in order to mobilize stronger and more ambitious climate action by all parties and non-party stakeholders, including civil society, the private sector, financial institutions, cities and other subnational authorities, local communities and indigenous people (UNFCCC, 2015).

Despite efforts to date to deal with climate change, inequalities in capacity to adapt are still commonplace, particularly in developing countries. Furthermore, planning for climate change adaptation confronts governments in developing countries with challenges at many levels, including a lack of resources and capacity to reduce climate change impacts, and a lack of concrete commitment by both developed and developing nations to combat climate change. These challenges pose systemic threats that are becoming increasingly apparent around the globe (IPCC, 2007, 2013, 2014; UNDP, 2007). Developed and developing countries are trying to combat climate change in different ways. Developed countries have generally concentrated on greenhouse gas reduction or mitigation measures, while developing countries have tended to prioritise adaptation to the impact of climate change (IPCC, 2007, 2012). However, adaptation and mitigation measures are now becoming common in both developed and developing countries, particularly at the sub-national or local level. Although national and regional governments are active, provincial and local governments are of particular importance. Indeed, municipal governments and cities around the world have been considered to be the most active level in initiating efforts to tackle climate change impacts (Bulkeley & Betsill, 2013).

The 2014 IPCC report found that many challenges have emerged as adaptation activities have been implemented. These include, how to manage the decision-making process, how to develop strategies and plans, and how to implement them effectively. It is clear that all nations face great challenges in developing and delivering effective policies to respond to climate change, particularly at sub-national levels, where climate change impacts are most visible. Various studies have been undertaken to analyse and assess the effectiveness of climate change policies and strategies at different levels of administration (global, regional, national and local level), although most to date have been conducted in developed countries (Preston et al., 2011).

## 1.2 Research problem statement

UNDP (2009) identifies Vietnam as among the five countries, globally, that are most affected by the impacts of climate change; and, like the others on this list, Vietnam has limited resources to prepare and respond to such impacts. Located in South East Asia, Vietnam has a total land area of 329,569 square kilometres, and it has a population of over 89 million, as at 2014. Vietnam has the highest population density in Southeast Asia, just after Singapore, with a national average of 232 people per square kilometres and up to 1,000 per square kilometres in the Northern Delta. Vietnam has been in economic transition since the introduction of the renovation policy (Doi Moi) in 1986, with major liberalisation of the market. Gross domestic product (GDP) per capita has increased more than 10 times over the last two decades, from 90 USD in 1990 to 1,596 USD in 2012. Vietnam is now considered as a middle-income country (Higashi et al., 2013; World Bank, 2011, 2012b). However, Vietnam is also facing the middle-income trap, among other challenges (Ohno, 2009); and is extremely vulnerable to climate change, being particularly exposed to sea-level rise and the occurrence of extreme weather events (GoV, 2011c; IPCC, 2012, 2014; MPI et al., 2015). Among the most severe effects of climate change in Vietnam are rising temperatures and sea levels, and an increase in the irregularity, frequency and force of extreme weather events such as tropical storms, floods, and droughts. Vietnam climate change scenarios show that, by the end of the 21<sup>st</sup> century: annual average temperatures will rise by 2-3°C; that total rainfall will increase, and dry-season rain will decrease; and sea levels will rise by as much as one meter relative to the 1980-1999 level (GoV, 2011c; MONRE, 2011).

These expected changes will have impacts on habitats and human lives. With the sea-level rise of one meter, about 40% of the Mekong River Delta, 11% of the Red River Delta, and 3% of other regions will be submerged, with 20% of Ho Chi Minh City under water. Associated losses in property and damages to the national economy are significant, with 10-12% of the population directly affected, costing about 10% of GDP, according to the National Strategy on Climate Change (GoV, 2011c). Such severe consequences in Vietnam are an explicit threat to poverty alleviation and hunger eradication, as well as to the achievements of the United Nations' Millennium Development Goals and the new Sustainable Development Goals. The sustainable development of the country is placed in severe jeopardy (UNDP, 2009). Already, in recent years, natural disasters stemming from climate change have become more severe and more frequent, bringing damage and destruction to economies, cultures, and natural environments. Between 2001 and 2010, floods, storms, landslides, droughts, saltwater intrusion and other climate-related disasters have left 9,500 people dead and missing, with economic losses of 1.5% of GDP each year, as analysed in the National Strategy for Climate Change 2011.

Climate change in Vietnam is also a great threat to food security in the country. Agricultural land, especially in low-lying coastal plains such as the Red River and Mekong River deltas, may shrink due to increased salinity induced by sea-level rise. Crop yields and growing seasons are expected to be increasingly altered, with higher risks of disease outbreaks. Livestock reproduction and growth are hampered by increased risks of epidemics. With the changing climate come higher risks of drought, threatening agriculture, hydropower generation, and water supplies in rural and urban areas. Changes in rainfall patterns can cause severe floods in the rainy season and exacerbate drought in the dry season, potentially inducing conflicts between water users (MONRE, 2011). Hazardous events such as flood, storms and droughts count for nearly 80% of the natural disasters in Vietnam (UNDP, 2008). The most severe impacts of rising seawater levels are expected in the Red River Delta and in the Mekong River Delta (UNDP, 2009; World Bank, 2007). As mentioned above, an increase of seawater level by one meter may cause the inundation of nearly 40% of the Mekong River delta, directly impacting the livelihoods of 10.8% of the delta population. These devastating outlooks on the potential impacts of climate change have raised the concern of all governments and of the international community (ICEM, 2009).

A key tool for anticipating and addressing damage from climate change is through specifically directed policies and planning of actions to avoid, ameliorate, mitigate and adapt. Vietnam has a centralized national approach to policy development and implementation (Clement & Amezaga, 2009; Ohno, 2009). Vietnam is a one-party state, with a strong central government at the national level, and 63 provincial governments. In most cases, policy is developed by national ministries, adopted by the national government and then passed to provincial authorities for implementation by provincial departments.

The decision-making process in Vietnam provides checks and balances horizontally (across ministries and departments), vertically (between central and local levels), and geographically (North, South, Middle and remote areas). There are three national leadership entities: (1) the Communist Party of Vietnam; (2) the National Assembly; and (3) the Government of Vietnam. This system has produced stability and continuity, but it may be less suitable for staging bold reforms or responding quickly to a changing world. Furthermore, the public policy-making process in Vietnam tends to be mostly reactive rather than proactive (Ohno, 2009). Climate change policy-making is not an exception to this.

In regard to climate change, the Government of Vietnam (GoV) has taken a range of actions, including: ratifying the Kyoto Protocol in 1994; initiating the National Targeted Program to Respond to Climate Change (NTP-RCC) in 2008; approving the National Strategy for Climate Change (NSCC) in 2011; and formulating the National Strategy for Green Growth

(NSGG) in 2012. In June 2013, the Central Executive Committee of the Party adopted Resolution No. 24/NQ-TW, on '*Active Response to Climate Change, Improvement of Natural Resource Management and Environmental Protection*', as the key policies and directions for climate change actions in Vietnam. Thus, at the national level, a climate change policy framework has been created to leverage action at lower levels (province, district and commune). However, the formulation and implementation of climate change policies at the provincial level has not been analysed and evaluated systematically from the concerned agencies although a few independent reviews have been completed including the one by a group of international and local experts (Nguyen Phuong Nam et al., 2015). Within the framework of the NTP-RCC, all line ministries and provinces were required to formulate their action plans to respond to climate change by the end of 2011 (GoV, 2008; MONRE, 2009). However, only 33 out of 63 provinces and central cities had formulated their climate action plans by the due date. There were only 40 provinces that had submitted their climate action plans to Ministry of Natural Resources and Environment (MONRE) by the end of 2013. Those that were developed followed the general guidelines prepared by MONRE in 2009. However, climate change impacts on provinces are markedly varied, because of geographic factors and the varying types and levels of vulnerability to climate change, which require specific actions suitable to local characteristics. Furthermore, there has been very little effort to analyse how these action plans have been prepared and implemented, and which challenges and drawbacks are prevalent (MONRE, 2015; World Bank, 2012a; Nam, Phuong Nguyen et al., 2015 ).

Given the problems facing Vietnam, there is an urgent need to: examine the efficacy of the procedures and approaches in the formulation and implementation of climate change policies, particularly the adopted action plans that are designed to inform targeted capacity development for provincial agencies; and to improve the comprehensiveness, effectiveness and feasibility of climate change action plans at the provincial level. Specifically, there is a need to understand the diffusion of national policies on climate change across lower levels of the administration system, and to identify gaps in the effectiveness of local climate change action plans on the ground.

### **1.3 Research objectives and research questions**

This PhD research project aims to bring a new understanding to climate action planning processes, particularly in a developing country context, at subnational level. Focussing on Vietnam as a case study, the research involves analysing the content of 40 climate action plans, and conducting qualitative research into climate action planning or plan-making processes, in three provinces.

The primary research objectives of this study are to analyse the content of provincial climate action plans and to understand climate action plan-making processes. In turn, it is expected that this will reveal ways of improving the prospects for national-level climate change policies and strategies, through the development and implementation of local climate action plans. There are four specific objectives that were made for this research:

1. To develop an analysis framework, taking account of literature and practice to date, and of the policy environment of the case study country, Vietnam.
2. To analyse the content of provincial climate action plans, in order to assess the activities proposed in these action plans throughout the country.
3. To analyse the policy formulation process, in order to identify the relationships between the policy-making process and the quality of the plans.
4. To explain the differences in the content of the provincial plans in selected provinces, which represent different vulnerabilities, and to develop recommendations for more effective policy formulation and implementation in Vietnam, especially in relation to climate change action plans.

The overarching research question is, how might the process of climate change policy-making and implementation in Vietnam at different levels be understood, and improved? Three specific research questions were asked:

1. How does content of the provincial action plans for responding to climate change vary, and what might explain this variation?
2. How are these action plans prepared, and how are they being implemented?
3. What factors influence the interpretation and implementation of the national policies at the provincial level?

#### **1.4 Research design**

The research is designed into two phases. Firstly, the national climate change policy framework was reviewed, and 40 provincial climate action plans were analysed, to understand the key contents of these climate policy papers. Then, the processes of the climate action plan-making of three provinces were investigated, to identify key factors that influence the action plan content and implementation results. This research deployed a qualitative method, with the application of a content analysis technique in the first phase, and semi-structure interviews in the second phase. In this research, policy analysis was applied as a core paradigm for understanding climate change policy-making in Vietnam from the national to sub-national levels, and for analysing the content of local action plans of

provinces as well as the action plan making process.

The formulation and implementation of provincial climate action plans is the main analytical focus in this study. Climate action plans would be expected to be the same in all provinces, as provincial governments receive the same guidelines, are allocated the same budget, and receive the same timeline from the national government. However, in this research I seek to reveal that the situation may vary from one province to another, due to a wide variety of factors such as differences in natural conditions, community engagement and stakeholder participation, qualifications and interests of local policy makers, institutional setting, policy coordination, and networking. Field research in the three selected provinces, through interviews and group discussions with provincial stakeholders, in particular people who had participated directly in the formulation of action plans, was conducted to collect data, which have been analysed to answer the questions, “How were these action plans prepared and how are they being implemented?”, “What factors influence the implementation of the national policies at the provincial level?”, and “How can the differences in provincial policies be explained?”. Selection of the three provinces for the second phase of the research will be detailed in Chapter 4.

### **1.5 Research findings**

Results of the present research indicate that 70% provinces purposely set out the objectives of ‘improve and strengthen capacity’ and ‘increase the awareness and responsibility’, although the budget allocated for capacity building and awareness raising was very neglected (5%). The action plans approved in 2012 and 2013 requested more budget than the action plan approved in 2011. Timeline for implementation of these action plans also varied among provinces and was strongly influenced by the national climate policy direction, which indicates that provincial climate action plans approved later have had longer implementation timelines than those approved earlier. The findings of the research also reveal that climate change policy-making in Vietnam is quite dynamic, and tends to be more innovative than other areas of public policy of the country. The policy-making process at national level indicates two approaches: strong political commitment in the early stage; then moving forward to a more mainstreaming approach. At provincial level, due to limited resources (both technical and financial resources), climate action planning still inherits a traditional plan-making process, in which the participation of civil societies and the private sector can be seen to be very limited. Budget allocation for implementing action plans is still heavily reliant on the state budget, and some provinces did not even propose any budget estimation in their action plans. This means that, in order to implement their climate action plans, these provinces have to prepare other action plans or budget planning. In addition,

lack of staff time and capacity has created challenges to the transformation of conventional plan-making practice into more robust and interactive planning, in which more resources can be mobilised from interested stakeholders and necessary resources can be secured for implementation. There are a number of factors influencing the climate action planning at provincial level, which include: (i) motivation and power sharing; (ii) institutional setting and policy coordination; (iii) local capacity and resources; (iv) stakeholder participation and networking; and (v) knowledge and information exchange.

## **1.6 Significance of the research**

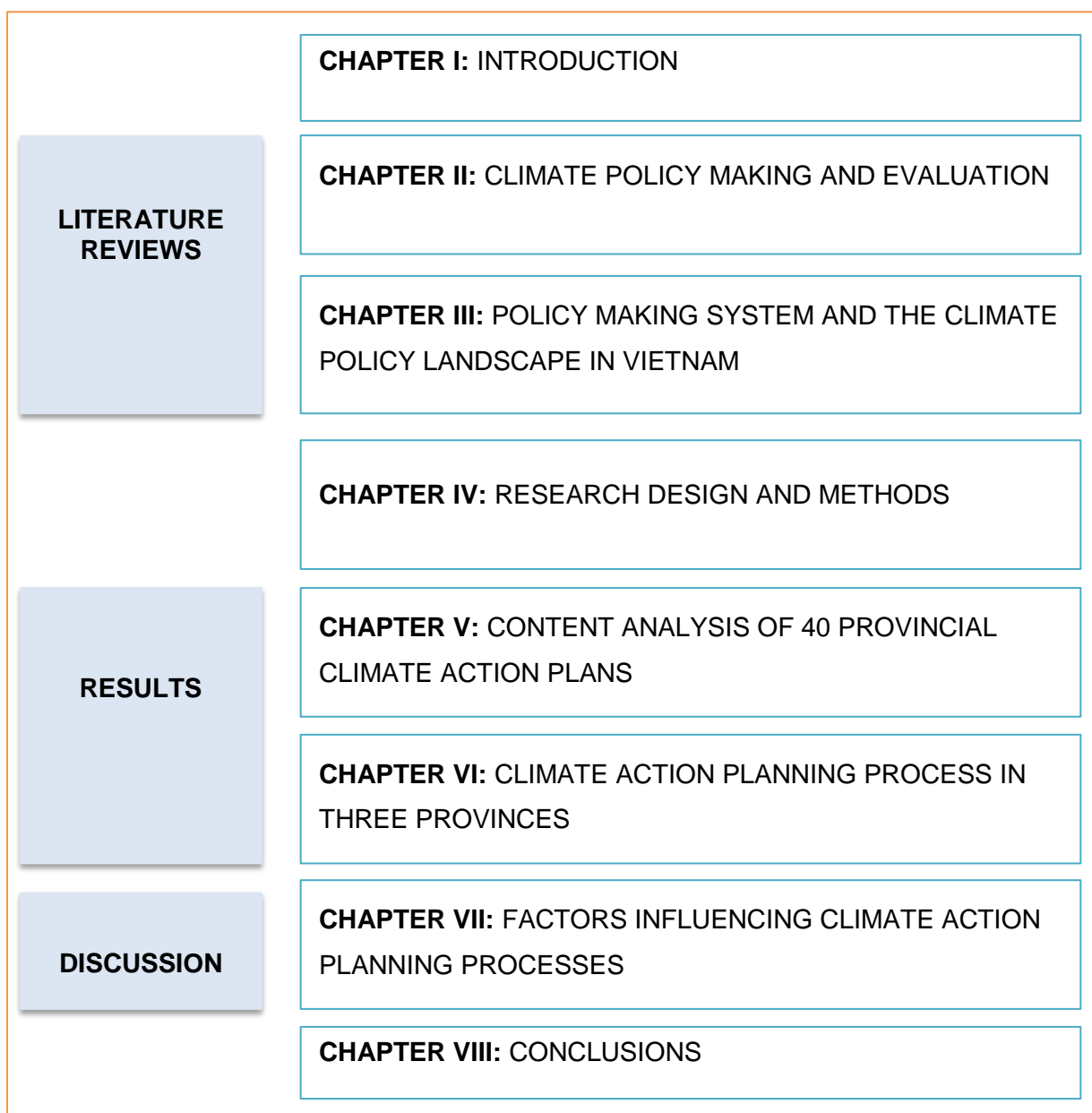
Climate policy is considered to be a relatively young and dynamic area of public policy-making (Massey & Huitema, 2013), particularly in developing countries such as Vietnam. Multi-level policy-making is an emerging concept, and has not been subject to comprehensive study in Vietnam. Climate change is a global issue, but its impacts are localised (Ayers, 2011). It is also a 'wicked' issue that requires innovative approaches, to formulate and implement policies and measures to effectively respond to the impacts of climate change. Vietnam is considered a country with a centralised-oriented policy-making system, and a prevailing top-down approach; but climate change is a new challenge that needs the government of Vietnam to be more innovative in proposing and implementing its climate change policies. New knowledge that can be drawn from this research reveals the dynamics of sub-national authorities in a centralised policy-making country regarding climate change action planning. The significance of policy networks and institutional settings in shaping the formulation and implementation of climate action plans is demonstrated across the three provinces studied. In particular, participation and learning processes in climate policy-making are critical factors in determining the efficacy of the plans produced. The research reveals that provincial governance is contingent at present, and therefore lacks capacity and power in addressing national policy frameworks in ways that reflect the local context. The research also highlights the importance of collaboration among policy makers, scientists, educators, media and citizens. This collaboration is part of the process of plan making, and is manifest during the formulation and implementation of the action plans.

## **1.7 Structure of the thesis**

This PhD dissertation comprises eight chapters (Figure 1.1). Following this introductory chapter, Chapter 2 describes the state of knowledge on public policy-making in general, and climate policy-making and evaluation in particular, through a critical review of the most relevant and up-to-date literature. Chapter 3 presents an overview of the context of Vietnam as the country of study, particularly the political system within which climate action planning is being attempted, and the national climate change policy framework. Chapter 4 presents



the research design, including the research objectives and research questions, as well as research strategies and methodologies. Chapter 5 presents an analysis of the content of 40 provincial climate action plans. Chapter 6 reports on the climate action planning processes of three provinces in Vietnam, and compares the main variations among these provinces in the formulation and implementation of their climate action plans. Chapter 7 analyses key factors influencing climate action planning at provincial level, and identifies challenges to the development of a robust action plan to respond to climate change in Vietnam. Chapter 8 provides conclusions to the thesis, including its contribution to knowledge and implications for climate action planning, as well as the limitations of the research; and speculates on future research directions.



**Figure 1.1: Schematic structure of the thesis**

## **CHAPTER II: CLIMATE POLICY MAKING- A COMPLEX PROBLEM**

### **2.1 Introduction**

Climate change is a contemporary issue that requires coordination and joint effort to effectively respond to its impact. Thus, it is an issue that places demands on governance across international, national, regional and local scales vertically, and between sectors horizontally (e.g. across departments that deal with environmental, energy and financial issues, and between private and public sector actors). The question therefore arises, can conventional policy making work effectively for climate change issues, at different geographical scales and administrative levels? This question has received attention from many scholars and governments around the world (Aall et al., 2007; Bahadur & Tanner, 2014; Bhave et al., 2014; Cashmore & Wejs, 2014; Galarraga et al., 2011; Mazmanian et al., 2013).

Adaptation to climate change is an emerging issue for policy makers, particularly in developing countries, where other issues also are prioritised in policy agendas. Massey and Huitema (2013) tackle the question of whether climate change can be considered as a policy field, given that policy fields or policy domains are three-dimensional entities comprised of substantive authority, institutional order, and substantive expertise. Climate policy is a relatively young and dynamic area of public policy making, and its development has, to date, appeared to draw more attention than deliver results in practice (Huitema et al., 2011(Massey & Huitema, 2016)). Due to its scientific, social and economic complexity and the difficulty of securing agreement on policy responses, climate change has been labelled a 'wicked problem' (Australian Government, 2007; World Bank, 2014). While many climate policies have been developed at international, national and local levels to tackle climate change impacts by reducing greenhouse gas emissions (mitigation) and improving resilience to climate change (adaptation), the evaluation of climate change policies remains challenging and encounters many difficulties (Measham et al., 2011). Such difficulties include the manner in which the decisions that inform evaluation practices are framed and undertaken. Indeed, criteria for the evaluation of climate policies in general, and climate action plans in particular, remain in the early stage of development (Huitema et al., 2011).

In order to understand climate policy making, particularly climate action planning, it is important to first review climate change governance at different scales, from global to local contexts. Understanding principles and theories of public policy making is also essential in analysing climate policy and its evolution. Public policy-making and policy analysis are discussed in detail in Section 2.2. In Section 2.3, a discussion of climate change policy and

plan making will be presented, in which local climate action planning, evaluation of climate policies, and approaches in climate action planning are detailed. Section 2.4 focuses on the factors that influence local climate adaptation, which include the motivation of local government, institutional capacity, networks and connections between agents, and adaptive capacity in climate adaptation planning. Section 2.5 provides conclusions on key messages derived from the relevant literature related to the research questions.

## **2.2 Understanding public policy making and policy analysis**

### **2.2.1 Introduction**

This section presents an overview of general public policy, and introduces processes of policy making and public policy analysis. Public policy is the set of policies (laws, plans, actions, behaviours) of a government; plans and methods of action that govern that society; and a system of laws, courses of action, and priorities directing a government action (Matheson, 2009). In an increasingly complex world of interrelated problems, many governments have tried to modernise and improve their institutional structure and the way they prepare for policy making (Burton, 2006). This has boosted public policy as a research topic for policy makers and academics. Public policy study, therefore, draws more attention when the policy problem has issues that are complex and cut across disciplinary boundaries, as is the case with climate change.

Arguably, understanding the policy-making process is a prerequisite to enable improved outcomes. This section reviews the policy development approaches and models that are widely found in the literature; and highlights the principles of policy making as well as the processes of policy-making in general and the situation in Vietnam in particular, in order to compare differences in policy making and to understand potential pitfalls of current climate change policy making. Giddens (2009 p.2) indicates that, “since the dangers posed by global warming aren’t tangible, immediate or visible in the course of day-to-day life, however awesome they appear, many will sit on their hands and do nothing of a concrete nature about them. Yet waiting until they become visible and acute before stirred to serious action will, by definition, be too late”. It is clear that responding to climate change requires humanity to reduce risks and to build better resilience to cope with impacts of climate change, not only today but also into the future. This observation is itself a basis for treating climate policy as different to other, more traditional administration tasks, and also marks out this policy area as one that requires urgent and specific actions at various levels of administration (international, regional, national, and local levels).

### **2.2.2 Processes of policy making**

Although there is no concrete concept or definition of the policy-making process, there are many models. For example, according to Howlett and Giest (2013), the five steps or stages of the policy process typically seen in the literature comprise:

- (1) Agenda setting;
- (2) Policy formulation;
- (3) Policy adoption;
- (4) Policy implementation; and
- (5) Policy evaluation.

Agenda setting refers to the first stage of the policy-making process, when a problem or an issue is initially captured by policy actors, then a range of solutions or options are proposed for intervention. Policy formulation refers to the development of specific policy options within government or administration, when possible choices are eliminated by excluding the infeasible ones, and efforts are made by various actors to have their best solutions prioritised among the remaining few. Decision making refers to the third stage, in which governments or administrations adopt a particular course of action. In the fourth stage of policy implementation, governments put their decisions into effect, using some combination of public administration tools in order to change the distribution of goods and services in society in a way that is broadly compatible with the sentiments and values of affected parties. Finally, policy evaluation refers to the fifth stage in the process, in which the results of policies are monitored by both state and societal actors, often leading to the re-conceptualisation of policy problems and solutions in the light of experiences encountered with the policy in question (Howlett, 2009). In reality, the policy-making process, or policy process, is a more complex and less smooth process than that of the five stages of the model referred to above. Wit et al. (2012, p. 9) indicate that the “policy-making process is rather a messy, complex, hard to manage and in fact rather unpredictable process”.

In many cases, stages 1, 2 and 3 are carried out at the upper level and by policy makers, while stage 4 (policy implementation) is carried out at the community level. Within the policy process, participation of policy actors or stakeholders in each stage differs greatly. According to Wit et al. (2012), in practice the role of citizens and non-governmental actors in stages 1, 2 and 3 may not be as important as it is in stages 4 and 5. Indeed, government agencies in stage 3 play an important role when approving the policy and setting the legal framework for

implementation in stage 4. In stage 5, the role of other stakeholders such as academia, non-governmental organisations, and the community at large becomes more important. However, the linkage among these stages in developing countries is typically loose. 'Good' policy is achieved by a clear agenda, feasible targets, timely decisions, and appropriate implementation activities (Wit et al., 2012).

Other formulations of the policy-making process have been recommended, for instance, Wheelan (2011) describes a policy process of 5 steps:

- (1) Identify a social goal;
- (2) Diagnose the problem;
- (3) Identify appropriate institutions for action;
- (4) Evaluate the substance and politics of the competing policy options; and
- (5) Implement enforce, and monitor the policy changes.

It is clear that making 'good' policy requires a set of tools to analyse the nature of a problem and to implement a solution that is both effective and political acceptable. Therefore, these steps of the policy-making process are interrelated. In developing countries, steps 3 to 5 have been labelled as typically weak, otherwise suffering from lack of coordination, implementation capacity, and monitoring of policy impacts (Wit et al., 2012).

Although there are variations, a 'five-steps model' variant of policy making tends to identify and emphasise the essential stages and sub-stages, each of which can be investigated alone (Howlett & Giest, 2013). This helps in the policy-making process to identify the relationship of each stage to any or all of the other stages of the process. The simplification of the policy development cycle allows key questions about public policy-making to be addressed, for example regarding the effectiveness of different tools and the identification of bottlenecks in policy making. Without this simplification of the policy development cycle, it would be very challenging to understand how a public policy was developed and what can be learnt from a policy-making process.

In the literature, the first stage of agenda setting often focuses on the difference between the systemic or unofficial public agenda, and the institutional or formal, 'official' agenda, which helps to conceptualise policy-making dynamics at this stage of the process (Howlett & Giest, 2013). The systemic agenda refers to all issues that are commonly perceived by interested stakeholders, while the institutional agenda consists only of a limited number of issues in which or to which attention or purpose is devoted by policy makers or government agencies. Requests for policy intervention may arise from different stakeholders, which makes agenda

setting prioritise urgent priorities or challenges (Howlett, 2009).

In the policy formulation stage, many studies have emphasised the importance of specific kinds of actors interacting to develop and refine policy options for government, for example Howlett and Giest (2013). However, unlike agenda setting, where the public or all actors often actively participate in the formulation stage, the relevant actors are restricted to those who not only have positions in but also some knowledge of the subject area, enabling them to comment at least on the feasibility of the proposed options. This requires an open channel for the contributions of academia or the research community. In reality, not every government opens up this channel effectively.

Decision making is the third stage of the policy development cycle. This has received a lot of attention since the 1950s, and Howlett and Giest (2013) describe different models of decision making, including the rational model and the incremental model. Decision making in the policy-making process is affected by the number of agents involved in a decision, their organisational setting, how well the problem is defined, the information available on the problem, its causes and consequences, and the amount of time available to decision makers to consider possible contingencies and the present and future consequences of decisions. Decision making at the level of ownership (or legal process) is important, as the higher the level of government that makes a decision, the stronger the legal binding will be (Howlett & Giest, 2013).

The above-mentioned models of policy-making processes apply to public policy, whereas other policy (such as corporate) may differ (Wheelan, 2011). In shaping public policy, politics plays a greater role than it does in shaping corporate strategy, as states share power with external policy actors to a greater degree than do corporate bureaucracies (Matheson, 2009). Clement and Amezaga (2009), in their research on the linkage of policy outcomes with factors located beyond the local level, through analysis of decision-making processes at the policy implementation stage of afforestation and forestry land allocation in Vietnam, also indicate that national policy makers allow flexibility in policy implementation but develop mechanisms of accountability and control between the provincial and central authorities. They also propose that discrepancies between policy intentions and outcomes are partly linked to the relative freedom provinces have to interpret and adapt policies during the implementation stage. This raises a question of how policy-making processes for other issues such as climate change responses in Vietnam can or should be formulated and implemented, and whether there is any freedom for provinces to interpret national guidelines in preparation of their provincial climate action plans.

### **2.2.3 Public policy analysis**

Public policy analysis has been defined as a means of synthesising information, including research results, to produce a format for policy decisions (the laying out of alternative choices) and of determining future needs for policy relevant information (Williams, 1971). More recently, Weimer and Vining (2005) define policy analysis as an applied social science discipline in which multiple methods are used to inquire and argue in producing and transforming knowledge on social issues, and hence relevant information that may be created and utilised in political settings to resolve policy problems. It has been argued that policy analysis has sharpened and improved the quality of adopted policies, as the world becomes more complex with many issues interrelated (Wheelan, 2011).

As discussed by Considine (2005), social and economic structures not only shape the work of policy makers, they may themselves also be the subject of policy intervention. Policy analysis, therefore, seeks to identify the stakeholders' interests, including those of policy makers. Different social and economic structures, hence, require their own policy making, including policy analysis objectives. The next section will focus on the evaluation of climate change policies, particularly local climate action plans, in order to understand the nature of policy-making processes (in this case, local climate change policies), which include both the formulation and implementation of policies at local level.

In policy analysis, different stakeholders set different objectives. Each stakeholder brings different objectives, clients' interests, common styles, time constraints, and weaknesses, as illustrated in Table 2.1. Each paradigm also has its own strengths and weaknesses as well as objectives, clients, time constraints, and common styles of policy study (Weimer & Vining, 2005). For example, the objective of policy study in a traditional planning paradigm is to define and to achieve the future desirable state of future society. In such a paradigm, there is no immediate time constraint, as it deals with the long-term future; but it has the weakness of wishful thinking or intention while ignoring the political process. In this paradigm, policy analysis has the objective of systematic comparison and evaluation of alternatives available to public actors for solving social problems. Policy analysis requires quick results and tight timelines, as it normally ties to a specific decision; and it has the weakness of bias due to client orientation and time pressure. In the present research project, the focus is on a systematic evaluation of actions and processes available to public actors for solving the social problem of climate action.

**Table 2.1. Paradigms and perspectives in policy study**

<b>Paradigms</b>	<b>Major objectives</b>	<b>Client</b>	<b>Common style</b>	<b>Time constraints</b>	<b>General Weakness</b>
Academic social science research	Construct theories for understanding society	'Truth' as defined by the discipline, other scholars	Rigorous methods for constructing and testing theories; usually retrospective	Rarely external time constraints	Often irrelevant to information needs of decision makers
Policy research	Predict impacts of changes in variables that can be altered by public policy	Actors in the policy arena; the related disciplines	Application of formal methodology to policy-relevant questions; prediction of consequences	Sometimes deadline pressure, perhaps mitigated by issue recurrence	Difficulty in translating findings into government action
Classical planning	Defining and achieving desirable future state of society	'Public interest' as professionally defined	Established rules and professional norms; specification of goals and objectives	Little immediate time pressure because deals with long-term future	Wishful thinking in plans when political processes ignored
Public administration	Efficient execution of programs established by political processes	'Public interest', as embodied in mandated program	Managerial and legal	Time pressure tied to routine decision-making such as budget cycles	Exclusion of alternatives external to program
Journalism	Focusing public attention on societal problems	General public	Descriptive	Strong deadline pressure-strike while issue is topical	Lack of analytical depth and balance
Policy analysis	Systematic comparison and evaluation of alternatives available to public actors for solving social problems	Specific person or institution as decision maker	Synthesis of existing research and theory to predict consequences of alternative policies	Strong deadline pressure-completion of analysis usually tied to specific decision	Myopia resulting from client orientation and time pressure

Source: Weimer and Vining (2005)



Table 2.1 illustrates that policy-making is not a uni-directional nor uni-dimensional process. Moreover, a systematic approach is required to reveal the multiple dimensions of the process in any particular case. Such a systematic approach was adopted to perform comparison, analysis and evaluation of climate change policy and planning in Vietnam. Understanding the paradigms of policy study, particularly public policy, provides improved guidance to policy-making processes.

The above review on the extant literature on public policy analysis reveals that policy analysis is critically important in designing and redesigning measures to respond to climate change. In the following section, detail of climate action planning and evaluation of climate policy (a form of climate policy analysis) will be reviewed based on the most relevant available literature.

## **2.3 Climate policy making and evaluation**

### ***2.3.1 Introduction***

Literature on climate policy making in general and climate action planning in particular has increased significantly in recent years, both in number and degree of contextual diversity (Cloutier et al., 2014; Regmi et al., 2014; Tang et al., 2010). In this section, knowledge and experience of local climate action planning, evaluation and monitoring of local climate policies and measures, and approaches in developing climate adaptation, will be reviewed and analysed.

### ***2.3.2 Approaches in climate adaptation planning***

In order to cope with climate change, many measures have been undertaken at different levels of management (Cloutier et al., 2014). At first, efforts were devoted internationally to seek joint action in reducing greenhouse gas emissions, particularly commitments from developed nations and emerging economies. Recently, as adaptation to climate change has drawn more attention from governments around the world, a number of initiatives have been proposed and applied to climate change adaptation at local, regional and national levels. Common approaches in climate adaptation planning have been reviewed by Amaru and Chhetri (2013), including the science-based approach, technological- or information-based approach, experience-based approach, and managerial or organizational approach. These approaches can be applied simultaneously depending on the stage of the planning process and the available resources for adaptation planning. Each approach has its own aim in designing a climate action plan (Table 2.2).

**Table 2.2. Four approaches in climate adaptation planning**

No.	Measure of adaptation	Description
1	Science based	<ul style="list-style-type: none"> <li>• Traditional science: experimentation by formal scientific method; done through a credible research institution or scientist; published scientific research</li> </ul>
2	Technology or information based	<ul style="list-style-type: none"> <li>• Information networks: dissemination of information such as climate data; predictive modelling</li> <li>• Increased communication: collaboration among different stakeholders or levels of governance; natural disaster warning systems</li> <li>• Developing infrastructure: For example, implementation of changes to irrigation or agricultural infrastructure</li> </ul>
3	Experience based: experimentation or informal communication	<ul style="list-style-type: none"> <li>• Informal experimentation: trial-and-error, unofficial experimentation by farmers or communities in an attempt to develop effective agricultural techniques</li> <li>• Change of agricultural techniques: implementation of new agricultural methods in an attempt to increase yields or cope with drought.</li> <li>• Focus groups or interviews: facilitating experience-based communication within communities to help set developmental goals and develop climate adaptation strategies</li> <li>• Education: teaching communities about agricultural techniques and methods for producing high yields in less favourable climatic conditions; providing individuals with skills and knowledge to pursue alternative livelihoods.</li> </ul>
4	Managerial and organizational:	<ul style="list-style-type: none"> <li>• Land redistribution or resettlement changes to the management of land; migration of communities or individuals to places with more favourable environmental conditions for agriculture or with new opportunities to earn livelihood</li> <li>• Funding: financial aid for development and climate adaptation efforts</li> <li>• Creation of new programs: planning programs to aid in a community's ability to cope with drought and natural disaster, diversify livelihoods, or set future goals</li> <li>• Agenda setting: prioritizing a particular goal or problem in governance or in the development of programs</li> <li>• Diversification of livelihoods: seeking new income-generating activities to compensate for a loss in profits from agriculture</li> </ul>

Source: Amaru and Chhetri (2013)

The first approach is science based, which normally requires experimentation conducted by credible research institutions or scientists, or information obtained from scientific publication.

In this case, planning for mitigation at international and national levels prevails, which requires the use of modelling to calculate GHG emissions in different development scenarios. The second approach is technology or information based, which involves information networks (e.g. disseminate information as such climate data, modelling), communication (e.g. collaboration among different stakeholders or levels of governance, natural disaster warning system), and development of infrastructure (e.g. implementation changes to irrigation or agriculture infrastructure). The third approach is experience based, with experimentation or informal communication. The fourth approach is managerial and organisational based, such as: land redistribution or resettlement changes to the land management, moving the community or individuals to places that have less risk and more opportunities for a livelihood; providing financial support for development and climate adaptation efforts; and creating new programmes such as planning to aid a community's capacity to adapt to drought and flooding, and diversity of livelihood activities.

Adaptation is an ongoing and dynamic process, whereby societies continually respond to a changing socioeconomic, technological and resource regime (Amaru & Chhetri, 2013). Therefore, it is important to note that approaches in climate adaptation will vary from place to place and time to time, through policy learning and knowledge development.

Climate policy-making processes may differ from nation to nation, depending on the political system and available resources. Different approaches to climate adaptation may result in different outcomes. There are many existing approaches and new tools that can be used in climate change impact assessment, planning, decision making and implementation. Each approach may imply a way of framing adaptation strategies (Hartmut Fünfgeld & McEvoy, 2013). Uittenbroek et al. (2014) recommend that the policy process for climate adaptation planning at local level should cover the following seven steps:

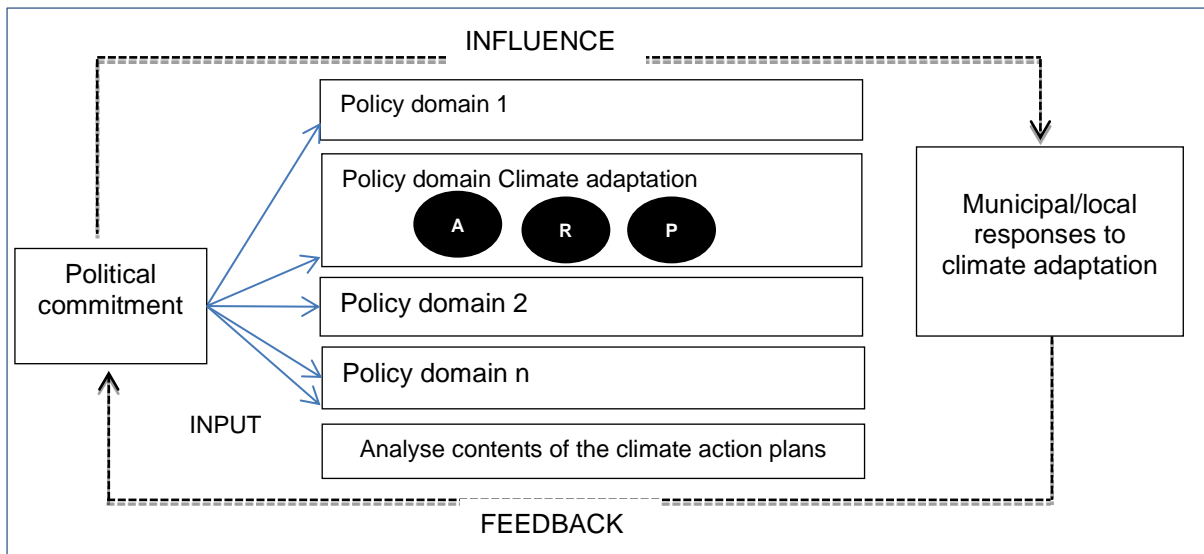
1. Setting agenda;
2. Framing problem;
3. Engaging stakeholders and the public;
4. Setting priorities;
5. Formulating policy options;
6. Generating political supports; and
7. Policy integration.

Furthermore, Uittenbroek et al. (2014) suggest an analytical framework for political commitment in climate adaptation planning. The two most important components of the framework are (1) agenda setting, framing and resource allocation; and (2) policy design and delivery. In climate adaptation planning, it is important to have political support and commitment, particularly at the early stage of the planning process. Conceptual understanding of political commitment, in what are known as the dedicated and mainstreaming approaches (Uittenbroek et al., 2014), is illustrated in Table 2.3, Figure 2.1 and Figure 2.2 accordingly. Table 2.3 indicates the features and conditions of political commitment, and the implications of the two approaches: the dedicated approach, and the mainstreaming approach (Uittenbroek et al., 2014). In a dedicated approach, political commitment is direct, and key conditions include a politically dominated agenda based upon framing conduct. Resources lie with a special bureau; and conformance to specific policy is the characteristic setting of this (typically) rapidly implemented and directed approach. On the other hand, the mainstreaming approach is founded on indirect political commitment, in which more policy-based agenda framed around the added value. For the later approach, key resources typically are institutional entrepreneurs (e.g., business entities); while policy design is based on integration, and implementation is through a performance-based approach.

**Table 2.3. Approaches in climate adaptation planning in Netherland**

	<b>The dedicated approach</b>	<b>The mainstreaming approach</b>
Political commitment	Direct	Indirect
Conditions:		
- Agenda	Political agenda	Policy agenda
- Framing	Main objective	Added value
- Resources	Special bureau	Institutional entrepreneurs
- Policy design	Specific policy	Policy integration
- Implementation	Conformance	Performance
Implications	Fast/effective	Erratic/deliberate

Political commitment, in the dedicated approach and the mainstreaming approach, is schematically presented in Figure 2.1 and Figure 2.2, respectively. Climate action in the dedicated approach can be seen as a specific policy domain. On the other hand, climate action in the mainstreaming approach is integrated into other existing policy domains.

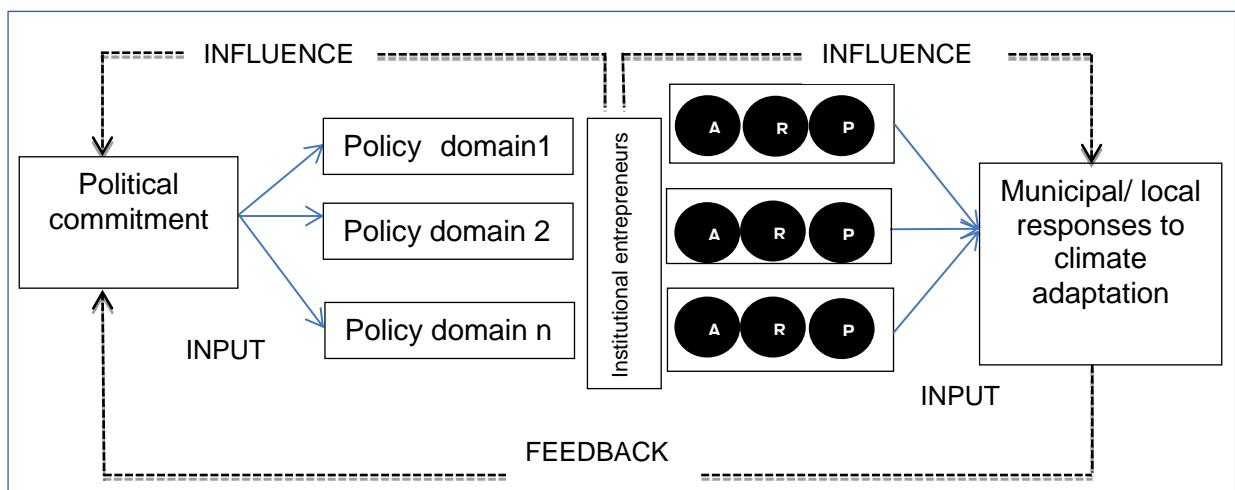


Note: A: Agenda; R: Resources and P: Policy design

**Figure 2.1: Political commitment in the dedicated approach in climate adaptation planning**

Source: Uittenbroek et al. (2014)

Political commitment in the mainstreaming approach is channelled into other existing policy domains such as urban planning, natural disaster reduction, and flooding control. The advantage of this approach is that it does not formulate standalone policy from scratch, which needs secured resources.



Note: A: Agenda; R: Resources and P: Policy design

**Figure 2.2: Political commitment in the mainstreaming approach in climate adaptation planning**

Source: Uittenbroek et al. (2014)

It is clear that each approach has advantages and disadvantages in climate adaptation, depending on the local contexts of capacity, awareness, and available resources. For example, the first generation of climate policies appear to have been more suited to the dedicated approach in climate action planning, when more political commitment is needed; whereas, in the next generation of climate policy, it may be more effective to use the mainstreaming approach to mobilise resources that have been allocated to other relevant, existing policy domains. Not only the approaches influencing the formulation of climate action plans, but the way which information and knowledge collected also important. Recently, Ziervogel et al., (2016) suggest that a shift from strengthening the science–policy interface to the knowledge–policy interface might be more appropriate in the context of adaptation planning that requires an understanding of the local context as well as of global science (p455).

### ***2.3.3 Local climate action planning***

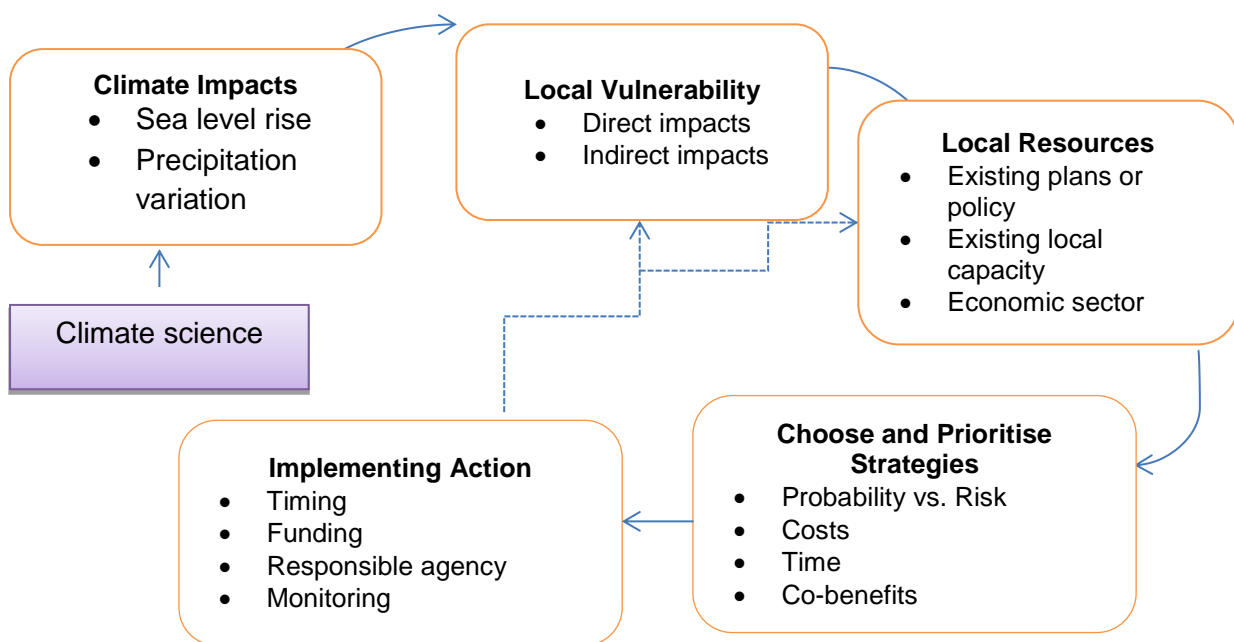
Local level climate action plans are given different names in different parts of the world. The United States (US) uses the term ‘local climate plans’. European countries tend to use the term ‘local adaptation plan’. In Vietnam, the official term is ‘action plan to respond to climate change’. In the present research, the term, climate action plan (CAP), will be used as an alternative for the term, action plan to respond to climate change, officially used in Vietnam.

Ayers (2010) highlights that the current mechanisms to provide support for adaptation under a global governance structure invariably present a paradox. Climate change is a global issue, yet vulnerability is locally experienced. Developing countries are historically less responsible for the emissions that result in climate change, yet they are most vulnerable to its impacts. This vulnerability is often compounded by limited resources, inadequate infrastructure, and weak and ineffective systems of governance. Moreover, despite the emergence of climate change adaptation policies in developing countries, they have predominantly been developed in industrialised countries.

Regmi et al. (2014) indicate that the development and implementation of local adaptation plans of action (LAPA) have been constrained by socio-structural and governance barriers, and thus have failed to successfully integrate local adaptation needs in local planning and increase the adaptive capacity of vulnerable groups. These authors also argue that the need to adopt an adaptive co-management approach, where the government and all other stakeholders can identify common local needs and responses, can run counter to uniform national efforts. For example, the World Resources Institute (2008) reports tension between different state-wide greenhouse gas (GHG) reduction policies in the USA and calls by

business for the federal government to enact a single and uniform policy. This may be suitable for mitigation policies and actions, but is not necessarily so for adaptation planning, where the differences in the physical, social, cultural and economic geographies of local areas demand localized responses. As a result, Robinson (2009, p. 164) argues, “municipal governments are important institutions in addressing climate change”. Puppim de Oliveira (2009) states that sub-national governments play an important role in the implementation of climate change-related policies, as they are closer to where the consequences of climate change will happen, and have a great potential to induce both adaptation and mitigation measures. Indeed, the local physical, socio-economic and political context can have a strong influence on how climate adaptation planning is formed and sharpened.

Boswell et al. (2012) summarise the process of climate change adaptation strategy development, which comprises five major steps: (1) identify local climate change impacts; (2) assess community vulnerability; (3) assess local adaptive capacities (local resources); (4) choose and prioritise adaptive strategies; and (5) program and fund implementation. These steps can be schematically presented as in Figure 2.3.



**Figure 2.3: Schematic procedures in development of climate adaptation strategies**

Source: Adopted from Boswell et al. (2012)

It can be drawn from this that climate science stands as the starting point for climate change impact assessments, in which the various changes in sea-level, precipitation and temperature are critical stressors in considering likely responses from local populations, systems and infrastructures. The impacts of these climate-induced changes vary from place

to place. Therefore, it follows that there is a need to conduct local vulnerability assessments in order to understand the resilience of each place, before formulating adaptation options.

Boswell et al. (2012) also point out that a simple description of impact factors, including temperature, precipitation and sea level rise, and their respective characteristics, are necessary in any climate adaptation planning. Based on this description, we can identify the potential impact on different areas/sectors before proposing any intervention measures (Table 2.4).

**Table 2.4. Impact factors and their characteristics for climate action planning**

<b>Impact</b>	<b>Characteristics</b>
<b>Temperature:</b>	<ul style="list-style-type: none"> <li>- Duration and frequency of high-heat days and/or heat waves</li> <li>- Duration and frequency of cold events</li> <li>- Timing and duration of seasons</li> </ul>
<b>Precipitation:</b>	<ul style="list-style-type: none"> <li>- Duration and frequency of drought</li> <li>- Alteration in annual precipitation total and form (e.g. snow vs. rain)</li> <li>- Intense precipitation events (e.g. days with total rainfall over a threshold)</li> </ul>
<b>Sea level and extreme weather:</b>	<ul style="list-style-type: none"> <li>- Flood level and frequency</li> <li>- Level and frequency of extreme high tide</li> <li>- Frequency and magnitude of extreme weather events</li> </ul>

Source: Boswell et al. (2012)

Climate adaptation planning that is configured in this way will start with impact assessment before proposing adaptation options. For example, temperature will be assessed first for the duration and frequency of the extreme temperature events, in terms of impacts on specific sectors (agriculture, transportation, housing and so on), then the adaptation options will be proposed for particular sectors. These options will then be assessed based on the available resources, technical capacity, and cost-benefit analysis, before being incorporated into the climate action plan. Local climate action planning usually begins with a multi-sectoral vulnerability assessment, covering the built environment, economic and social settings, and ecosystem health, as shown in Table 2.5.

This general guideline on sections of areas for vulnerable assessment could be useful for local government in preparing their climate action plan, taking into consideration the most vulnerable areas so that they can better channel their efforts in framing and implementing their climate activities. This is particularly so in developing countries where the resources for



implementation are limited, and there is thus a requirement to thoroughly assess the most necessary areas or sectors that need financial resources to be spent. (MPI et al., 2015) suggest that “*climate risk and vulnerability assessment is the critical starting point for an operational policy framework*” (p. 85).

**Table 2.5. Vulnerability assessment areas**

<b>Build environment</b>
<p><i>Infrastructures</i></p> <ul style="list-style-type: none"> <li>• Transportation (road ways, airports, marine ports, trains)</li> <li>• Water and wastewater</li> <li>• Energy</li> <li>• Communication</li> </ul>
<p><i>Buildings and planned development</i></p> <ul style="list-style-type: none"> <li>• Businesses</li> <li>• Residences</li> <li>• Community services (hospitals, schools, fire, police)</li> </ul>
<b>Economic and social setting</b>
<ul style="list-style-type: none"> <li>• Public health</li> <li>• Public safety</li> <li>• Vulnerable populations</li> <li>• Economy</li> <li>• Export/import of goods</li> <li>• Employment level and security</li> <li>• Economic flexibility</li> <li>• Food security</li> </ul>
<b>Ecosystem health</b>
<ul style="list-style-type: none"> <li>• Forests</li> <li>• Wetlands</li> <li>• Marine ecosystems and coastal environments</li> <li>• Agriculture</li> <li>• Ground water</li> <li>• Surface water (rivers and lakes)</li> </ul>

Source: Boswell et al. (2012)

Climate action plans can take many forms, and vary greatly in terms of scope and length. Indeed, they can be stand-alone plans or incorporated into local development plans such as land-use plans (Bassett and Shandas, 2010). Climate action plans, as recommended by Boswell et al. (2012), commonly contain elements such as greenhouse gas emission inventories, forecast and reduction targets, mitigation and adaptation policies and actions, implementation programmes, and plans for monitoring and evaluation.

The climate action planning process encounters difficulties where there is poor availability of reliable and comprehensive information on climate impacts, and climate change vulnerabilities for local communities, physically, economically and socially (Measham et al., 2011). In such cases, we can expect both impacts and proposed responses to be rather vague and ill-defined. As pointed out by Cloutier et al. (2014), climate adaptation planning at the local level invariably faces difficulties in data availability, and in turn also invariably encounters difficulties in the promotion of the selected adaptation measures over other priorities. In addition, Cloutier et al. (2014, p. 470) conclude:

“Although the challenge of climate change is essentially viewed from a climate-based perspective, it seems appropriate to keep the discussion within a territorial framework rather than climate trends and projections in order to improve the social relevance of the adaptation plan. By articulating the real characteristics of the territory with conventional intervention practices and forecasted climatic trends, the territorial concerns and current practices for which relevant adaptation tools could possibly be applied can be identified and integrated”.

### ***2.3.4 Evaluation and monitoring of climate policies***

Climate change policies have been evaluated by various scholars (Baker et al., 2012; Dubash & Jogesh, 2014; Fu & Tang, 2013; Tang et al., 2010; Tang et al., 2013). However, the development of criteria for evaluation of policies responding to climate change is still in its infancy. As a result, most of the studies on the issue still apply commonly used, generic policy evaluation criteria (Huitema et al., 2011), as indicated in Table 2.6.

Many climate policies have been developed at international, national and local levels to tackle climate change impacts by reducing greenhouse gas emissions (mitigation) and improving resilience to climate change (adaptation). However, the evaluation of climate policies remains its infancy, and tracing the manner in which policies are framed and performed is not very well described or understood (Huitema et al., 2011). Criteria on evaluation of climate policies in general and climate action plans in particular are in the early stages of development.

Evaluation of climate policies has received attention from governments and researchers as well as development agencies. Evaluation approaches differ according to scale and many other factors. At international and national levels, climate policy evaluation has, to date, been mainly focused on attempting to test the effectiveness of mitigation measures, particularly reduction of greenhouse gas emissions (Damsø et al., 2016; Salon et al., 2014). At the local level, evaluation of climate policy is more complex and diverse, encompassing both mitigation and adaptation policy domains. Due to the complexity of climate change, policy evaluation often covers only a narrow range of criteria. Huitema et al. (2011) suggest that complexity, reflexivity, and participatory analysis of climate policy have a more complex relation than is often assumed, and that more work on climate policy evaluation is needed (Table 2.6).

**Table 2.6. Criterion and leadings questions for policy evaluation**

<b>Criterion</b>	<b>Leading questions, example</b>
Goal attainment and effectiveness	Where policy goals have been achieved, and whether this can be attributed to the policy
Cost-effectiveness	How much of a given benefit is delivered per unit of expenditure expressed as the net benefit or cost per unit of effectiveness? (e.g. tons of carbon mitigated or number of vulnerable people protected).
Efficiency	Have the right goals been formulated, should certain emission reductions should be achieved by one sector or another, or do the benefits of reduced emissions outweigh cost incurred?
Fairness	Relates to issue of equity, including the question whether 'windfall profits' (unfair competitive advantages) have arisen because of climate policies (e.g. emission trading creates a potential for those with many emission credits, i.e. the bigger polluters).
Legitimacy	Does the public accept the policies, does the policy meet criteria of democratic accountability such as transparency?
Coordination	Is the policy well-coordinated with other existing policies?
Legal acceptability	Are policies in accordance with legal principles?

Source: Huitema et al. (2011)

Goal attainment and effectiveness has received much attention in existing climate policy evaluation work. In order to analyse the content of climate action plans, it is necessary to

develop an analytical framework that includes goal attainment and effectiveness. Most studies related to climate change policy evaluation so far have focused on evaluating the targets of greenhouse gas (GHG) emissions reduction, and activities proposed in the policy, and/or upon analysing capacities to implement proposed activities of related stakeholders at different levels. For example, these provide the focus for the studies of Baker et al. (2012), Tang et al. (2010), Tang et al. (2013), Fu and Tang (2013), and Dubash and Jogesh (2014). They emphasise either focus on policy content or on policy-making processes, rather than upon the relationship between the content and policy or plan-making process. Baker et al. (2012) evaluated the outputs of the climate adaptation action plans of local governments in South Australia. Fu and Tang (2013) focused on evaluation of drought resilience in the context of climate change; and, within this, the four plan components, of 'factual basis', 'inter-governmental coordination and capabilities', 'policies, tools, and strategies', and 'implementation' were used to evaluate the action plans.

Despite the rapid growth in climate policy evaluation and analysis, it remains in relative infancy as a practice, compared to more established policy and practice arenas, such as resource management. Massey and Huitema (2013) in fact doubt whether climate change can yet be considered as a policy field. This debate takes place in the context that climate change may be emergent but is an urgent priority for action, and yet it also has to compete with other more established and understood policy priority areas. Policy fields or policy domains are three-dimensional entities, comprised of substantive authority, institutional order, and substantive expertise; and this suggests that the legitimacy of climate change as a policy issue is contingent to some extent upon wider systems of policy and governance (Massey & Huitema, 2013). Indeed, climate change has been given special attention in the policy research community around the world due to its complexity and urgency.

One of the key concerns in climate action planning is to assess the adaptive capacity of the locality. The idea of adaptive capacity has also received attention from the research community; for instance, as shown in Table 2.7, Preston et al. (2011) provide examples of various perspectives for the evaluation of institutional adaptation. In their study, Preston et al. (2011) identify a different suite of relevant criteria than that proposed for assessing adaptation processes and/or planning, which serve as plausible but contextually varied foundations for the evaluation of climate change adaptation. For instance, Fusel (2008) identifies 14 core components of an effective approach to climate change adaptation; meanwhile, Perkins et al. (2007) propose six core components, which cover multi-levels of the government, that link with additional resources. Gagnon-Lebrun and Agrawala (2006) also indicate eight core components of adaptation action plans in their evaluation study;

while Smith et al. (2009) list 10 core components in their editorial comments on an architecture for government action on adaptation to climate change. The focus on evaluation of adaptation plans is varied, and the evaluation appears to be getting more comprehensive regard to the number of core components. It is worthy to note that the emphasis of evaluation focus for climate adaptation plans has shifted from the adaptation process (Gagnon-Lebrung and Agrawala, 2006) to the governance supporting adaptation planning (Smith et al. (2009). This movement indicates the importance of how climate adaptation planning has taken place, and who have been the key actors in the process.

**Table 2.7. Key research and evaluation focus for adaptation plans**

<b>Reference</b>	<b>Gagnon-Lebrung and Agrawala (2006)</b>	<b>Perkins et al. (2007)</b>	<b>Fusel (2008)</b>	<b>Smith et al. (2009)</b>
Emphasis	Emphasis on adaptation progress	Emphasis on substantive aspects of adaptation planning	Emphasis on procedural aspects of adaptation planning	Emphasis on governance to support adaptation planning
Core components	<ol style="list-style-type: none"> <li>1. Historical climatic trends</li> <li>2. Climate change scenario</li> <li>3. Impact assessment</li> <li>4. Identification of adaptation options</li> <li>5. Mention of policies synergistic with adaptation</li> <li>6. Establishment of institutional mechanism for adaptation responses</li> <li>7. Formulation of adaptation policies/modification of existing policies</li> <li>8. Explicit incorporation of adaptation in projects</li> </ol>	<ol style="list-style-type: none"> <li>1. Applicable to different levels of government and types of environmental challenges</li> <li>2. Sufficient detail for policy construction</li> <li>3. Provides means to assess sensitivity, adaptive capacity, vulnerability</li> <li>4. Suggests steps for adaptive actions</li> <li>5. Cover implementation</li> <li>6. Provides links to additional resources, includes stakeholders</li> </ol>	<ol style="list-style-type: none"> <li>1. Clear procedural structure</li> <li>2. Flexible assessment procedure</li> <li>3. Prioritization of assessment efforts</li> <li>4. Identification of key information needs</li> <li>5. Inclusion of key stakeholders</li> <li>6. Choice of relevant spatial and temporal scales</li> <li>7. Balanced consideration of current and future risks</li> <li>8. Management of uncertainties</li> <li>9. Policy guidance in the absence of quantitative risk estimates</li> <li>10. Prioritization of adaptation actions</li> <li>11. Mainstreaming of climate adaptation</li> <li>12. Cross-sectoral integration</li> <li>13. Disease-specific methods and tools</li> <li>14. Assessment of key obstacles to adaption</li> </ol>	<ol style="list-style-type: none"> <li>1. Historical climatic trends</li> <li>2. Political leadership</li> <li>3. Institutional organisation</li> <li>4. Stakeholder involvement</li> <li>5. Climate change information</li> <li>6. Appropriate use of decision analysis techniques</li> <li>7. Explicit consideration of barriers to adaptation</li> <li>8. Funding for adaptation</li> <li>9. Technology development and diffusion</li> <li>10. Adaptive research</li> </ol>

Source: Adapted from Preston et al. (2011)

Climate action plans are viewed as an increasingly important mechanism in improving climate change awareness, analysis, policy-making, and implementation, both in developed and developing countries (Baker et al., 2012; Dannevig & Aall, 2015; Platform, 2013; Regmi et al., 2014; Tang et al., 2013). According to Tang et al. (2013), over 35 states and hundreds of local jurisdictions in the US have adopted climate action plans through the city networks. In other countries, local climate change action plans have been formulated through a specific national program; for example, Australia developed a National Climate Adaptation Framework, and initiated its Local Adaptation Pathways Programme (LAPP), providing grants to local governments to develop local climate risk assessments and adaptation plans funds for local climate risk assessments and for preparation of local adaptation plans (Baker et al., 2012). Norway has created the Norwegian Climate adaptation programme to provide knowledge, experience and tools, which the planners and politicians use to formulate local action plans to respond to climate change (Dannevig et al., 2012).

Baker et al. (2012) argue that the evaluation of local climate change adaptation plans should identify how local climate action plans have been formulated and also the quality of plans, as well as the contribution of local activities and policies in combating global climate change.

Various approaches have been applied in evaluation of local climate action plans, combining qualitative, quantitative and mixed methods. For example, Fu and Tang (2013) applied a mixed-method approach in evaluation of local comprehensive plan for drought-resilient communities in the fastest growing counties in the US. Baker et al (2012), on the other hand, used a qualitative approach in evaluation of local climate change adaptation plans in Southeast Queensland, Australia.

At the multi-national level, Juhola et al. (2012) point out that the ability of a region to respond to climate change depends on many factors, including economic, social and political capacity, as well as infrastructure and technical potential. These authors assessed the generic adaptive capacity of Nordic regions, by using a set of indicators that reflect five determinants of adaptive capacity. The results illustrate that Nordic regions have a high capacity to respond to climate change, but that there are also significant differences between and within regions. In this study, Juhola and colleagues found that regional responses to climate change impacts are considered to be crucial, as they are likely to target specific vulnerabilities with concrete and feasible adaptation measures. This study was not directly involved in evaluation of any regional climate change action plans in general, but rather focussed upon adaptive capacity. Higher adaptive capacity has been related to higher quality of a climate change action plan (Tang et al., 2010).

Previously, Biesbroek et al. (2010) compared national adaptation strategies (NAS) in Europe, by analysis of the nine NAS formulated from 2005-2008, which comprise Denmark (2008), Finland (2005), France (2007), Germany (2008), Hungary (2008), Netherlands (2007), Romania (2008), Spain (2006) and United Kingdom (2008). Findings from the study show that the role of NAS in the wider governance of adaptation differs between countries, but clearly indicates a new political commitment to adaptation at national policy levels. Interestingly, the authors also find that, in most cases, approaches for implementing and evaluating the strategies are yet to be defined. The paper concludes that, even though the strategies show great resemblance in terms of topics, methods and approaches, there are many institutional challenges, including those presented by structures and processes of multi-level governance. However, in this study, the authors did not analyse how these NAS were formulated and the quality of the mentioned NAS.

Before 2010, studies directly evaluating local climate change action plans were in general scarce and limited, even in the US (Tang et al., 2010); although some studies discussed the role of local policy in climate change, few research efforts directly focused on local climate change action plans (Wheeler, 2008). Remarkably, Tang et al. (2010) state that, up to 2010, no empirical model had measured local climate change action plan quality. Interestingly, Ellen Bassett and Shandas (2010) analysed 20 completed municipal climate action plans in the US, to understand both their processes and their products, including the extent to which they represented innovation in planning. The results of this study show that there is great diversity in what constitutes a climate action plan, and that some plans are motivational documents, while others are extremely detailed implementation plans with concrete goals, clear objectives, and well-reasoned methods. The decision to prepare a climate action plan at municipal or local level reflects the existence of local political will and leadership; which also influences the planning processes used, the form of the resultant plan, and the actions it identifies. Climate action plans of municipalities in the US have been formulated with the primary objective of reducing greenhouse gas emissions (mitigation measures); while the local climate change action plans in developing countries are designed more with an adaptation preference. In the (2010) Bassett and Shandas study, the authors mainly focused on analysing the key drivers in formulation and adoption of local climate action plans.

Baker et al. (2012) evaluated the quality of 7 local action plans on climate change in Southeast Queensland, Australia. The researchers applied outcome criteria to evaluate the content of local action plans to climate change. The evaluation framework in this study consisted of three elements: (1) the outcome criteria; (2) the evaluation categories; and (3) an enumeration system for coding qualitative information. Five main concerned areas were:



(1) water resource planning; (2) environmental planning and bio-diversity conservation; (3) urban planning; (4) coastal management; and (5) fire management. There are eight outcome criteria proposed by Baker et al. (2012), as presented in Table 2.8.

**Table 2.8. Outcome criteria for the evaluation of the action plans**

<b>Areas of intervention</b>	<b>Criteria</b>		
Water Resource Planning	C1. Water quantity is maintained or improved	C2. Water quality is maintained or improved	C3. Impacts of flooding are minimised or avoided
Environmental Planning and Biodiversity Conservation	C4. Landscape structure, composition and function are maintained	C5. Ecosystem, species and genetic diversity are maintained	
Urban Planning	C6. Urban heat island effects are minimised or avoided		
Coastal Management	C7. Impacts of sea level rise and storm surge are minimised		
Fire Management	C8. Wildfire are management and impacts are minimised or avoided		

Source: Adapted from Baker et al. (2012)

Criteria 1-3 are applied for the water resource planning domain; criteria 4-5 are applied for the environmental planning and bio-diversity conservation component; and criteria 6-8 are used for evaluation of urban planning, coastal management, and fire management domains, respectively. It appears that water resource planning receives special concern in their study, as a result of the direct link to impacts of climate change in Australia.

According to Baker and colleagues, local governments have awareness of climate change impacts but they have not generated the relevant adaptation plans geographically when given the opportunity to do so. The authors also indicate that the effectiveness of devolving climate change action planning to local government depends upon how structural, procedural, and contextual barriers are addressed. They observed increasing responsibility falling upon local governments to prepare and adapt to global climate change through the climate change adaptation planning process. However, in this study, Baker and colleagues

did not investigate the planning process, the key actors, or the relationship with national policies; but rather, they focussed upon the quality (outcomes) of the seven adopted local climate change adaptation plans.

Lund et al. (2012) investigated how municipalities in Denmark adapt to climate change, and how added value can be achieved by a change of governance modes. The study conducted a quantitative survey and a qualitative analysis of 10 municipal climate change adaptation strategies, as well as interviews with planners from five municipalities. Results from this study reveal that adaptation is rather narrowly defined, and that adaptation planning and implementation takes place in technical departments of the municipalities. Cross-sector collaboration, the involvement of citizens, and external resources are limited. The authors also argue that increased collaboration and meta-governance would assist local authorities in their efforts and open collaboration avenues with professionals from other sectors, researchers, citizens, and companies. This, in turn, would stimulate inter-municipal and cross-sectoral collaboration, in order to produce adaptation measures with added value and feasibility. In this study, the content of the 10 municipal climate change adaptation strategies was not analysed in detail, but rather the study focused on the process of making plans and the interaction among the municipal agencies.

According to Dannevig et al. (2012), adaptation to climate change has been added to the political agenda in many industrialised countries. However, in most of these countries, adaptation measures are yet to be implemented in legislation and are, as a result, voluntary undertakings. At the local government level, this means that adaptation has to compete with other non-mandatory issues. Dannevig and colleagues hence tried to examine how the implementation of climate adaptation measures has proceeded in eight municipalities in Norway. The results indicate that seven of the eight municipalities have implemented or have specific plans to implement adaptation measures. The findings also indicate that municipalities are able to implement adaptation policies that are not initiated at the central level, but are contingent upon a number of factors such as the efforts of individuals within the municipal organisation, municipal size, and the use of external expertise. The study of Halvor Dannevig and colleagues focused on how adaptation to climate change measures are implemented, leaving out how measures are proposed and the coordination and interaction among the municipal agencies during the formulation stages.

Tang et al. (2010) used three key components as the domain for evaluation, termed 'AAA': (1) Awareness; (2) Analysis and (3) Action. The authors applied these to evaluate the quality of local climate change action plans. 'Awareness' indicates the degree to which local planners and policy makers understand the concepts of climate change. 'Analysis' is

designed to provide an emission inventory or an assessment of climate impact. The ‘action’ component of a plan should demonstrate how a local jurisdiction can reduce GHG emissions (or how they will achieve the objectives stated in a plan). There are 36 indicators under the three components: (1) Awareness, which covers 4 indicators, focuses on Greenhouse Gas emissions; (2) Analysis comprises six indicators related to emission inventory, emission trends, vulnerability assessments, and analysis tools; and (3) Action, which proposes 26 indicators grouped into seven catalogues (Communication and collaboration policies; Financial tools; Transportation policies; Energy strategies; Waste strategies; Resource management strategies; and Implementation and monitoring strategies), as indicated in Table 2.9. This framework was used to evaluate climate change action plans in the US.

**Table 2.9. Three domains and 36 indicators used for local climate action plan evaluation in the United States**

<b>Indicators</b>	
Awareness	<ul style="list-style-type: none"> <li>- Concept of climate change or global warming</li> <li>- Concept of Greenhouse gas (CO<sub>2</sub>) emission</li> <li>- Effects and impact of climate change</li> <li>- Long-term goals and detailed targets for GHG emissions</li> </ul>
Analysis	<ul style="list-style-type: none"> <li>- Emissions inventory</li> <li>- Base year emission</li> <li>- Emission trends forecast</li> <li>- Vulnerability assessment</li> <li>- Cost estimates for GHG emission reduction</li> <li>- Using analysis tools</li> </ul>
Action	<ul style="list-style-type: none"> <li>- Public awareness, education, and participation</li> <li>- Inter-organizational coordination procedures (business, government, IPCC)</li> </ul> <p><b>Communication and collaboration policies</b></p> <ul style="list-style-type: none"> <li>- GHG reduction fee</li> <li>- Establish a carbon tax</li> </ul> <p><b>Financial tools</b></p> <ul style="list-style-type: none"> <li>- Disaster-resistant land use and building code</li> </ul>

- Mixed use and compact development
- Infill development and reuse of remediated brown field sites
- Green building and green infrastructure (urban forest, parks and open spaces) standards
- Low-impact design for impervious surface
- Control of urban service/growth boundaries

*Transportation policies*

- Alternative transportation strategies
- Transit-oriented development and corridor improvement
- Parking standard adjustment
- Pedestrian/resident-friendly, bicycle-friendly, transit-oriented community design

***Energy strategies***

- Renewable energy and solar energy
- Energy efficiency and energy stars

***Waste strategies***

- Landfill methane capture strategy
- Zero waste reduction and high recycling strategy
- Waste and storm water management

***Resource management strategies***

- Creation of conservation zones or protect areas
- Watershed-based and ecosystem-based land management
- Vegetation (forest/woodlands) protection

***Implementation and monitoring strategies***

- Establish implementation priorities for actions
- Financial/budget commitment
- Identify roles and responsibilities among sectors and stakeholders
- Continuously monitor, evaluate and update

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Source: Adapted from Tang et al. (2010)

Tang et al. (2013) assessed the content of 24 US coastal states' climate action plans for

managing the risks of extreme weather events and natural disasters. A number of 32 indicators under the 'AAA' (Awareness, Analysis and Action) framework has been created.

Under the 'Awareness' component, four indicators are:

- 1) Extreme events from climate change;
- 2) Uncertainty of climate change;
- 3) Climate change evidence identified by IPCC assessment report; and
- 4) Goals for building coastal resilience.

Four indicators are identified under the 'Analysis' component:

- 1) Identification of coastal hazards from climate change;
- 2) Vulnerability assessment;
- 3) Risk assessment; and
- 4) Assessment of adaptation costs.

Under the 'Action' component, 24 indicators, covering from land use and development regulations to development impact fees, have been established and used to assess the content of the coastal states' climate action plans.

In Tang et al. (2010) and Tang et al. (2013), evaluation indicators have been developed around three components or themes of Awareness, Analysis and Actions with respect to climate change. Most indicators are applied to evaluate how local (state) authorities in the US tackle climate change issues by reducing greenhouse gas (GHG) emissions, as stated in their action plans. However, in general the authors tried to assess the comprehensiveness of the local climate action plans based on the above-mentioned indicators, and how climate change issues are reframed at sub-national levels in the US, but did not evaluate or discuss the effectiveness of these action plans or analyse how these action plans were formulated and implemented. In addition, Ellen Bassett and Shandas (2010) evaluated climate change action plans using an evaluation matrix, instead of using criteria or indicators showing the complexities and diversities of climate change policy evaluation and assessment.

Evaluation of plan implementation is very complex, as concluded by Tian and Shen (2011). Therefore, it is useful not only to analyse the content of action plans but also to investigate

the plan-making process, in order to understand the structure and content of proposed plans as well as the delivery of the proposed activities in different contexts (e.g. policy-making systems and resources allocation mechanism).

The importance of climate adaptation is strongly influenced by how the issue is viewed and framed. In some cases, as Measham et al. (2011, p.901) point out, where “knowledge and responsibility for tracking and responding to climate change is not evenly distributed across local government departments”, climate change is conceptualised as an environmental issue. In practice, dealing with the climate change issue is normally assigned to the environmental agency, whether at national or sub-national level. However, climate change is a cross-sectoral issue that needs the involvement of different agencies within the government system, and also other related stakeholders such as NGOs, the private sector, communities, and international development organisations. Therefore, the coordination capacity of the environmental agency should be sufficient to mobilise resources to develop and deliver climate change responding options (Ayers, 2010).

Evaluation of climate action plans have been conducted at regional, national and local levels in Australia, the US, Denmark, Norway, Sweden, and other countries (Amundsen et al., 2010; Baker et al., 2012; Biesbroek et al., 2010; Dannevig et al., 2012; Dubash & Jogesh, 2014; Ellen Bassett & Shandas, 2010; Huitema et al., 2011; Massey et al., 2014; Tang et al., 2010). Most of these studies have taken place in developed country contexts, where capacity for and experiences in planning or policy-making dealing with a cross-sector, emerging and ‘wicked’ problems such as climate change may be different than those in developing country contexts (Ayers, 2010).

Anguelovski and Carmin (2011) highlight that many cities or municipals encounter challenges when they seek to initiate and sustain climate action plans and programs. Whether they are in the global North or South, developed or developing countries, city and sub-national authorities normally lack political support, financial and human resources and other forms of capacity, as they are looking to pursue both mitigation and adaptation activities. As a result, implementation of the activities proposed in climate action plans or programs needs the flexibility of local governments in mobilising resources and prioritising most urgent tasks.

### ***2.3.5 Common challenges in climate adaptation process***

In order to combat climate change effectively, there are a number of challenges or barriers that different levels of government have to deal with. Climate change is widely considered to be a complex and cross-sectoral issue. Causes of climate change can be considered as

being driven globally, but their impacts are burdens locally. Efforts at climate change mitigation have been seen to move from having a national focus to there being many initiatives from communities, municipal and cities around the world having the aim of GHG emissions reduction. This kind of localised movement contributes to achieving the targets of many national governments in reducing GHG emissions (Damsø et al., 2016; Salon et al., 2014).

Climate adaptation planning may vary from place to place, and depends heavily on the modes of governance and awareness of local leaders. Moser and Ekstrom (2010) in their study highlight a list of common barriers in climate adaptation process (Table 2.10). In each stage of the adaptation process, there are a number of barriers. For example, in the first stage of problem detection, common barriers are the existence of a signal such as flooding or extreme drought, threshold of concern, and threshold of response needs and feasibility. Gathering and uses of information regarding to climate change encounter many barriers such as the availability and accessibility to the information as well as the reliability of the information, and legitimacy and receptivity to information. When it comes to defining or redefining the problem for development of adapting options, the barriers are threshold of response need and feasibility and level of agreement. It is not easy to have a consensus from all stakeholders on the scope of the issues and how the issue is framed or defined. In developing options for climate adaptation, barriers are leadership to lead the process, ability to identify and agree on goals or objectives as well as on measures to achieve goals, control over process of developing options, and control over the proposed options. In order to assess options for climate change adaptation, information and data availability is normally considered as the biggest challenge (Amundsen et al., 2010). Agreement on the best option for climate adaptation is also one of the barriers that occurs in the planning process. It is clear that barriers are observed in every stage of climate adaptation, and understanding the nature of these barriers is critically important to overcoming challenges in developing a robust climate action plan.

**Table 2.10. Common barriers in the stages of climate adaptation process**

<b>Process stages</b>	<b>Common barriers/challenges</b>
Detect problem	- Existence of a signal
	- Detection (and perception) of a signal
	- Threshold of concern (initial framing as problem)
	- Threshold of response need and feasibility (Initial framing of

Process stages	Common barriers/challenges
	response)
Gather/use information	<ul style="list-style-type: none"> <li>- Interest and focus (and consensus, if needed)</li> <li>- Availability</li> <li>- Accessibility</li> <li>- Salience/relevance</li> <li>- Credibility and trust</li> <li>- Legitimacy</li> <li>- Receptivity to information</li> <li>- Willingness and ability to use</li> </ul>
(Re)define problem	<ul style="list-style-type: none"> <li>- Threshold of concern (reframing of the problem)</li> <li>- Threshold of response need</li> <li>- Threshold of response feasibility</li> <li>- Level of agreement or consensus, if needed</li> </ul>
Develop options	<ul style="list-style-type: none"> <li>- Leadership (authority and skill) in leading process</li> <li>- Ability to identify and agree on goals</li> <li>- Ability to identify and agree on a range of criteria</li> <li>- Ability to develop and agree on a range of options that meet identified goals and criteria</li> <li>- Control over process</li> <li>- Control over options</li> </ul>
Assess options	<ul style="list-style-type: none"> <li>- Availability of data/information to assess options</li> <li>- Accessibility/usability of data</li> <li>- Availability of methods to assess and compare options</li> <li>- Perceived credibility, salience, and legitimacy of information and methods for option assessment</li> <li>- Agreement on assessment approach, if needed</li> <li>- Level of agreement on goals, criteria, and options</li> </ul>
Select option(s)	<ul style="list-style-type: none"> <li>- Agreement on selecting option(s), if needed</li> <li>- Sphere of responsibility/influence/control over option</li> </ul>



<b>Process stages</b>	<b>Common barriers/challenges</b>
	<ul style="list-style-type: none"> <li>- Threshold of concern over potential negative consequences</li> <li>- Threshold of perceived option feasibility</li> <li>- Clarity of authority and responsibility over selected option</li> </ul>
Implement option(s)	<ul style="list-style-type: none"> <li>- Threshold of intent</li> <li>- Authorization</li> <li>- Sufficient resources (fiscal, technical, etc.)</li> <li>- Accountability</li> <li>- Clarity/specificity of option</li> <li>- Legality and procedural feasibility</li> <li>- Sufficient momentum to overcome institutional stickiness, path dependency, and behavioural obstacles</li> </ul>
Monitor outcomes & environment	<ul style="list-style-type: none"> <li>- Existence of a monitoring plan</li> <li>- Agreement, if needed, and clarity on monitoring targets and goals</li> <li>- Availability and acceptability of established methods and variables</li> <li>- Availability of technology</li> <li>- Availability and sustainability of economic resources</li> <li>- Availability and sustainability of human capital</li> <li>- Ability to store, organize, analyse, and retrieve data</li> </ul>
Evaluate effectiveness of option	<ul style="list-style-type: none"> <li>- Threshold of need and feasibility of evaluation</li> <li>- Availability of needed expertise, data, and evaluation methodology</li> <li>- Willingness to learn</li> <li>- Willingness to revisit previous decisions</li> <li>- Legal limitations on reopening prior decisions</li> <li>- Social or political feasibility of revisiting previous decisions</li> </ul>

Source: Moser and Ekstrom (2010)

In addition to research of Moser and Ekstrom (2010) on barriers in each stage of climate change adaptation process (Table 2.10), Massey et al. (2014) provide a list of potential relevant variables in adapting to climate change in European Union country members, which includes drivers and barriers of both internal and external variables (Table 2.11).

**Table 2.11. Overview of potential relevant variables in adapting to climate change**

	<b>Internal</b>	<b>External</b>
<b>Drivers</b>	<ul style="list-style-type: none"> <li>- Extreme weather events</li> <li>- Increased public awareness</li> <li>- Domestic political pressure</li> <li>- Scientific research</li> </ul>	<ul style="list-style-type: none"> <li>- Efforts by international organisation</li> <li>- Efforts by European Unions</li> <li>- Financial supports from international funds</li> <li>- Pressures from NGOs</li> <li>- Motivated by progress in other countries</li> </ul>
<b>Barriers</b>	<ul style="list-style-type: none"> <li>- Lack of political awareness</li> <li>- Lack of institutional capacity</li> <li>- Lack of financial resources</li> <li>- Lack of time and human resources</li> </ul>	<ul style="list-style-type: none"> <li>- Neighbouring countries not adapting</li> <li>- Lack of guidance by European Union</li> <li>- Communicating/language barriers</li> </ul>

Source: Massey et al. (2014)

Extreme weather events, increased public awareness, domestic political pressure, and scientific research evidence are key internal drivers for promoting adapting activities to climate change. Meanwhile, the internal barriers hindering climate adaptation include lack of political awareness, lack of institutional capacity, lack of financial resources, and lack of time and human resources. In addition, the external drivers to climate adaptation are efforts of international organisations and financial support from international funds, the pressures from NGOs, and motivation from other countries. For example, in their European study, Massey

et al. (2014) stress that these external barriers include communicating with other countries, lack of guidance from the European Union, and lack of reciprocal action across jurisdictions.

A study by Regmi et al. (2014) reveals that implementation of local adaptation plans have been constrained by socio-structural and governance barriers. They also argue the need to adopt an adaptive co-management approach where the government and all other stakeholders identify a common local-and national-level mainstreaming strategy for knowledge, resource mobilization, and institutional development. Bressers and O'Toole (1998) state that the process of policy formulation usually involves the implementing agency/(ies), hence the role of policy makers in the implementation process is important. The authors also pose the question of whether or not government also assigns itself (via affiliated organisations, such as line ministries or agencies) an important task in the implementation process; or whether the policy makers are happy to leave the challenge of execution to more remote organisations, for example relatively independent bodies such as government cooperation or lower levels of government. Furthermore, Bhave et al. (2016) studied the Robust Decision Making (RDM) approaches in climate change adaptation revealed that data requirements, lack of examples of RDM in actual decision-making, limited applicability for surprise events, and resource constraints are likely the main barriers for successful application of RDM approaches in developing countries. Oberlack (2016) also stresses that institutions are one of the decisive factors which enable, constrain and shape climate change adaptation and current understanding of institutions in adaptation situations is fragmented across the scientific community, evidence diverges, and cumulative learning is limited. In order to respond to climate change, decision makers at different levels of government tend to address this challenge by framing adaptation as a decision problem, whereby the responses to impacts of change are addressed within existing decision processes centred on defining the decision problem and selecting options. However, this 'traditional decision-making' is constrained by societal values and principles, regulations and norms and the state of knowledge (Gorrdard et al., 2016). As a result it is unsuitable for addressing two groups of barriers in climate adaptation, (1) specific examples of how interactions between values-rules-knowledge systems constrained existing framings of decision making and the development of options for coastal adaptation; (2) limitations in the adaptive management strategies that underpinned the projects. Previously, Jon Barnett and O'Neill (2010) proposed a definition of maladaptation as 'action taken ostensibly to avoid or reduce vulnerability to climate change that impacts adversely on, or increases the vulnerability of other systems, sectors or social groups'. They also listed five distinct types or pathways through which maladaptation arises; namely actions that, relative to alternatives: (1) increase emissions of greenhouse gases; (2) disproportionately burden the most

vulnerable; (3) have high opportunity costs; (4) reduce incentives to adapt, and (5) set paths that limit the choices available to future generations. The authors also discussed in their study on these five types of maladaptation with reference to decisions to (mal)adapt to water stress in Melbourne. The findings reveal that there are five pathways to maladaptation offer a basis by which adaptation decisions can be screened for their possible adverse effects. Each implies a question and a line of investigation that diligent policy makers could ask and strike for answers to before committing resources to adaptation decisions.

### **2.3.6 Summary**

Local climate action planning has drawn attention from academia, practitioners, policy makers and development agencies around the world, due to its complexity and the urgency of local responses to climate change from both mitigation and adaptation perspectives. The procedure in local climate action planning proposed by Boswell et al. (2012) stresses that local climate change impact and vulnerability assessment is critically important in designing adaptation options. It is also necessary to identify available resources, and selection of the intervention activities, in order to ensure that the proposed options can be implemented within the available resources.

Evaluation studies of climate change policies in general, and local climate action plans in particular, have been conducted around the world, but most research activities have taken place in developed countries (Baker et al., 2012; Baynham & Stevens, 2013; Preston et al., 2011; Tang et al., 2010; Tian & Shen, 2011; Webler et al., 2014). Various approaches and criteria have been applied to understand either the quality of the policy or the decision-making process. The evaluation has been conducted on regional-, national- and local-level climate policies, with different focuses. Evaluation studies have also pointed out the barriers and challenges in climate action planning, particularly at local levels. In Section 2.4, a number of factors that influence local climate action planning will be analysed and discussed.

Policies and measures for climate change adaptation have been adopted increasingly by developing and developed countries. According to Massey et al. (2014), in the period 2005-2010, the total number of recorded adaptation policy measures in European countries grew by some 635%. It is clear that adaptation to climate change has received special attention from governments at different levels, from multi-national to national and from national to local authorities. Current policy-making systems have a strong inheritance from conventional approaches, which are typically driven by top-down mechanisms. However, it is sub-national governments (cities, states, counties) that have taken the lead in tackling climate change,

even in countries where national governments have been reluctant to support international efforts, particularly in the US, European Unions and Australia. This suggests an important role for sub-national governments in formulating and implementing climate policies and actions, even though they are not generally subjected directly to international pressure or agreements. They are, however, subject to local community sentiment. In addition, despite the great variation in sub-national responsibilities among countries, many sub-national administrations have control over areas that crucially affect greenhouse emissions, such as transportation and energy use (Collier & Löfstedt, 1997) as well as land use regulation and environmental education. Indeed, in several countries, international and national policies are implemented at the sub-national level. Another reason to engage sub-national governments, especially local governments, in climate policy is their flexibility to implement new policies and their knowledge that bonding to the field where impact is most felt on local communities. Because they tend to be smaller, decisions can be taken quickly and their structure can adapt faster to new situations, as compared to larger and more bureaucratic national governments. Sub-national governments are also closer to their constituencies, and can suffer more closely the pressures from environmentalists and other climate-concerned groups. Moreover, even though many sub-national governments are under-resourced to take action related to climate change, across numerous local jurisdictions lie innovative policies that can potentially be translated, or even themselves be up-scaled, to become national policies (Tompkins & Amundsen, 2008).

There remain many obstacles to the involvement of sub-national governments in policy making to tackle climate change. Firstly, many sub-national administrations lack the autonomy to take action in policies that affect climate change. Their authority to regulate economic agents or impose certain local green taxes may be limited. They may not have the institutional capacity or the financial resources necessary to implement actions concerning climate policies, which can be expensive, such as some adaptation policies (e.g. construction of dams or relocation of settlements). Sub-national governments may be overloaded with other local demands, and climate policy may be down the list of priorities. Moreover, national governments are those that generally have the international commitment to climate policy, so sub-national governments may leave those policies to the upper levels. There is also the economically rational argument that sub-national governments are more motivated to free-ride in a global public good (as climate stability), and they may not have incentives for implementing certain climate policies, such as mitigation, if others do not do so (Kousky & Schneider, 2003). If those governments spend resources in implementing mitigation policies and others do not make the same effort proportionally (free-riding), they would not benefit and the resources would be wasted. Finally, a more coordinated action at

national or regional level may be more effective and efficient than isolated or non-coordinated local policies.

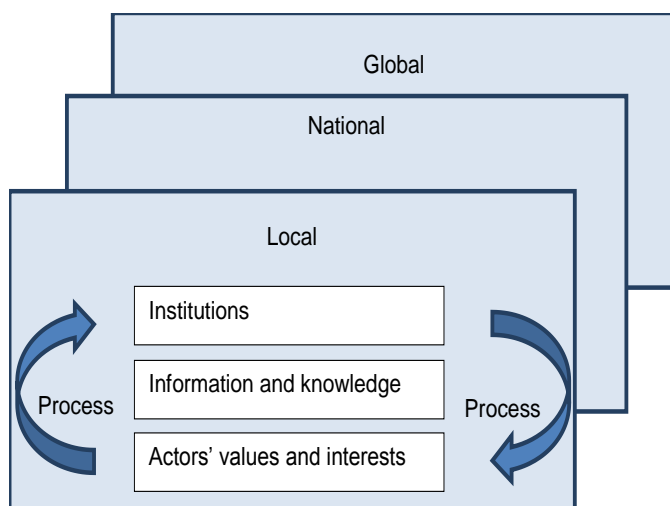
## **2.4 Factors influencing local climate action planning**

### **2.4.1 Introduction**

There are many policies and strategies for responding to climate change at different levels around the world that have been developed and implemented. However, due to the complexity of the issue, the climate change policy landscape has changed dramatically (Huitema et al., 2011; Preston et al., 2011). In the early 1970s, most of the effort was to focus on measures to halt ozone depletion; while since the late 1980s international policy has moved to greenhouse gas reduction targets and global warming. Until the 2000s, beside the effort for GHG emissions reduction (mitigation), significant effort has been devoted to the development of policies and measures to adapt to climate change impacts (adaptation) (Massey et al., 2014).

From the framework (Figure 2.4) that Loft et al. (2015) propose in their study, on challenges of ecosystem service governance, it is clear that assessing challenges of climate change governance is the same as the ecosystem service governance. The most important factors in the process are institutions, information and knowledge, and the interest of actors participating in the process. These three factors are driving forces for accessing climate change governance at international, national and local level. Challenges of climate governance, therefore, can be observed at all levels of administration. However, at the local level, climate change governance encounters more challenges due to lack of resources and capacities (Ayers, 2011). In addition, Nilsson et al. (2012, p. 751) point out that, “adaptation to climate change is often perceived as a local concern and priority, yet local stakeholders are influenced by knowledge and politics from international and national context”. The inter-relation between different levels of governments in climate change is clearly taken place.

Even in the context of developed countries such as Sweden, the institutionalising of knowledge and knowledge transfer and exchange has been observed as being not strong; as has been seen in the implementation of Local Agenda 21 in Sweden, which calls for more action at the local level. Nilsson et al. (2012) also conclude that the adaptation policy in Sweden has basically relied on soft government tools, and that there is a need to improve the feedback mechanisms from the local to national levels, in climate change policy.



**Figure 2.4: Framework for assessing challenges of ecosystem service governance**

Source: Loft et al. (2015)

Qi et al. (2008) stress that the mandate from the central government, local needs, and the international market, are three major factors that transform responses to climate change by local governments in China. Other factors that influence change in local governments' responses to climate change include impact of climate change, capacity and awareness, and leadership and vision of local government officials. In the case of China, the central government remains the most important player in directing national, regional and local responses to climate change. Qi et al. (2008) conclude that the role of local initiatives should also be complemented to promote effective responses to climate change.

The evolution of climate change policies around the world is a result of improving our understanding of climate change, awareness of climate change impacts, and resources allocated for dealing with the issue. The climate change policy landscape has not only changed in time but also evolved geographically. During the 1990s, most developed countries were only focusing on mitigation policies to reduce GHG emissions. Since the 2000s, however, more policies and measures have been proposed by developed nations to adapt to climate change impacts at different geographical levels (IPCC, 2014). Meanwhile, developing countries now not only put efforts into adaptation, but also tackle the issue of GHG emissions reduction through programme and actions on green growth (e.g. reduce energy consumption per GDP), reforestation programs, energy saving, and renewable energy developments (GoV, 2011c, 2012).

#### **2.4.2 Motivation and power sharing of local government**

Local governments respond to incentives, laws and regulations set by upper levels of

government. Financial incentives are often strong and effective means to influence local government behaviour. For example, to increase their revenue, local governments in China tend to promote construction and land auctions, which can bring more financial benefits than do other types of activities (Qi et al., 2008). In regard to the climate change issue, incentives for local governments are still considered to be neglected and invisible in most places, particularly in developing countries. As a result, the participation of wider stakeholders is still limited, and the financial incentives for local governments can be small.

In addition, local governments are confined by their political, legal, administrative, and social frameworks (van Staden et al., 2010). These constraints set limits on innovative activities and mobilisation of resources, for local governments to solve their local problems without following the general policy framework of the national government. In the relationship between the central government and localities, the rules governing the behaviour of governments are often not explicitly defined and delineated, which means that constraints often have no effect on the public because of a lack of accountability of upper levels. This contrasts sharply with governments where top officials are elected by the people and thus can be held accountable by their constituencies. Local governments are also confronted with limited resources to carry out their initiatives or policy interventions to address local issues, as their activities are heavily dependent on the resources allocated by the central government. It is assumed that local governments are more accepting-receivers than innovative actors, as it is safer to be aligned with national policy directions (Qi et al., 2008; Tian & Shen, 2011). In addition, Flyvbjerg (2002), in his study on urban planning in Aalborg, Denmark, stresses that the power with the local government is exercised in ways that involve stakeholders within and outside the government system. The power in plan making in his study was shared among the actors, but key actors dominated in deciding the plan objectives, for their own interests.

In their study in China, Qi et al. (2008) indicate that, as the highest of local government, provinces respond to calls from the central government. Provinces receive political power and much of their financial resources from central government. There has been a mushrooming of provincial/city groups leading on climate change. Essentially, this is an administrative response rather than a local context-driven response to climate change, which is considered as a priority issue for a central government that requests local government to respond actively. This response may have little to do with heightened awareness of climate change or the vision of provincial governments to tackle climate change impact as a priority for future sustainable development, as observed in, for example, the state of California and the Northeastern states in the United States (Fu & Tang, 2013; Tang et al., 2013). For the



same reason, prefectural governments in China established their leading groups on climate change in response to calls from provincial governments. This response of lower levels of government is expected or required in a command-and-control system. However, better central-local interaction, more local responses, and greater local capacity, are critical for effective policy-making and implementation of any public policy. For example, in China, the radical change in most provinces was neither a direct response to the threat of climate change nor the result of a growing awareness of climate change, so much as it was a response to the central government's expectation for these institutions to take action (Chmutina, 2010; Qi et al., 2008).

The motivation of a local government is the collective expression of the motivations of key government officials, including top leaders in the government. In practice, top government officials care about their reputation with the public, which care often reflects what and how much they have done for the region or area that they govern and the sector in which they have more interest. Presently, government officials in developing countries, for example in China, care more about economic achievements, and trade-offs between economic development and environmental pollution, than other arising issues such as climate change (Qi et al., 2008).

Kern and Bulkeley (2009) reveal that local governments have fewer opportunities to access political power as do national governments. However, local governments are better able to identify and understand local resources and local vulnerabilities. This indicates that local governments can increasingly play a key role in responding to climate change, and that more political power should be transferred to local government in responding to climate, particularly for climate adaptation.

In the mainstreaming approach, the climate change issue is integrated into existing organisational structures and routines. Limited additional resources are then made available to address climate adaptation. Alternative solutions, therefore, need to be implemented using existing and allocated resources. However, this is difficult, as most of existing resources are labelled or allocated and cannot be used differently for other purposes (e.g. organisational path dependence). Hence, it appears that, despite the overall willingness of policy makers to act upon climate adaptation, without alterations in the existing structures and routines, climate-adaptation responses will remain limited and inconsistent. This approach of mainstreaming, is especially relevant to Vietnam, where resources are limited and sectors that have secured financial and technical support will not easily re-allocate funding for other sectors such as climate change.

### **2.4.3 Institutional setting and coordination**

Dealing with climate change requires the effort of governments at different levels; and collaboration between different levels of government is critical important. Ayers (2011) highlights that, despite growing engagement with multi-level governance climate planning, the current global governance structure presents a paradox that reflects the fact that climate change is a global risk but vulnerability to its impacts is locally experienced. Specifically, developing countries are historically less responsible for the emissions that result in changes in the atmosphere, but are most vulnerable to impacts of these changes, as their vulnerability is multifaceted in limited resources, inadequate infrastructure, and ineffective systems of governance (Ayers, 2010).

Institutional setting is, *prima facie*, important in climate plan effectiveness; and this includes institutional capacity, the term used to identify qualities that appear to strengthen local innovative processes. In a recent study, Uittenbroek et al. (2014) note that the dedicated approach is based on direct political commitment, which provides opportunities such as political pressure; and new organisational structures to some extent can strengthen institutional capacity in designing climate adaptation policies. However, these authors also argue that clear positioning of new policies is important, as direct political commitment can be discontinued as other social problems enter the political arena. On the other hand, the mainstreaming approach depends on indirect political commitment, which actors have to form or establish by strategic framing and networking. Indirect political commitment often leaves organisational structures and routines unchanged, which can hamper or hinder municipal responses, as actors cannot reallocate their resources to climate adaptation themselves. This call for a change in organisational structures and routines has been barely acknowledged in the literature (Uittenbroek et al., 2014). Existing organisational structures and routines, however, can be rigid and therefore difficult to change. It is relevant, therefore, to explore how existing structures can be changed where there is only indirect political commitment, as in municipalities that apply the mainstreaming approach. This indicates that the approach to climate adaptation planning should be carefully considered, to best suit with the institutional capacity and available resources.

Uittenbroek et al. (2014) also point out, in their case study of Rotterdam, that new organisational structures are set up (in the dedicated approach to climate action planning) that become the problem owner and budget owner. If the budget is available, then knowledge development and investment in pilot projects are promoted. This provides an opportunity to learn how existing structures and routines need to be altered, based on explorative learning rather than exploitative learning. On the other hand, a barrier or

challenge to climate adaptation may arise if this new structure is not continued into the next political term and no integration or links established with other policy domains. The authors also indicate that strategic framing, institutional entrepreneurs (and their networking skills), and existing organisational structures, are essential in climate adaptation planning. Strategic framing has been proven important in order to obtain some form of political commitment to climate adaptation. For example, in Amsterdam, the Netherlands, investments in a climate-proof water system are possible within the strategic frame of a sustainable and compact city. It is up to the policymakers to develop a strategic frame that allows them enough room to execute their policy agenda. It is, however, public participation that should be secured in framing the policy objectives and measures. Another implication is that indirect political commitment appeals to the pioneering and networking skills of the individuals working in different policy domains. These are the earlier-mentioned institutional entrepreneurs such as social enterprises, non-governmental organisations and start-up companies. These entrepreneurs promote alternative solutions and mobilise their networks within and outside the municipality (province or city).

Governance is a multi-actor and multi-perspective process in which a social system coordinates, steers and manages itself, with governments playing a facilitating role (Jan Corfee-Morlot et al., 2009). Multi-level governance (MLG) stresses the significance of political activity that crosses traditional jurisdictional boundaries; and MLG also refers to power sharing between levels of government (for example, national, regional, provincial, municipal governments), with no centre of accumulated authority (Jan Corfee-Morlot et al., 2009). In addition, Francesch-Huidobro (2016) highlights that MLG can provide a useful framework to understand how resources, tasks and power are distributed through vertical and horizontal processes. Vertically, (Type 1) conceives of governance as the negotiation of power and distribution of resources between different levels of government. Horizontally, (Type 2) is where a variety of often overlapping and interdependent spheres of state and non-state actors/stakeholders/authorities are involved in allocating power and resources.

Multi-level governance is characterised as decision-making and action that is conducted and handled not only across multiple geographic scales, levels and sectors but also by a range of public, private and civil society stakeholders (Hooghe & Marks, 2003). In practice, national governments have generally been seen as the principal actors in decision making, while sub-national governments are considered more active in combating climate change issues by proposing initiatives and innovation approaches; while both have increasingly engaged with other forms of organisation in governance arrangements. For example, in the EU, increased devolution to the local level has meant that, "*what has emerged in recent years, is*

*a complex set of overlapping and nested systems of governance involving European, national, regional, and local actors, groups and networks” (Loughlin, 2001, p.20).*

The ability of sub-national governments to deal with climate change may be strengthened or weakened by the governance structure in which they are embedded (Bowen et al., 2013). Action effectiveness may be enhanced by creating networks of support with other sub-national governments, NGOs and the private sector. This can be done by improving the capacity of government mobilisation with other non-governmental local actors, to implement voluntary actions. The chain and scale of causes and consequences of climate change are interlinked at all levels (global, regional, national, and local). Successful actions to deal with those global problems can be implemented by articulating with other sub-national governments, or with governments and governance structures at other levels (Bulkeley & Betsill, 2003). This indicates the importance of local governments in dealing with climate change.

Another aspect that influences local climate action plan making is the power of local government. Power is normally considered as a key factor in local government behaviour. Firstly, the source of the power determines to whom and what the government responds and how it responds. In the context of a one-party government system such as in Vietnam, nomination and selection of local government officials are still heavily influenced by decisions made in the upper-level government rather than by the selection of local people. In practice, upper-level governments are important sources of power over local governments. However, to some extent, local governments may represent the state and possess a degree of state power, including the power to give a mandate to the next level of government and allocate state and government resources. Secondly, the power that a local government possesses determines what and how much it can do. In Vietnam, most second-tier cities and counties have no power to make legislation. They only implement legislation and policy made by the central and provincial governments. Local governments, however, are delegated much power by upper-level governments, and have much authority and discretion in dealing with specific issues (Qi et al., 2008). This decentralisation mode appears to be taken place at a certain level, but not completely, particularly when it comes to issues that require mobilisation of resources from the central government. The power in climate action planning is thus still strongly dominated by the central government than by that of local officials.

#### **2.4.4 Local capacity and resources**

Together with power, capacity determines what and how much a local government can do.

All levels of government face the challenge of a lack of capacity in dealing with climate change issues (Measham et al., 2011). This is especially the case for local governments, where awareness and technical capacity remain low. Even if the government is willing to take action, its capacity is often a limiting factor. This limitation prevents the local government from formulating and implementing a comprehensive climate action plan that can take into considerations of short- and long-term impacts caused by climate change, accelerated by other emerging issues such as rapid urbanisation, population booms, and poor infrastructure systems. For example, Measham et al. (2011, p. 894) stress that, “resource constraints can lead to self-perpetuating short-term technical fixes rather than long-term integrated approaches to addressing problem”.

Capacity to develop and deliver a ‘good’ local climate action plan should be considered in terms of both technical and financial aspects. Knowledge is a part of technical capacity, but it is also more than that. Knowledge, in this case, is not only limited to the issue of climate change (including climate characteristics, climate change scenarios, climate change impacts, sea-level rise, vulnerability to climate change, etc.) but also knowledge in coordinating the participation of all actors involved in the plan-making process, and knowledge in mobilising necessary resources for implementation of the action plan. Creating knowledge in the above-mentioned topics may take time and resources. Therefore, knowledge transfer can sometimes be seen as an alternative method for providing updated and relevant knowledge for planners. For example, learning from other provinces or municipalities that have similar socioeconomic contexts or similar ecosystems appears to be an option to start building knowledge and information on climate change.

According to Stéphane Willems and Baumert (2003), there are three types of resource that are considered important when describing local institutional capacity. Firstly, resources refer to knowledge that participants in an institution have access to and their degree of openness to new ideas. Secondly, relational resources include the range of stakeholders involved and the degree of integration of different networks into the institution. Thirdly, mobilisation capacity includes the repertoire of mobilisation techniques and the presence of what are called ‘critical change agents’. It is important, as Boswell et al. (2012) recommend, to assess available resources (capacity) in selecting the best options for local climate action plans.

One of issue in climate action planning is to identify the adaptive capacity of a region or province. Adaptive capacity is considered as one of the most important components in every climate adaptation strategy. Indeed, adaptive capacity is context specific, and can vary from country to country, community to community, among social groups and individuals, and over time (Smit & Wandel, 2006). Vulnerability to climate change is dependent on the adaptive

capacity, with higher adaptive capacity leading to less vulnerability to the impacts of climate change. Adaptive capacity of a country or region is defined by the social and natural system. Brooks and Adger (2005) stress that adaptive capacity is not directly measured easily, so it is necessary to examine potential changes in the sensitivity of human and ecological systems to climate change. Therefore, a capacity assessment includes an examination of resources necessary to adapt to climate hazards. It is, therefore, recommended to include adaptive capacity assessment in climate action planning, and to identify available resources and best options in responding to the impacts of climate change (Boswell et al., 2012). In the present research, capacity is defined as technical, financial, knowledge and network resources of relevant stakeholders needed to develop and to implement a meaningful climate action plan.

#### ***2.4.5 Stakeholder participation and networking***

In the contemporary policy-making process, public participation is considered important to shape a policy objective and to ensure the implementation of the proposed policy is well informed and received by the public. Networking is also an element in policy development around the world, particularly in developed countries. There are four types of networks in policy development that have been analysed by Bressers and O'Toole (1998): networks with strong cohesion and strong interconnectedness; networks with strong cohesion and weak interconnectedness; networks with weak cohesion and strong interconnectedness; and networks with weak cohesion and weak interconnectedness. Type of network is important in identifying the policy instruments: for example the US's agriculture sector can be considered as a network of strong cohesion and strong interconnectedness; and it is therefore well-known for a wide range of instruments that have been used with emphases on research, subsidies and price supports, and great effort in information provision, targeted advice, education, and technical assistance. Other instruments such as regulations and some fees have also been applied where the interests of the group as a whole have been at stake. Bressers and O'Toole (1998) also stress that attributes of a network can be useful indicators in understanding instrument selection of governments, and can strengthen extant discussions, largely focused on such variables as learning and policy. Climate change is a new area of public policy making; networks for this issue are therefore newly created; and these networks can contribute to the development of robust climate change-responsive policies.

Climate action planning implies a need for public participation. Indeed, logically, the more the involvement of the wider public, the better the action plan is likely to be perceived by local communities. Wider participation is also considered as an indication of public acceptance to

adopt the policy option (Serrao-Neumann et al., 2014). Stakeholder participation in policy making is not only focusing as a technical issue, but it becomes an indication of a more comprehensive and democratic policy-making approach. In practice, public participation initiatives need to go beyond the provision of sound technical or scientific information, to include deliberation about climate change impacts, and to determine also the shared responsibilities between the public and private sectors and communities, to address potential problems caused by those impacts. For example, creating a forum for proactive deliberation that allows citizens to engage early and meaningfully in the process is critically important in the context of climate change adaptation (Huiteima et al., 2011; Measham et al., 2011), as it provides stakeholders with an opportunity to construct, discuss and advocate for alternative options. Furthermore, the achievement of stronger forms of public participation in light of climate change requires sound political leadership that supports the implementation of such initiatives at the local level, particularly when planning decisions are set to have trade-offs for individuals and the community. Finally, stronger forms of public participation can only be assessed based upon the existence of both better a baseline data and evaluation mechanisms. It is argued that this should be the starting point for any mandated public participation process.

Serrao-Neumann et al. (2014) recognise three critical factors that can negatively influence the level of public participation in climate adaptation actions:

- (1) a technocratic approach to decision-making;
- (2) absence of high-order government support; and
- (3) a lack of evaluation mechanisms for public participation.

In Vietnam, particularly at provincial level, these three factors are potentially presented and worthy of investigation, particularly at provincial level, when the capacity of officers is still limited, as are mechanisms for coordination of public participation. Firstly, climate change has been considered more as a technical problem than a social matter; hence climate adaptation planning is normally assigned to technical developments or experts, and the participation of ordinary people is normally limited (Nilsson et al., 2012). Secondly, the national government provides general policy direction to all sub-national governments, and strong support cannot be secured for all. Then, sub-national governments appear to be struggling in mobilising necessary resources to develop their climate action plans. Thirdly, not all sub-national governments have evaluation mechanisms for public participation. This is due to the complexity of the climate change issue, which requires a robust flat-form to

engage and coordinate the participation of all stakeholders (Serrao-Neumann et al., 2014). In addition, improving information, communication, buy-in and understanding helps to address local government's liability concerns and supports effective decision-making, particularly in terms of identifying the best management options (NCCARF, 2012), and encouraging the active participation from all interested stakeholders in designing and implementing an action plan to respond to climate change. In addition, a recent study conducted by Nguyen et al. (2016, p. 1) on evaluating capacity for climate change adaptation in the health and water sectors in Vietnam concludes that "there are significant interconnected constraints on adaptive capacity that are further exacerbated by governance issues, such as inadequate cooperation and transparency in sharing information and data".

Given the central proposition that network characteristics tend to reproduce themselves in a given setting, one could expect that strong interconnectedness would promote the implementation of policies by organisations that also participated in policy formulation – thus preserving the pattern of continuous mutual involvement (Bressers & O'Toole, 1998). In their study, Bressers and O'Toole (1998, p. 229) highlight that, "a continuing involvement during implementation could maintain strong interconnectedness, at the same time while the availability of these contacts could promote the involvement of the network's actors in implementation of a plan or policy". As climate change is an emerging policy issue, therefore there are not many existing network actors; and this requires the policy-making process to establish a policy network that can help policy makers encourage the involvement of different stakeholders during development of a responding measure to climate change. The authors also point out that policy makers appear reluctant to entrust the full responsibility for implementation to lower authorities or other institutions outside the network, particularly if these actors have unknown or less supportive attitudes. If the target group is opposed to the policy, then policy makers tend to keep implementation in their own hands. The implementation of a policy is likely to be entrusted to organisations from within the networks that have also participated in policy formulation. This can promote the active participation of interested or related target groups in the formulation of the policy (Bressers & O'Toole, 1998). Participation of the target groups is important in designing more feasible activities, as the group can provide the knowledge and information they have to promote the dynamic of discussion in the policy formulation process (Serrao-Neumann et al., 2014).

Radaelli (1995) stresses that the interest in agenda and evaluation has nothing to do with linear views of the policy process, but is oriented towards the investigation of concepts and hypotheses about the role of knowledge. The globalisation era and international economic integration context promotes more intensive interaction among countries. Not only trade and



technology transfer but also policy transfers take place across borders. Dolowitz and Marsh (2000) stress that, directly and indirectly, implications, discussions and analyses of the process of lesson-learning, policy convergence, policy diffusion and policy transfer have been witnessed within political science and international studies. Knowledge about policies, administrative arrangements, institutions and ideas in one political setting (present or past) is used in the development of policies, administrative arrangements, institutions and ideas in another political setting; which can be called policy transfer. The authors also highlight that policy-makers tend to be increasingly reliant upon policy transfer, and this draws more attention from people who are interested in or studying public policy. In this regard, the climate action planning process in the three studied locations in Dolowitz and Marsh's research indicates that there was a significant gap in the possession of information and knowledge on climate impacts and climate vulnerabilities, and also on the policy coordination for the complex issue of climate change.

## **2.5 Chapter summary**

Contemporary public policy making has received increasing attention from the research community and society, as conventional policy-making practices reveal limitations in dealing with complex issues such as global environmental pollution and climate change. The five stages of policy making reviewed by Howlett and Giest (2013) present five stages of policy making that are suited for study purposes. In reality, the process of policy making is more complex, and has inter-linkages that cannot be separated completely into separate stages (Wit et al., 2012).

Understanding the climate change policy-making process, particularly local climate action planning, requires knowledge of national and local contexts, as well as of the content of current climate policies and plans. Based on this chapter's literature review on climate change and climate policy-making, Chapter 4 of this thesis will focus on research design and methods applied for the present research, in which content analysis and interview data analysis techniques are used for a qualitative research method approach.

Motivation of the local government in responding to climate change is critically important, and decides the mechanism for mobilising resources for implementing measures for climate change adaptation and mitigation. It is worth mentioning that the motivation of a local government will be influenced by how the climate change issue is framed and incentives that can be brought into the local area (Salon et al., 2014). Motivation also relates to power sharing, particularly in the context of multi-level governance where power should be shared vertically and horizontally.

Agrawal (2009) highlights the importance of institutional partnerships in local adaptation practices. In fact, partnerships among local public and civil institutions are more closely aligned with the adaptation practice. Meanwhile, partnerships between private and civil society institutions are relatively uncommon, and need more encouragement. Agrawal also suggests that local institutions should be enhanced, and that institutional coordination across scales needs improved. Before allocating any external support, it is important to understand local institution linkage and access patterns.

Serrao-Neumann et al. (2014) suggest that the wider the public participation, the better the climate action plan is likely to be perceived by local communities. Indeed, the participation of wider stakeholders in climate adaptation requires better communication (or coordination), strong political commitment, and effective evaluation mechanisms. Using existing actors' networks can also be a channel to encourage wider public participation in designing and implementing climate action plans. It is understandable that the interaction among the existing actors and expansion of stakeholders remains limited in the three studied localities, as even in Norway, Lund et al. (2012) also find that cross-sector collaboration, the involvement of citizens, and external resources, in climate action planning are also limited.

It is clear that there are a number of challenges in climate action planning; but they may be varied by time and location as well as by the different stages of the planning process. Lack of political awareness, lack of institutional capacity, lack of financial resources, and lack of time and human resources are considered to be the most common internal challenges (Massey et al., 2014). Factors influencing climate action planning that are mainly focussed on in recent studies are motivation, institutional capacity, available resources, capacity of local government, and stakeholder participation.

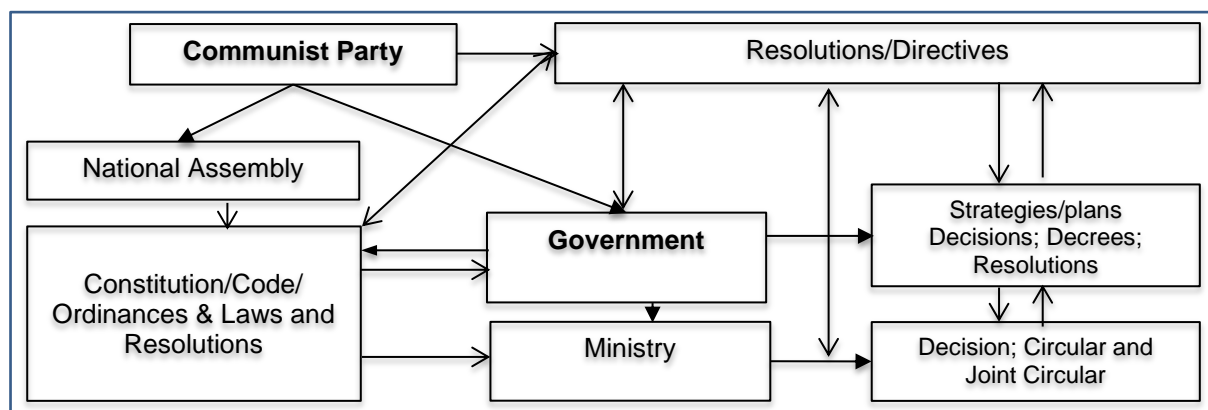
### CHAPTER III: POLICY MAKING AND CLIMATE POLICY IN VIETNAM

This chapter aims to review the policy-making system and climate change policy framework in Vietnam. Policy making system in this context refers to the public policy making of Vietnam and key actors or agencies participating in the policy making. In addition, the climate change policy framework of Vietnam will be reviewed, with focuses on actors involved in climate policy development and the content of key current national climate change policies.

#### 3.1 Policy-making system in Vietnam

For administration purposes, the country is divided into four levels: the central government, and three levels of local government (provincial, district, and commune level). Provinces are divided into districts and provincial cities. Districts are divided into communes and townships. Among these four levels of government, only central and provincial governments can propose policies.

In Vietnam, both the Vietnam Communist Party (VCP) and state systems formulate policies (particularly legal documents). The policy documents that are formulated by the VCP and state agencies are illustrated in Figure 3.1. These policy documents comprise: (1) Constitution; (2) Code; (3) Law; (4) Resolution; (5) Ordinance; (6) Decree; (7) Decision; (8) Circular; and (9) Joint circular.



**Figure 3.1: Structure of national policy formulation system (legal documents formulated by different state agencies) in Vietnam**

Source: adopted from Law on Formulation of Legal Documents 2015 (National Assembly, 2015).

Resolutions and Directives adopted by VCP are general policy directions for the National Assembly (NA) and Government of Vietnam (GoV) to formulate policies. The NA, GoV and ministries and provincial authorities are requested to provide information, data, and comments for the development of the CPV's Resolutions and Directives. In general, the

national policy is formulated as described in Figure 3.1, where the CPV establishes directions for development. Based on the CPV's directions, the National Assembly formulates and approves laws and more specific resolutions; then, based on guiding documents from the CPV and National Assembly, the Government of Vietnam (GoV) prepares policies and strategies for development and management in various areas (education, economics, healthcare, etc.). In many cases, GoV then assigns a ministry or ministries to prepare decisions, circulars or joint circulars to implement policies at the national level. Local authorities (particularly at the provincial level) will implement policies within their administrative responsibilities (National Assembly, 2015). However, some policies and strategies require local authorities to prepare action plans before implementing, for example, socio-economic 5-year development plans and action plans to respond to climate change.

It is well known that Vietnam's decision making is based on consensus. Checks and balances are in place horizontally (across ministries and departments), vertically (between central and local levels) and geographically (North, South, Middle, and remote areas). There are three top national leaders: (1) the Communist Party of Vietnam; (2) the National Assembly; and (3) the Government of Vietnam. This system can produce stability and continuity, but it is not suitable for staging bold reforms or responding quickly to the changing world. Policies remain mostly reactive rather than proactive (Ohno, 2009).

The government of Vietnam (GoV) copes with urgent issues such as inflation or traffic jams in a bottom-up fashion and without a clear focal point of leadership or responsibility (Ohno, 2009). When a serious problem is identified, an inter-ministerial committee is called and its chair is appointed. Each ministry proposes solutions from its perspective, which are summarized into general policy recommendations without execution details. Bureaucracy can supply broad ideas touching every aspect of the problem, but it does not lead to prioritization or selectivity for real actions. This approach is supplemented by a person or an organization who can decide on a shortlist of actions and, normally, the sequencing of measures among many proposals. There should also be an interaction between the higher level and the implementing level of the government to produce policies that are both realistic and sharply focused. However, in reality there are not many policies formulated in this way. This situation has led to the poor implementation of public policies in Vietnam; and in this case, the objectives of proposed policies are not fulfilled (Ha Bui et al., 2010; Nguyen Ha et al., 2010; Ohno, 2009)

According to a report prepared by Spratt (2009) for the United States Agency for International Development (USAID), policy development in Vietnam is a lengthy and

multilayered process that comprises the following steps:

- (1) Assessing the need for a new policy (agenda setting);
- (2) Drafting its various versions (policy formulation);
- (3) Sending it to provincial level for feedback (policy formulation);
- (4) Returning it to the authorizing ministry (policy formulation);
- (5) Sending it for review to other ministries and sectors (policy formulation);
- (6) Accepting comments (policy formulation);
- (7) Getting experts to review and approve the policy (policy adoption); and
- (8) Obtaining the Prime Minister's approval (policy adoption).

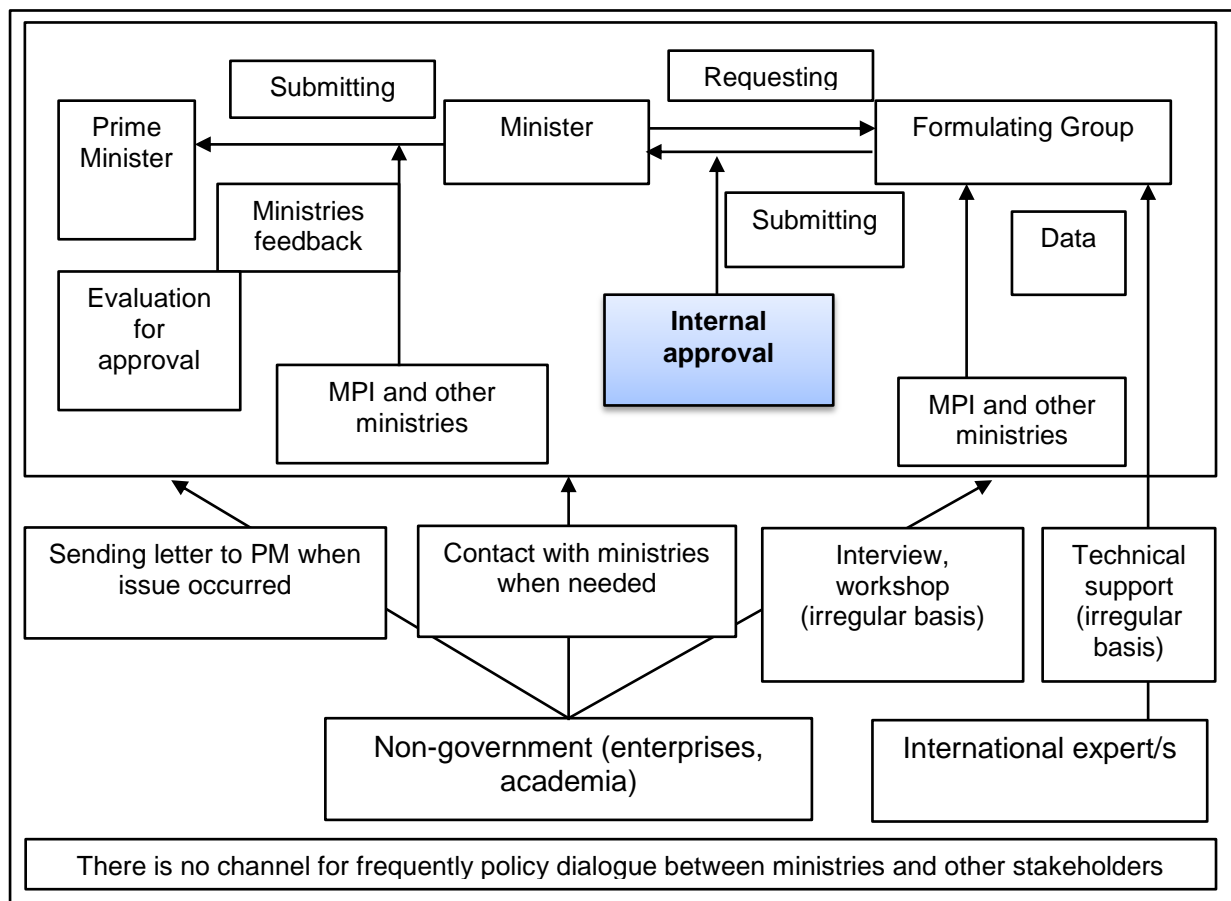
The above-mentioned steps are applied for national policies, which government assigns to a particular ministry to formulate a policy. At the provincial level, the cycle of policy formulation is typically similar, with the department role replacing the ministry role.

Step 1, assessing the need for a new policy, is normally carried out by the Ministry. Detailed studies to inform on the urgency and importance of formulation of a new policy are normally not made. Steps 3 and 5 may be undertaken concurrently. Step 7 can be considered as the initial approval by the minister after having all comments from line ministries, provinces and other stakeholders such as experts. Some policy documents can be approved by the minister, but others must be approved by the prime minister (examples include national strategies for development of sectors, e.g. climate change action plans).

The government system in Vietnam is unique. While it has a recognisable 2-tier structure (national and provincial) it operates under a single-party system. As illustrated in Figure 3.1 this system provides feedback loops via party affiliated mechanisms as well as government mechanism that give the appearance of a top-down system of policy making. The local level (normally called provincial level) is divided into lower administrative systems as districts and then communes, although these play no role in reframing national and provincial policies. Provincial departments are often required to reframe a policy to suit local conditions, and then develop appropriate provincial policies and action plans. This has the benefit of providing national consistency in approach to issues and problems, together with localized relevance. However, the policy implementation process can be uneven and may result in vastly different outcomes: as for example, in a study conducted by Nguyen Ha et al. (2010) in the evolution of HIV policy, and a study carried out by Ha Bui et al. (2010) in health policy process in Vietnam. Studies in other centralised systems have found a similar pattern of

uneven outcomes, for example, health policies in China (Green et al., 2011). According to Nguyen Ha et al. (2010), a number of factors contribute to such uneven outcomes of public policy in Vietnam, including the use of a top-down approach, passive participation in policy formulation from relevant actors, and lack of resources for implementation.

Fig.3.2 illustrates that there are two main domains involved in policy formulation at national level: (i) government actors (e.g., ministries, agencies); and (ii) non-government actors (including enterprises, NGOs, CBOs, individuals, academia etc.). Most of the formulation activities take place within the government’s boundary. Non-governmental actors are only involved in discussion at seminars or workshops. The current climate change policy formulation, however, receives support from international agencies such as UNDP, WB and ADB, and these actors are more active in participating in the development of climate policies in Vietnam.

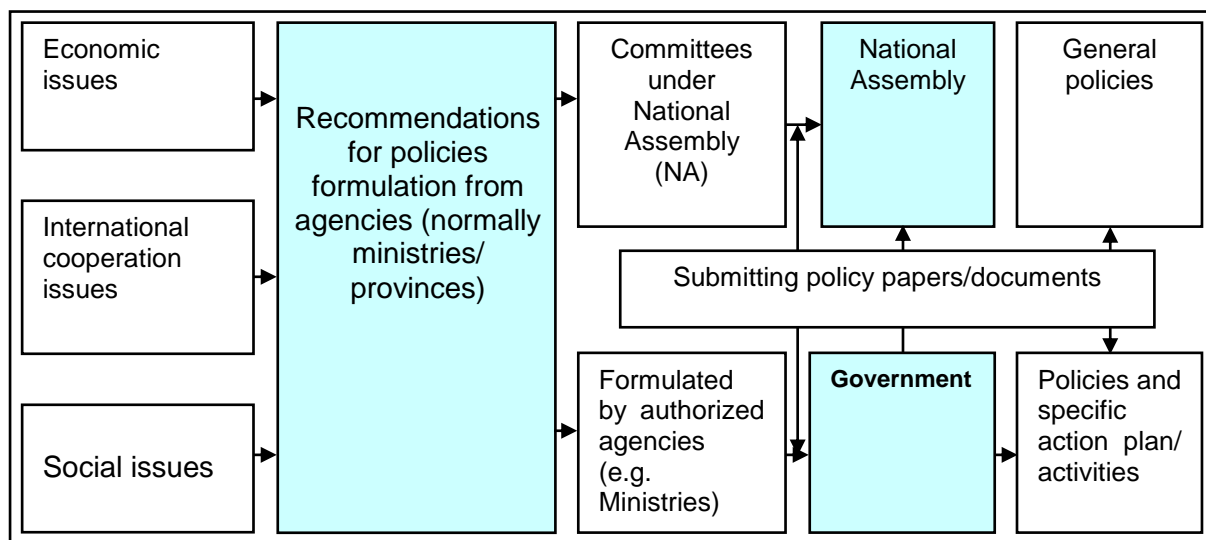


**Figure 3.2: The diagram of current public policy formulation procedure in Vietnam<sup>1</sup>**

Source: adopted from Ohno (2010)

<sup>1</sup> For example, the formulation of sectorial development strategies in Vietnam

The current public policy formulation procedure of the GoV has received criticism from international scholars (Nguyen Ha et al., 2010; Ohno, 2009; Painter, 2003, 2005; Spratt, 2009). Most criticisms focus on the coordination among stakeholders in policy formulation and implementation. Another issue is that the feasibility studies for formulation of the policy normally take place over a very short period and lack evidence-based research, which may result in difficulties in implementing policies. For example, in the final quarter of the year, recommendations for formulation of new policies are submitted to the government or the national assembly for preparation in the next financial year. In this step, the recommendations normally come from the administrative agency without studies or reports from other stakeholders. The policy agenda will be finalised and the formulation process will take place in the financial year. Lack of research has caused difficulties in the formulation and delivery of policy in the appropriate manner (e.g., it may not be necessary to formulate a new policy if the implementation of the previous policy taken place effectively). In addition, the budget allocated to the formulation of a particular policy is not available before the second quarter of the year, also affecting the policy quality. Fig 3.3 presents a diagram for formulation of general policy (e.g. laws, resolutions) in Vietnam at national level (focus on NA and GoV).



**Figure 3.3: The schematic diagram of policy formulation steps in Vietnam**

Source: adopted from Oanh (2010)

### 3.2 Climate change policy framework in Vietnam

#### 3.2.1 The actors in formulation of climate change policy

In Vietnam, the Ministry of Natural Resources and Environment (MONRE) has the principal responsibility for management of responses to climate change. Within the mandates of

MONRE, the Department of Meteorology, Hydrology and Climate Change (DMHCC) is assigned to co-ordinate climate change-related activities, while the Department of Legal Affairs (DLA) advises on the legal aspects of climate change, including legislation development, review and implementation. MONRE is also the national focal point to implement the UNFCCC and the Kyoto Protocol, as well as the coordinating office for the National Committee for Climate Change (NCCC). Vietnam submitted its First National Communication to the UNFCCC in 2003, and its Second National Communication in 2010; and the Third National Communication is being prepared with the financial support of the Global Environment Fund (GEF) and United Nation Environmental Programme (UNEP).

Climate change policy formulation in Vietnam has received support from international community. Many policy papers related to climate change have been formulated with technical support from international partners in cooperation with line ministries in Vietnam (e.g. MONRE, MARD, and MPI). Non-governmental organizations (NGOs), both internationally and nationally based, also actively participate in climate change policy development in Vietnam, through organising seminars and workshops for the members as well as actively participating in national forums on the climate change issue. Not only participating in and supporting the formulation of climate change policies at national level, NGOs are also actively involved in the implementation of climate change policies at local level. For example, the Danish Development Agency (DANIDA) supported Ben Tre and Quang Nam province to implement their climate action plan under the framework of NTP-RCC. Furthermore, many INGO and local NGOs have also supported localities in implementing measures to mitigate the impacts of climate change. For instance, Care International is active in the community-based climate adaptation approach, the World Wild Fund for Nature (WWF) is supporting the ecosystem-based climate adaptation (EbA) approach in Ben Tre, and GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit, or the German Federal Enterprise for International Cooperation) is supporting Quang Binh and Ha Tinh provinces in mainstreaming EbA into socioeconomic development plans. Rockefeller Foundation through the Asian Cities Climate Change Resilience Network (ACCCRN) has supported cities such as Can Tho, Da Nang, Quy Nhon and Lao Cai in Vietnam to conduct vulnerable assessment to climate change and to prepare local climate action plans in these cities.

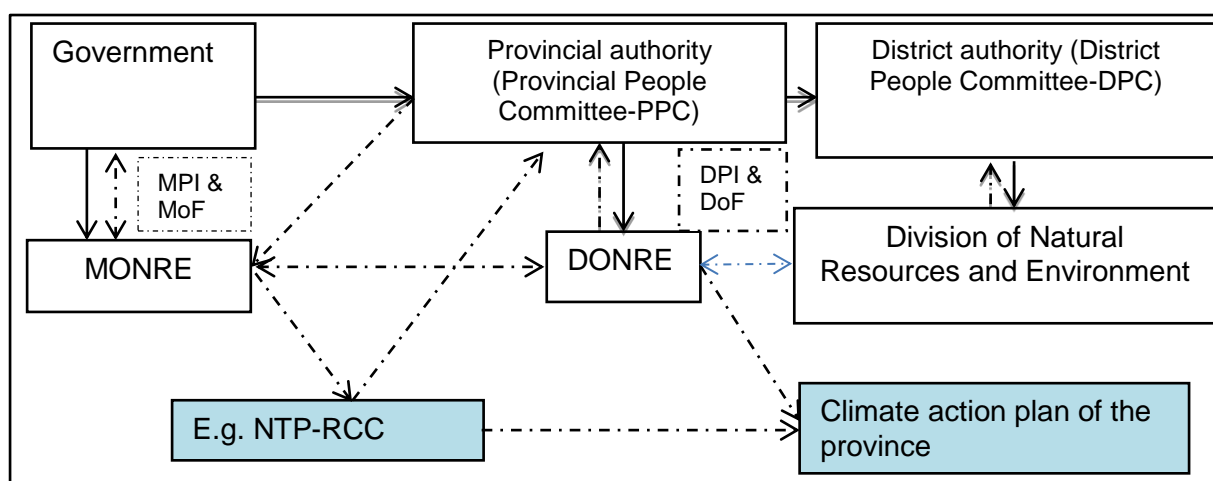
### ***3.2.2 Institutional setting for climate change policy-making in Vietnam***

Climate change is a complex and an inter-sectorial issue in Vietnam, as in other countries. In order to manage and coordinate efforts in responding to climate change impacts, a number of institutions have been established. The Ministry of Natural Resources and Environment



(MONRE), established in 2003, has been assigned as the state agency responsible for climate change issues. MONRE oversees the implementation of climate change policies at national level; and its local departments (Department of Natural Resources and Environment - DONRE) are responsible for overseeing and implementing the national and local policies in their provinces.

In Figure.3.4, the role of Ministry of Planning and Investment (MPI) and Ministry of Finance (MoF) are very crucial in allocating and expending budgets. At the moment, there is no budget line in state budget planning system for climate change activities in Vietnam.



**Figure 3.4: Schematic diagram of relations among the actors within the government system in formulation of climate change policy (e.g. NTP-RCC) in Vietnam**

Note: → indicates strong control and top-down approach; ----> indicates direction what actor should follow but less top-down approach than the previous. <----> indicates the feedback mechanism between upper and lower levels of the administrative system.

Climate change policy formulation is normally assigned to MONRE by the GoV in cooperation with the two key ministries, MPI for arrangement of budget, scope of policy covered and for budget allocation and expenditure and MoF for regulating budget spending. The National Committee for Climate Change (NCCC) was established on January 9, 2012, and MONRE was appointed as the focal point to manage the operation of the NCCC office.

### **3.2.3 The mechanisms for budget and resource allocation**

This section outlines the budget and resource allocation for national targeted program to respond to climate change (NTP-RCC) as an example for further discussion. NTP-RCC is also a typical example of budget and resource allocation for implementation of public investment in Vietnam, in which climate change action planning is one of the activities receiving support from state budget. National targeted programmes (NTPs) are government programs that serve development goals. Each NTP is a set of objectives, tasks, and

comprehensive measures on economic, social, scientific, technological, environmental, political, legal, and organizational aspects, serving one or more prioritized targets, which are often set in ten-year Socio-Economic Development Strategies (SEDSs), or five-year Socio-Economic Development Plans (SEDPs). Each NTP consists of interrelated projects that implement the program objectives<sup>2</sup>.

The process of the NTP formulation comprises the following steps:

- Before June of the fourth year of each 5-year period, ministries and their equivalent bodies make proposals for the NTP based on the selection criteria for NTPs, and submit them to the MPI and MoF;
- The MPI has the coordinating role and works in collaboration with the MoF to finalize the list of NTPs, submits them to the PM for consideration, and then submits to the National Assembly for approval of the list;
- After the list of NTPs is approved by the National Assembly, the MPI coordinates with the MoF and other line ministries to appraise the NTPs for official approval by the Prime Minister.

The current budget allocation mechanism for NTPs requires that the implementation agencies (both central and local) submit budget planning and estimations to the NTP managing agency (approved earlier by the National Assembly). It should be noted that the NTP implementation plan is part of the Social Economic Development Program (SEDP) of the corresponding line ministries or local authorities (province). Therefore, the annual plans for the NTP implementation must be consistent with the SEDP.

NTP proposals, including budget plans, have to be approved by the National Assembly based on the appraisal and budget balance prepared by the MPI and MoF for the whole state budget. The budget allocation for specific projects within an NTP is done by the NTP managing agency (a line ministry or equivalent) in coordination with the MPI and MoF. The pro-poor dimension of this allocation, if any, is usually included in the program objectives at different levels for different NTPs. A budget line is reserved for each NTP in the planning period.

Recently, the GoV has strengthened the investment management from the central state budget by issuing Instruction No. 1792/CT-TTg (October 15, 2011). Based on this policy, the MPI has also refined the regulations for NTPs for 2012 by the Guideline No. 8845/BKHDT-

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<sup>2</sup> According to Decision 135/2009/QĐ-TTg stipulating regulations on management and implementation of NTPs, signed by the Prime Minister in 2009.

TCTT (December 21, 2011), including the following general rules for budget allocation for 2012:

- NTP management institutions must formulate criteria and standards used for fund allocation;
- NTP management institutions, from 2012 onwards, must have budget allocation plan for NTP-implementing agencies at the project component level of the programs;
- Budget allocations for NTPs need to refer to sectorial development plans at local levels. These stipulations help organize the budget allocation in a more transparent way and in line with socio-economic development plans.

In addition to the main financial resources for NTP from the central state budget, provincial resources are encouraged to supplement the programs' implementation. The Decision No. 135/2009/QD-TTg on the management and implementation of NTPs stipulates that the chairpersons of provinces are responsible for mobilizing local resources in cash and kind to contribute to NTP project activities (Article 31, Point 6).

Circular No. 07/2010/BTNMT-BTC-BKHDT is the guiding document for management of finance for the NTP-RCC in Vietnam. However, it only mentions that funds would be allocated to implement tasks listed in Decision No. 158/2008/QD-TTg, but does not cover detailed cost estimation and the pro-poor criteria for selection of projects. According to the report prepared by the NTP-RCC's standing office (2011), specific guidelines on budget lines for projects should be formulated and updated, as the guidelines in Circular 07 are quite broad and not up-to-date (especially for the cost norms and budget line such as budget for administration and budget for investment), which has created difficulties in preparing proposals for project financial plans. The budget allocation for the implementation of the NTP-RCC is currently regulated by the guideline of State Budget Law (Decree No. 60/2003/ND-CP approved in June 6, 2003 and Decision No. 135/2009/QD-TTg approved in November 4, 2009) on promulgation of regulations for management and implementation of the national targeted programme (NTP).

The climate change action plan of a province is prepared by the province within the framework of the national action plan to climate change. Due to the complexity of the climate change issue, provinces face many difficulties in formulation of their action plans to respond to climate change. The next sections will describe the climate change policy framework in Vietnam and its challenges in implementation of the key policies at different levels. Specifically, NTP-RCC will be discussed in more detail in Section 3.2.4.1.

### **3.2.4 National climate change policy frameworks**

Vietnam approved the United Nations Framework Convention on Climate Change (UNFCCC) and Kyoto Protocol in 1994. Understanding about the climate change impacts to countries in the world has progressed remarkably since then. In recent years, the government of Vietnam (GoV) has developed policy frameworks and other mechanisms to respond to climate change in Vietnam: the National Targeted Program to Respond to Climate Change (NTP-RCC) in 2008, the Supporting Program to Respond to Climate Change (SP-RCC) in 2009, the National Strategy for Climate Change (NSCC) in December 2011, the National Strategy for Green Growth (NSGG) in 2012, and the Party's Resolution (No. 24/NQ-TW) to *active response to climate change, improvement of natural resource management and environmental protection*, in June 2013. These national policies provide directions and priority activities to respond to climate change in Vietnam, and are considered as a platform for reframing climate actions at provincial level.

#### *3.2.4.1 National Target Program to Respond to Climate Change*

The NTP-RCC was first approved by the Prime Minister's Decision No. 158/2008/QĐ-TTg dated December 2, 2008. NTP-RCC could be considered as the first supporting policy to leverage resources responding to climate change in Vietnam, particularly to increase awareness and improve capacity to cope with climate change impacts at national and provincial levels. The NTP-RCC has the following strategic objective:

*“to assess climate change impacts on sectors and regions in specific periods and to develop feasible action plans to effectively respond to climate change in the short-term and long-term to ensure sustainable development of Vietnam, to take opportunities to develop towards a low-carbon economy, and to join the international community's efforts in mitigating climate change and protecting the climatic system” (GoV, 2008, p. 1).*

Based on these strategic objectives, eight specific objectives of the program are as follows:

- (1) Identify the extent of climate change in Vietnam due to global climate change, and assess climate change impacts on every sector, area and locality;
- (2) Identify measures to respond to climate change;
- (3) Promote scientific and technological activities to establish the scientific and practical basis for climate change response measures;

- (4) Consolidate and enhance the organizational structure, institutional capacity, and the development and implementation of policies to respond to climate change;
- (5) Enhance public awareness, responsibility and participation; and develop human resources to respond to climate change;
- (6) Promote international cooperation to obtain external supports in response to climate change;
- (7) Mainstream climate change issues into socio-economic, sectoral and local development strategies, plans and planning;
- (8) Develop and implement action plans of all ministries, sectors and localities to respond to climate change; to implement projects, including pilot projects to respond to climate change.

Among these specific objectives, objective number eight, 'develop and implement action plans of all ministries, sectors and localities to respond to climate change; to implement projects, including pilot projects to respond to climate change', clearly requests provinces (localities) to formulate and implement climate action plans. Furthermore, NTP-RCC also sets out a deadline: by end of 2011, all provinces should formulate and approve climate action plans.

The targeted program was designed to implement activities in three phases. Phase I (2009-2010) was called the start-up period; Phase II (2011-2015) referred to the implementation stage; and Phase III (after 2015) was designed for the development stage. NTP-RCC was approved with a total budget of 1,965 billion VND (115 million USD<sup>3</sup>) for implementation. The program proposed seven priority activities:

- Assessing the level of climate change, developing climate-change and sea-level-rise scenarios;
- Developing and implementing the scientific and technological program on climate change;
- Strengthening the organizational capacity, regulations and policies on climate change;
- Raising awareness and human resources development;
- Strengthening the international cooperation capacity;
- Developing the standard framework to integrate climate change issues in development and implementation of projects and socio-economic development plans;
- Developing and implementing the actions plans to respond to climate change.

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<sup>3</sup> According to the exchange rate at that time (2008).

The prioritized activities of the NTP-RCC have been changed to meet the challenges of different climate change scenarios, due to better understanding of climate change impacts on Vietnam. These tasks have been modified three times since they were first approved in 2008. For example, in 2011, the NTP-RCC was reviewed and revised to have three priority activities (GoV, 2011d): (1) assessing the impact levels of climate change, and developing climate change and sea-level-rise scenarios; (2) developing and implementing the scientific and technological program on climate change; and (3) strengthening capacity, communication, monitoring and evaluation of the program's implementation.

The budget for implementing NTP-RCC activities in the period 2009-2015 (excluding the funds for the implementation of the action plans of ministries, sectors, and provinces) is proposed at 1,965 billion VND (equivalent to 115 million USD), of which the structure of finance sources is as follows: (1) Foreign capital for 50 per cent; and (2) Domestic capital for 50 per cent, within which central budget covers 30 per cent, local budget 10 per cent, and the private sector and other capital contributions 10 per cent. The budget of the NTP-RCC for the post-2015 period will be defined in accordance with the specific objectives for that period. However, NTP-RCC itself did not specify how the budget will be mobilised and distributed to implement the seven above-mentioned priority activities. Part of the NTP-RCC was allocated to provinces in preparing the provincial climate action plan, with an average amount of 1 billion VND (equivalent to 50,000 USD) per province. The amount is more or less the same that local municipalities in South East of Queensland, Australia received from the Federal Government to prepare their climate change action plans (Baker et al., 2012).

In 2010, the Government of Vietnam reviewed NTP-RCC in Decision No. 2331/QD-TTg (GoV, 2010), and updated the list into the following priority activities for the NTP-RCC:

- Assessing the levels of CC, developing CC- and sea-level-rise scenarios;
- Developing and implementing the scientific and technological program on CC;
- Strengthening capacity for interdisciplinary activities on CC;
- Raising awareness and human resources development;
- Developing and implementing the action plans to respond to CC.

Comparing to the list of priorities mentioned in Decision No. 158/2008/QD-TTg (GoV, 2008), the number of activities was reduced to five from seven; however, the activity, 'Developing and implementing the action plans to respond to CC', is still on the list. This indicates that formulation and implementation of action plans to respond to climate change at national and subnational levels is considered essential in NTP-RCC.

According to Decision No. 2406/QĐ-TTg of the Prime Minister dated December 18, 2011 (GoV, 2011d), enacting a list of national targeted programs in the period 2012-2015 (16 NTPs), the NTP-RCC has three priority activities:

- Assessing the level of CC, developing CC- and sea-level-rise-scenarios;
- Developing and implementing the scientific and technological program on climate change;
- Strengthening capacity, communication, monitoring and evaluation of the program implementation

The new decision of the GoV reduced the number of priorities of NTP-RCC from five for the year of 2011 to three for 2012-2015. One of the three key activities is, '*Strengthening capacity, communication, monitoring and evaluation of the program implementation*', in which evaluation of the program implementation is mentioned for the first time. However, there is no evaluation framework for NTP-RCC yet developed.

The main tasks of the NTP-RCC have been changed to meet the challenges of different climate change scenarios, due to better understanding of climate change impacts on Vietnam. These tasks have been modified three times since first approved in 2008.

To achieve the objective of the NTP-RCC, the GoV approved the financial procedures, which have the following aspects:

- The State ensures necessary resources, and mobilizes domestic and international support; and the State provides a legal basis to encourage participation and investment of socio-economic components and domestic and overseas organizations in activities to respond to climate change;
- NTP-RCC activities should be combined with other programs and projects to attract more investment;
- Projects and investment activities under NTP-RCC will be considered to obtain tax remission in accordance with the legislation.

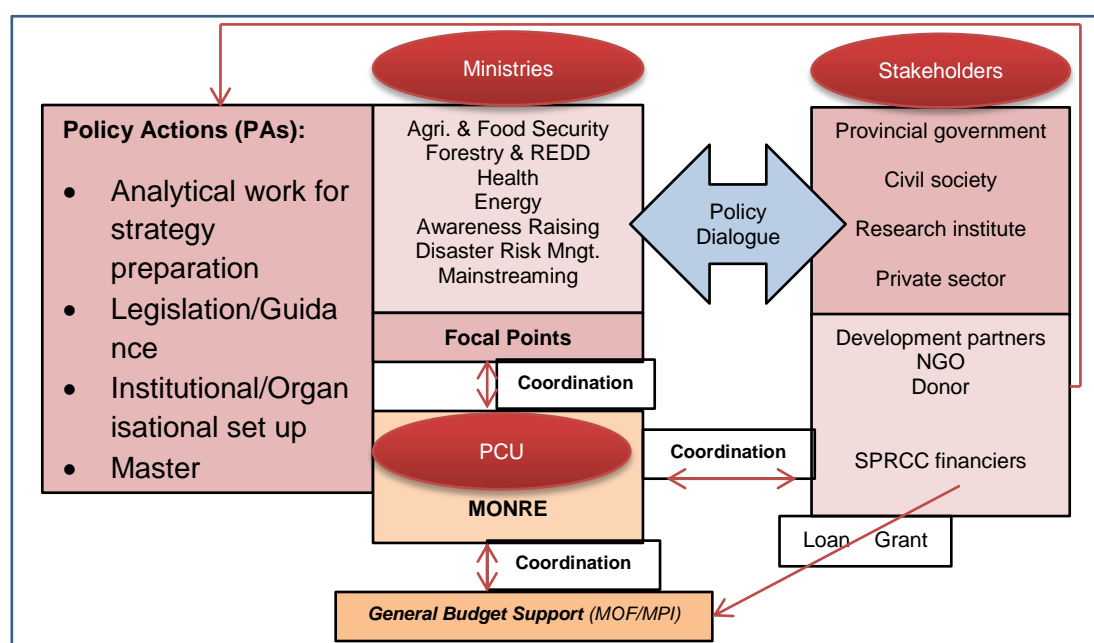
The budget of the NTP-RCC for the post-2015 period will be defined in accordance with the specific objectives for that period. The budgeting for the NTP-RCC is regulated by the State Budget Law, Decision No. 135/2009/QĐ-TTg on the guideline to implement NTPs (GoV, 2009), and particularly the inter-ministerial Circular No. 07/2010/TTLT-TNMT-KHDT-TC, approved by MONRE, MPI and MoF (MONRE, 2010). This refers to the development and implementation of action plans of all ministries, sectors and localities (specific objective 8).

Under NTP-RCC all ministries, sectors and provinces are requested to formulate their action plan; but the costs for implementing these action plans are not covered by budget allocated to NTP-RCC. Preparation of action plans at provincial level was the requirement of NTP-RCC in phase I (2009-2011); however, there were only around 35 provinces that prepared their action plan during this period.

### 3.2.4.2 Supporting Program to Respond to Climate Change (SP-RCC)

In 2009, a group of bilateral and multilateral donors proposed an idea to leverage the implementation of the NTP-RCC through a budget support mechanism. The main objective of the SP-RCC is to enable smooth and effective implementation of the NTP-RCC.

The main activities under the SP-RCC are budget support, policy dialogue, coordination among relevant stakeholders, and formation of policy matrices, which then turn into policy actions. Within the SP-RCC, a PCU (Program Coordination Unit) has been established under MONRE to coordinate the activities of the SP-RCC (Figure.3.5).



**Figure 3.5: Working Structure of the SP-RCC in 2011**

*Source: SP-RCC (presented at workshop organized January 18, 2012)*

The SP-RCC has been designed to support the implementation of the NTP-RCC. The financial contribution from development partners (both loans and grants) for the SP-RCC (873,65 USD for the period 2009- October 2014, Table 3.1) is much higher than the total requested budget for the NTP-RCC (around 47 million USD for the period 2009-2015). Hence, the SP-RCC not only supports the NTP-RCC but also expand their supports to other activities that were not mentioned in the NTP-RCC. The national strategy on climate change,



establishment of national committee on climate change, the national strategy for green growth (being drafted), and other movements have created a new context that the SP-RCC could cover by expanding its vision and mission as well as its working principles in supporting climate actions in Vietnam.<sup>4</sup>

**Table 3.1. Financial contribution of development partners to SP-RCC 2009-2014**

<b>Development partners of SP-RCC</b>	<b>Financial contribution to SP-RCC 2009-2014 (as of October 2014)</b> (Unit: Million USD)	<b>Note</b>
JICA	473.00	Loans
AfD	112.00	Loans
CIDA	4.25	Grant
WB	210.00	Loans
AFAT	13.40	Grant
Korea Eximbank	60.00	Loans
<b>Total</b>	<b>872,65</b>	

*Source: MONRE, 2014*

Currently, the SP-RCC partners include ministries (eight), donors (JICA, AFD, WB/DFID, CIDA, AusAID, and Korea Eximbank), non-governmental organizations (both international and national NGOs working in Vietnam), and research institutes (including technical experts work for the SP-RCC). In the future, the SP-RCC will expand its cooperation with the private sector, whose enterprises can significantly contribute to climate change response activities, according to the SP-RCC's mid-term review. The SP-RCC supports sixteen main domains or sectors, particularly the energy sector (focusing on new and renewable energy sources, and energy efficiency) and the agriculture sector (focusing on reforestation and reduction of GHGs in livestock production) (Table 3.2). The SP-RCC, in cooperation with ministries or sectors, has developed a policy matrix to address gaps and needs of the ministry or sectors related to climate change. The policy matrix was approved by the Prime Minister (GoV, 2011a), and was agreed upon by the development partners. Based on the approved policy matrix, the MoF will allocate budget to line ministries and sectors to prepare policy action (strategies, laws, regulations, etc.).

<sup>4</sup> SP-RCC's first midterm review report presented at the consultation workshop organized by SP-RCC's PCU on 18<sup>th</sup> January 2012 in Ha Noi.

So far, the SP-RCC has supported the policy formulation and implementation of the NTP-RCC in four main ways: (1) financial; (2) policy formulation (to prepare policy for climate change investment projects); (3) capacity building for NTP-RCC implementation; and (4) donor coordination. From 2012 onwards, the SP-RCC will support investment activities with the initial funding of nineteen projects that have met the climate change criteria set out in Decision No. 1719/QD-TTg dated October 4, 2011 and signed by the Prime Minister (GoV, 2011b).

**Table 3.2. Target Sectors/Areas of the SP-RCC in 2012**

Target sector	Ministry involved <sup>5</sup>	Leading donors
<b>Adaptation</b>		
1. Water resources	MONRE/MARD	WB
2. Coastal zone management	MONRE/MARD	JICA
3. Natural resources	MONRE/MARD	JICA
4. Infrastructure	MOT/MOC	JICA
5. Health	MOH	JICA
6. Agriculture	MARD	CIDA
<b>Mitigation</b>		
1. Energy efficiency	MOIT/MOT/MOC	JICA
2. Renewable energy	MOIT	AFD
3. Forestry	MARD	JICA
4. Waste management	MOC/MONRE	JICA
5. Agriculture	MARD	CIDA
<b>Cross-cutting issues</b>		
1. Create major orientation	MPI/MONRE/MARD	WB
2. Financial mechanism	MoF/MPI/MONRE	JICA
3. Awareness raising	MONRE/MOET	JICA

*Source: SP-RCC's PCU office, 2012*

<sup>5</sup> MONRE - Ministry of Natural Resource and Environment; MARD - Ministry of Agriculture and Rural Development; MOT - Ministry of Transportation; MoC - Ministry of Construction; MOIT - Ministry of Industry and Trade; MPI - Ministry of Planning and Investment; MoF - Ministry of Finance; MOET - Ministry of Education and Training

### 3.2.4.3 National Strategy for Climate Change (NSCC)

In addition, the National Strategy for Climate Change (NSCC) was approved by the Prime Minister's Decision No. 2139/QĐ-TTg in December 2011 (GoV, 2011c), with the following overall objective:

*“Optimize all the capacity of the country in dealing with climate change; adopt climate change adaptation, greenhouse gases emission reduction measures; safeguard people's life and properties; promote sustainable development goals; strengthen human and natural system resilience to climate change; develop a low-carbon economy to protect and enhance the quality of life; ensure national security and sustainable development in the light of climate change impact; and share efforts with the international community to protect the global climate system” (GoV, 2011c, p. 5).*

In order to achieve the strategic objective, NSCC has set out the 10 following tasks:

- 1) Proactive disaster preparedness and climate monitoring (include early warning and disaster-risk reduction);
- 2) Contributing to food and water security;
- 3) Proactive response actions to sea-level rise in vulnerable areas;
- 4) Protection and sustainable development of forests, enhance GHG absorption and biodiversity conservation;
- 5) Greenhouse gases emission reduction to protect the global climate system (including the development of new and renewable energies; energy saving and efficiency; agriculture and solid-waste management);
- 6) Increasing the role of the GoV in climate change response (including amendment and integration of climate change into other strategies and planning, and strengthening institutional capacity);
- 7) Community capacity development to respond to climate change (including the improvement of the public health system, awareness raising, and education and training on community level);
- 8) Scientific and technological development for climate change response;
- 9) International cooperation and integration to enhance the country's status in climate change issues; and
- 10) Diversification of financial resources and enhancement of effectiveness of investments.

Among the ten above-mentioned tasks, task number 6 of the NSCC was set out to increase roles of the government of Vietnam (GoV) in responding to climate change, by amending policies and by integrating climate change concerns into other strategies and plans as well as by strengthening institutional capacity. The NSCC was formulated and approved following the implementation of the NTP-RCC, which indicates that the GoV realised the importance of human and institutional capacity for climate change responses, by setting up the national target program to strengthen capacity and human resources, before formulating its national strategy to cope with climate change impacts. It shows the different approaches in climate policy-making compared with other public policies, as in Vietnam the national strategy is normally formulated first, then action plans and target programme are established later to execute tasks and activities to achieve the objectives set out by the strategy.

#### 3.2.4.4 National Strategy for Green Growth

Understanding the importance to sustainable economic development and the impact of climate change, GoV assigned Ministry of Planning and Investment (MPI) as a coordination agency to develop the national strategy for green growth. Formulation of this strategy received support from international partners such as UNDP, and KOICA. This strategy was officially approved by the Prime Minister of Vietnam on 25<sup>th</sup> September 2012.

The strategy stated the overall objective as follows:

*“green growth, as a means to achieve the low carbon economy and to enrich natural capital, will become the dominant trend in sustainable economic development, which requires that mitigation of greenhouse gas emissions and increased capacity to capture greenhouse gases are gradually becoming essential indicators in social economic development”.* (GoV, 2012, p. 2).

It also lists three specific objectives:

- Economic restructuring and institutional improvement, by greening existing sectors and encouraging the efficient utilization of natural resources and energy by sectors aiming at achieving higher added values;
- Conduct studies and enhance application of appropriate advanced technologies to more efficient uses of natural resources, reduce greenhouse gas emissions, and contribute to an effective response to climate change;

- Improve people's living standards and create environmentally friendly life styles through job creation from green industry, agriculture and services; investment in natural capital; and development of green infrastructure.

The strategy also identified three strategic tasks to fulfil the above objectives:

- Reduce the intensity of greenhouse gas emissions and promote the use of clean and renewable energies;
- Greening production system;
- Greening lifestyle and promoting sustainable consumption.

Furthermore, it also proposed seventeen solutions to achieve the strategy's objectives:

- 1- Communication, awareness improvement and implementation encouragement;
- 2- Improving energy performance and efficiency, reducing energy consumption in production, transportation and trade;
- 3- Changing fuel structure in the industries and transportation;
- 4- Promoting effective exploitation, and increasing the proportion of new and renewable energy sources for national energy production and consumption;
- 5- Reducing greenhouse gas emission through the development of sustainable organic agriculture, improving the competitiveness of agricultural production sector;
- 6- Reviewing and revising master plans for production sectors, gradually limiting development of economic activities that generate significant waste, environmental pollution and degradation, and creating favourable conditions for development of new green production sectors;
- 7- Utilising natural resources economically and efficiently;
- 8- Accelerating fast development of green economic sectors to create jobs, increasing income and enriching natural capital;
- 9- Developing key sustainable infrastructure for transportation, energy, irrigation and urban works;
- 10- Innovating technologies and widely applying cleaner production practices;
- 11- Sustainable urbanization;
- 12- Developing new rural model with lifestyle in harmony with the environment;
- 13- Promoting sustainable consumption and building green lifestyle;
- 14- Mobilising resources to implement the green growth strategy;

- 15- Human resource training and development;
- 16- Study to develop science and technology, issuing economic and technical standard system, and establishing database/information hub on green growth;
- 17- International cooperation.

In this strategy, MONRE was assigned as the standing agency for the National Committee for Climate Change, to: take the lead and cooperate with other agencies in policy formulation in responding to climate change in general, provide guidelines for registration and monitoring and evaluation of greenhouse gas emissions; monitoring the investment policies related to natural capital.

The NCCC can be considered as the coordination office at national level to mobilise and leverage resources for climate change activities. Following the establishment of the NCCC at national level, it suggests or requests that all provinces should also formulate their Provincial Committee for Climate Change (PCCC); however, to date, not all 63 provinces and cities have managed to set up their PCCC.

The NSGG is designed up to 2050 as the road map for Vietnam in transforming its economic development modes, which can contribute to the reduction of greenhouse gas emissions or intensity of greenhouse gas emissions per GDP unit. This strategy is, therefore, mostly related to mitigation measures rather than being adaptation options. However, these policy papers can be considered as the framework for economic development and combating climate change in Vietnam. It is clear that the GoV has not only focused on adaptation to climate change impacts but has also leveraged its resources to reduce greenhouse gases emissions by introducing the NSGG. In this regard, NSGG can be considered as a national framework for combating climate change in Vietnam besides the NSCC.

#### *3.2.4.5 Resolution of Communist Party of Vietnam*

The Communist Party of Vietnam (CPV) in June 2013 approved Resolution No.24-NQ/TW to *active response to climate change, improvement of natural resource management and environmental protection*. The Resolution serves as one of the critical bases for designing policies in response to climate change. This resolution can be considered as the guiding document for climate change responding activities of the country up to 2050. The overall objective of the resolution by 2020 is as follows:

*“to manage responses to climate change, avoiding disasters and reducing greenhouse gas emissions, and by 2050 actively responding to climate change and sustainable management of natural resources and ensuring the quality of the environment”*. (CPV, 2013 p.1).

According to the Resolution, specific objectives until 2020 include, among others, to reduce GHG emissions per unit of GDP from 8-10% compared with 2010. As the CPV's resolution, this policy framework only provides political will and direction to GoV and local authorities in preparing and implementing necessary actions in accordance with the resolution's framework and objectives.

Interestingly, compared to other sectors, the climate change policy framework has been prepared in the reverse manner. The CPV typically provides policy directions, and then the strategy is formulated before the formulation of action plans. For climate change policy formulation in Vietnam, the National Targeted Program to Respond to Climate Change (NTP-RCC) was first formulated and approved in 2008, and in December 2011 the National Strategy for Climate Change (NSCC) was approved. In 2012 the action plan to implement the NSCC was formulated (Decision No. 1474/QĐ-TTg dated October 5th 2012); and not until June 2013 was the resolution (policy direction) of the CPV approved. This indicates that climate change policy making in Vietnam has created an interesting pathway, and has a more or less bottom-up approach that has influenced the policy-making process.

#### *3.2.4.6 Vietnam's plan for implementation of the Paris Agreement*

The government of Vietnam has developed and approved the plan for implementation of the Paris Agreement on 28th October 2016 (Decision No. 2053/QĐ-TTg). The plan's content includes 5 components (1) Mitigation of greenhouse gas emissions (for 2016-2020 and 2021-2030); (2) Adaptation to climate change ((for 2016-2020 and 2021-2030); (3) Development and efficient utilization of resources; (4) Establishment of Transparency System (MRV) and Development and revision of institutions and policies.

The plan also reveals that for mitigation of GHG emissions, by 2030, Viet Nam commits to reduce 8% GHG emissions compared to Business-as-Usual (BAU) levels when using its own resources, and up to 25% when receiving international support. Emission reduction targets will be periodically reviewed, evaluated, and revised in accordance with conditions of socio-economic developments in each period. Regarding adaptation to climate change, Viet Nam will continue its programs and projects to adapt to climate change within the scope of the National Strategy for Climate Change, in order to improve resilience, to protect the citizens' lives and livelihoods, and to facilitate large contributions to GHG emission mitigation. It is clear that under the Paris Agreement Vietnam has strengthen its commitment to responding to climate change. Regard to adaptation, Viet Nam aims to improve resilience and to protect the citizens' lives and livelihoods thorough implementation of the National Strategy for Climate Change. The GoV developed and released the national climate change

action plan for 2012-2020 on 5th October 2012 and under the plan for implementation of the Paris Agreement the adaptation plan for 2016-2020 and 2021-2030 will be developed.

The above policy framework of Vietnam regarding climate change indicates that, at national level, the policy direction has been created to leverage the implementation of these policies at local level. However, the resources for reframing and implementing these policies at local level should be allocated appropriately to designated stakeholders, in order to improve the effectiveness of policy objective deliveries.

### ***3.2.5 Sub-national climate change policies***

Provincial action plans and sectoral climate action plans and other initiatives to respond to climate impacts have been promoted through national government and international development agencies. Introduction of the climate action plans of provinces and cities under the NTP-RCC support had started as soon as 2009, just after the approval of NTP-RCC through the Decision no. 158/2008/QĐ-TTg dated December 2, 2008 by the Prime Minister. NTP-RCC supports provinces and national cities to formulate their climate action plans by allocating an amount of around 1 billion VND (equivalent of \$50,000 USD) to each province. The provincial government then proposes the project proposal for climate action plan formulation, submitting this to the office of NTP-RCC for approval before securing financial resources to organise the formulation process. Up to the end of 2014, 62 over 63 provinces and national-level cities had formulated and approved their climate action plans. The list of 40 provincial climate action plans can be seen at the Appendix 6.

Besides formulation of the climate action plan, provinces and cities have also developed other measures or plans to implement the national strategy for climate change (NSCC), the national strategy for green growth (NSGG), and the Party's Resolution No.24. It can be considered that these plans are the updated version of or derived from the climate action plans of the provinces and cities. The formal climate plans of provinces can be referred to as the climate action plans that were supported by the NTP-RCC. Other climate plans of the provinces are only supplements to the provincial climate action plan, and have less binding responsibilities.

The climate change policy framework in Vietnam has been developed with support from international partners, particularly the national policies. In the last few years more proactive approaches in climate adaptation planning have been introduced in Vietnam at provincial level by international agencies. For example, GIZ supports two provinces in Vietnam to deploy Ecosystem-based Adaptation (EbA) approach in mainstreaming climate change concerns into socio-economic development plans.



### **3.3 Chapter summary**

It can be concluded that the climate policy framework of Vietnam is quite comprehensive at national and local levels. However, neither the implementation nor the evaluation framework for these policies has been detailed or developed. In order to implement these policy initiatives, resources need to be allocated accordingly, and the feasibility of the climate action plans of provinces should be assessed both technically and financially by reliable, expert and independent parties, to ensure that the policy goals and objectives can be reached and positive policy impacts can be realistically expected. This suggests that the next generation of climate action plans should place more effort on the implementation processes, including identifying the role of private sector and citizens in formulating and implementing climate action plans. Resources are also needed to specifically ensure climate action plans enable local communities to be engaged and involved appropriately.

## **CHAPTER 4: RESEARCH DESIGN AND METHODS**

### **4.1 Research aims, objectives and questions**

#### **4.1.1 Research aims**

In this research, policy analysis was applied as a core paradigm in understanding climate change policy-making in Vietnam from the national to local level, and for analysing the content of provincial climate action plans, as well as the plan-making process.

Evaluations and analysis of local climate action plans have been undertaken in many countries (Amundsen et al., 2010; Baker et al., 2012; Biesbroek et al., 2010; Dannevig et al., 2012; Dubash & Jogesh, 2014; Ellen Bassett & Shandas, 2010; Huitema et al., 2011; Massey et al., 2014; Tang et al., 2010). However, these studies mainly focus on analysis of the formulation process and/or contents of these action plans. To date, there is a limited number of studies that take account of the implementation process of local action plans and the relationship between the formulation and implementation stages, especially within a centralised system in which broad national policies and strategies are implemented through national government orders but no clear resources are provided. More evaluation and analysis activities of local climate change action plans, particularly in developing countries, where this pattern of governance is common, should be carried out in order to identify the key factors in designing a well-targeted and carefully developed climate change action plan at local level, and in implementing these action plans effectively.

Thus, the primary research objectives of the present study are to analyse the content of provincial climate action plans, and to understand climate action plan-making processes in Vietnam. In turn, it is expected that this will reveal ways of improving the prospects for national-level climate change policies and strategies, through the development and implementation of local climate action plans.

#### **4.1.2 Research objectives**

As explained in Chapter 1 (Section 1.3), in order to achieve the above the mentioned primary objectives, the following four specific objectives are proposed:

1. To develop an analysis framework, taking account of literature and practice to date, and the policy environment of the case study country, Vietnam.
2. To analyse the content of provincial climate action plans in order to assess the activities proposed in these action plans throughout the country.

3. To analyse the policy formulation process in order to identify the relationships between the policy-making process and the plan delivery.
4. To explain the differences in the content of the provincial plans in selected provinces, which represent different vulnerabilities, and develop recommendations for more effective policy formulation and implementation in Vietnam, especially in relation to climate change action plans.

#### **4.1.3 Research questions**

The overarching research question is, how might the process of climate change policy-making and implementation in Vietnam at various levels be understood and approved? Under this overall research question, the three following specific questions were proposed:

1. How does content of the provincial action plans for responding to climate change vary, and what might explain this variation?
2. How are these action plans prepared, and how are they being implemented?
3. What factors influence the interpretation and implementation process of the national climate change policies at the provincial level?

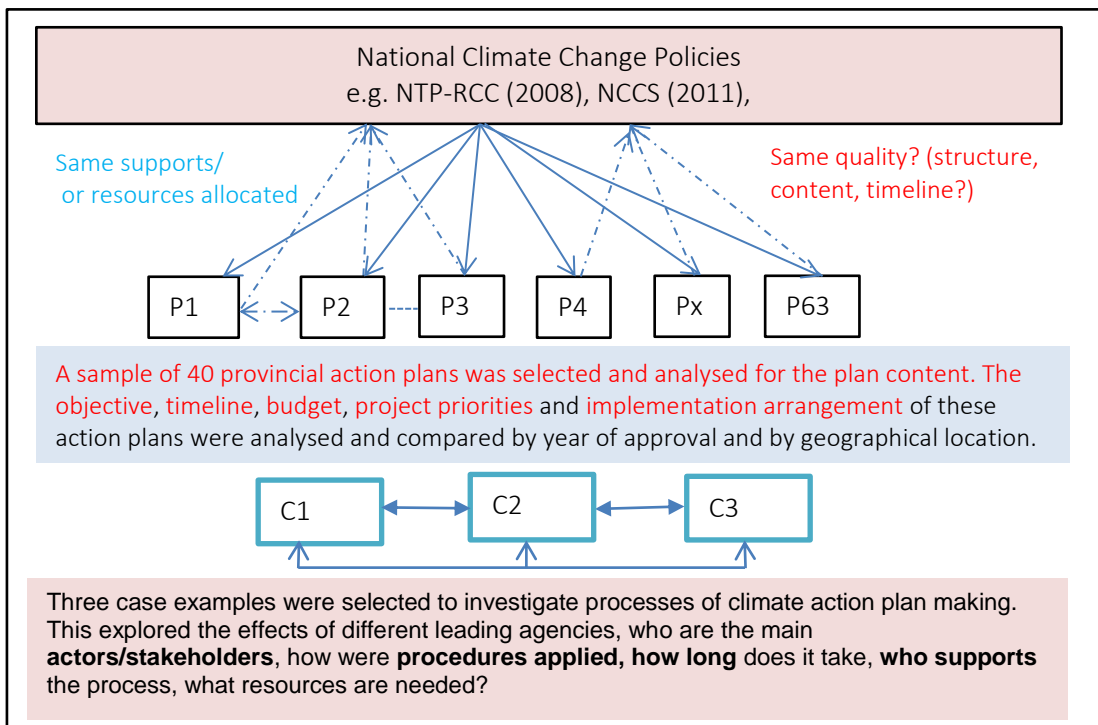
#### **4.2 Research overview**

This research takes Vietnam as a case study of climate change policy-making, and explores climate action plans at the provincial level in Vietnam, as a vehicle for seeking to analyse provincial climate action plan-making processes.

According to Yin (2009), case study research is useful when a phenomenon is broad and complex, when in-depth investigation of a holistic nature is needed, or when a phenomenon cannot be studied outside the context in which it occurs. In addition, Flyvbjerg (2006) confirms that, from a single case study, research can also contribute to knowledge and generalise from the findings. In the present research, in the context of a centralised policy-making system such as in Vietnam, formulation and implementation of the climate change policy lends itself ideally to a case study to investigate the plan-making process.

The formulation and implementation of provincial climate action plans was the main focus in the present study. Climate action plans would be expected to be the same in all provinces, as having the same guidelines, the same budget allocated, and the same timeline received from the national government. However, this research aims to investigate any variation in the situation may vary from one province to another, due to a wide variety of factors such as differences in natural conditions, community engagement and stakeholder participation, and

the qualifications and interests of local policy makers. Field research in three selected provinces was conducted through interviews and group discussions with provincial stakeholders, in particular people who had participated in the formulation of a climate action plan; to collect data that was then analysed in order to answer the following questions: 'How were these action plans prepared, and how are they being implemented?'; 'What factors influenced the implementation of the national policies at the provincial level?'; and 'How can the differences in provincial policies be explained?'

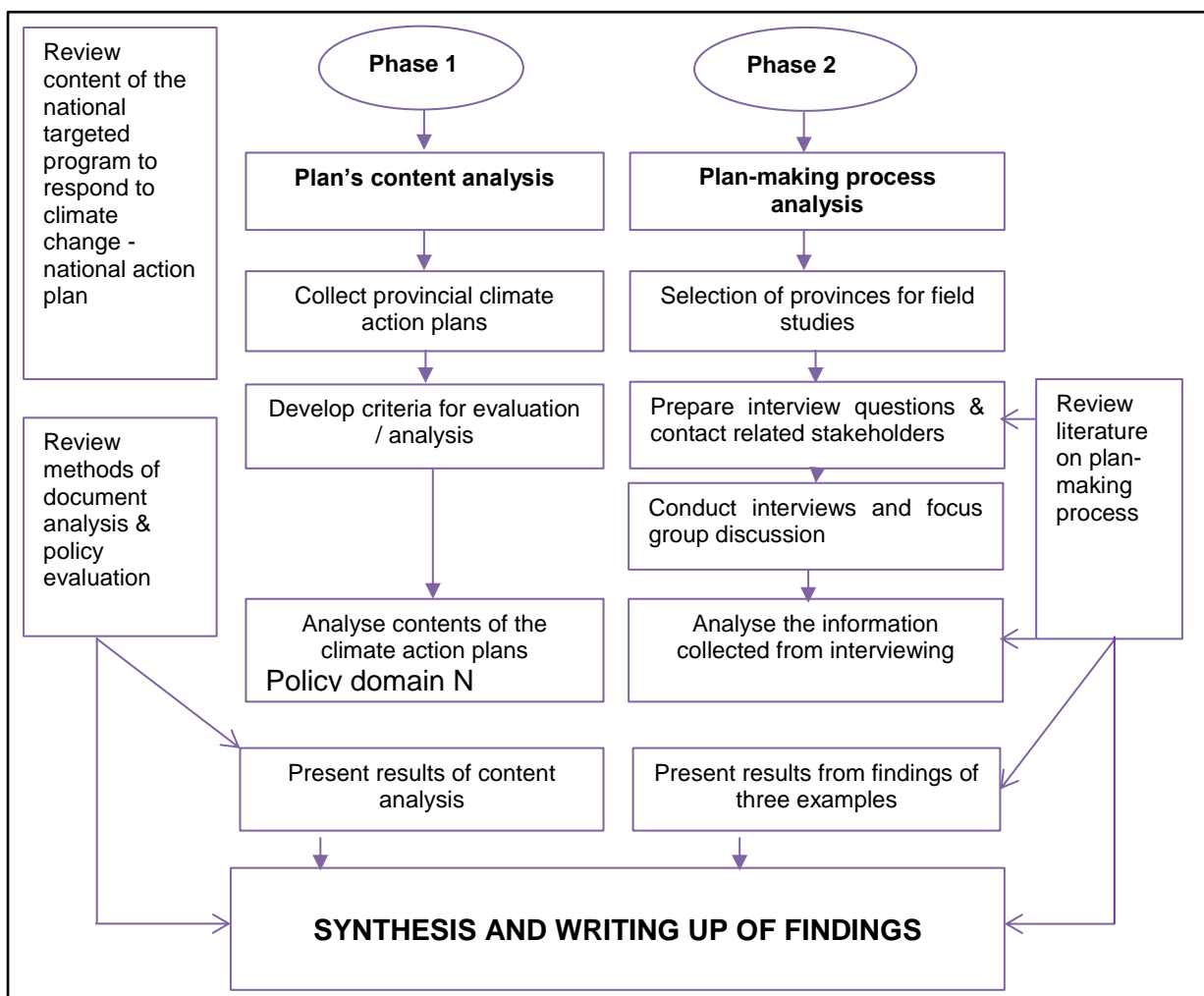


**Figure 4.1: Approach in selection of study samples and studied locations**

In this research project, forty provincial climate action plans were analysed to reveal the similarities and differences by year of approval and by location of provinces (Figure 4.1). Selection of provinces to investigate the climate action plan-making process was followed by an initial quantitative analysis. This analysis included but was not limited to consideration of 'comprehensiveness', 'location' and 'time of formulation' of the provincial action plans.

The research design and process is schematically represented in Figure 4.2, which covers two phases. Firstly, analysis of the provincial climate action plans in Vietnam was conducted, based on the content analysis of the policy papers, in order to: develop an analysis framework, taking account of literature and practice to date and the policy-making system of the case study country, Vietnam (Objective 1); and to assess the activities proposed in these forty action plans. Secondly, targeted interviews were undertaken with related stakeholders,

to explore various national and provincial identities and parameters within which the plans were developed. Examples of the provincial climate action plans were selected based on a set of criteria, to analyse the formulation and implementation process (see Section 4.3.2). In-depth interviews with relevant stakeholders and group discussions with key actors in the policy-making process were conducted in order to: (1) analyse the policy formulation process in order to identify the relationships between the policy-making process and content of the plans; and (2) explain the differences in the content of the provincial climate action plans in selected provinces, which differences represent different vulnerabilities. Results and findings from the first and second phases were synthesised and discussed, and implications for climate change policy-making in Vietnam were also drawn.



**Figure 4.2: Detail of Research Design**

Based on these two phases, the research was divided into four components: (1) initial content analysis; (2) detailed content analysis; (3) field research, including interviews, observations and group discussions; and (4) synthesis of the findings from components 1-3.

Initial content analysis of local action plans was conducted based on the texts from climate action plans of the forty provinces and cities in Vietnam. In the first phase of this research, the protocol and principles of content analysis methodology were applied. The following sections will present theory underlying the content analysis method, and how the content analysis method was applied to conduct analyses of the forty provincial climate action plans.

In the second phase, the selection of three provinces to explore the plan-making process was conducted, using the case study methodology. After the selection of three examples was conducted, interviews with relevant stakeholders in three provinces were undertaken. Details of how the selection of three provinces was made, and how interviews with key relevant stakeholders were conducted, will be provided in Section 4.3.2.1.

### **4.3 Research methods**

#### ***4.3.1 Methods for Phase 1: Content of climate action plans***

In the first phase of this research, a content-analysis approach was applied to analyse the content of provincial climate action plans.

A wide range of theoretical frameworks, methods, and analytical techniques have been labelled content analysis; and there are also at least six major definitions of content analysis from various sources in the social sciences. Weber (1990) defines content analysis as a research methodology that utilizes a set of procedures to make valid inferences from text. In political science, content analysis is commonly used as a method to analyse policy papers. According to Neuendorf (2002), content analysis is a summarizing process that a researcher can apply in order to obtain key message from the studied documents. Content analysis is not limited to political science. For example, content analysis, as pointed out by Hsieh and Shannon (2005), has become widely used as a research method in health studies. In conventional content analysis, coding categories are derived directly from text data. With a direct approach, analysis starts with a theory or relevant research findings as guidance for initial codes. A summative content analysis involves counting and comparisons, usually of keywords or content, followed by interpretation of the underlying context. In organisational research, Duriau et al. (2007) define content analysis as a class of research methods at the intersection of the qualitative and quantitative traditions. Content analysis is promising for rigorous exploration of many important but difficult-to-study issues of interest to organizational researchers, in areas as diverse as business policy and strategy, managerial and organizational cognition, organisational behaviour, human resources, social-issues management, technology and innovation management, international management, and organisational theory.

In practice, researchers often consider content analysis as a flexible method for analysing text data, and the method is common in many study areas. Content analysis includes a family of analytical approaches ranging from impressionistic, intuitive, and interpretive analyses to systematic, strictly textual analyses. Weber (1990) highlights that the specific type of content analysis approach chosen by a researcher varies with the theoretical and substantive interests of researcher and the problem being studied.

Mayring (2000) emphasises that content analysis includes not only the manifest content of the material, as its name may suggest, but also has differentiated levels of content, such as themes and main ideas of the text, as primary content, and context information as latent content. According to Mayring (2000), there are four basis ideas of content analysis, as follows.

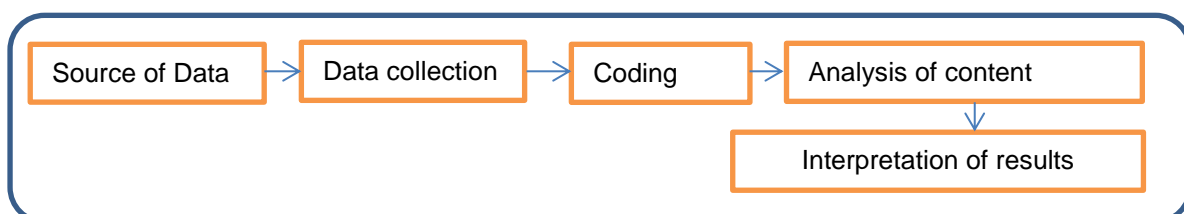
*Fitting the material into a model of communication:* Fitting the material should be determined with respect to what part of the communication inferences shall be made, to aspects of the communicator (experiences, opinions, feelings), to the situation of text production, to the socio-cultural background, to the text itself, or to the effect of the message.

*Rules of analysis:* The material is to be analysed step by step, following rules of procedure, devising the material into content analytical units.

*Categories in the centre of analysis:* The aspects of text interpretation, following the research questions, are put into categories, which are carefully founded and revised during the process of analysis (feedback loops).

*Criteria of reliability and validity:* The procedure has the pretension to be inter-subjectively comprehensible, to compare the results with other studies in the sense of triangulation, and to carry out checks for reliability.

Figure 4.3 schematically presents five main steps of content analysis, starting from source of data, then data collection, coding, analysis of content, and interpretation of results. In the present study, data collection will be described in Section 4.3.1.1; coding or criteria for analysis, and the analysis procedure, will be explained in Sections 4.3.1.2 and 4.3.1.3, respectively. Interpretation of the results will be outlined in Section 4.3.1.4.

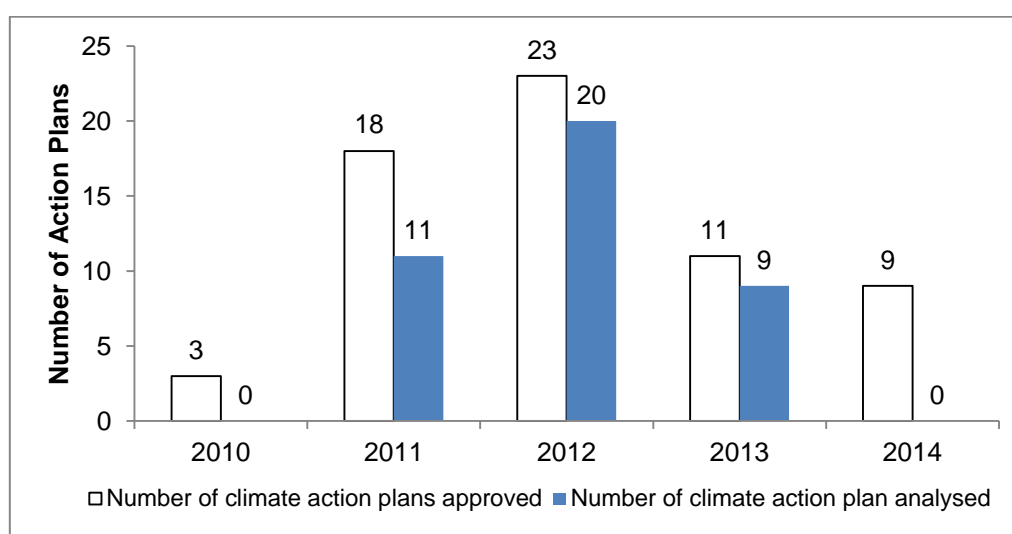


**Figure 4.3: Steps in content analysis**

#### 4.3.1.1 Data collection

Data collection is regarded as the first phase of content analysis, for which Weber (1990) identifies three critical sampling decisions: select information sources; define the type of document for analysis; and choose specific texts within these documents. These decisions depend on the purpose of the study, the methodological approach, and the information availability.

In the present research, all forty-three action plans received by the NTP-RCC's Standing Office and stored at the Department of Meteorology, Hydrology and Climate Change (DMHCC) under the Ministry of Natural Resources and Environment (MONRE) were collected. However, the provincial climate action plans approved in 2010 were not taken into the analysis, because there were only three action plans (see Figure 4.4). The forty climate action plans, approved in 2011, 2012 and 2013 by the Provincial People Committee (PPC), of forty provinces and central cities were selected for content analysis. According to the current practice, there is no formal regulation set by the Government of Vietnam (GoV) that requires the provincial governments to submit their climate action plan documents to MONRE. Therefore, these forty action plan documents were submitted to MONRE on a voluntary basis after the provincial authorities had officially approved them.



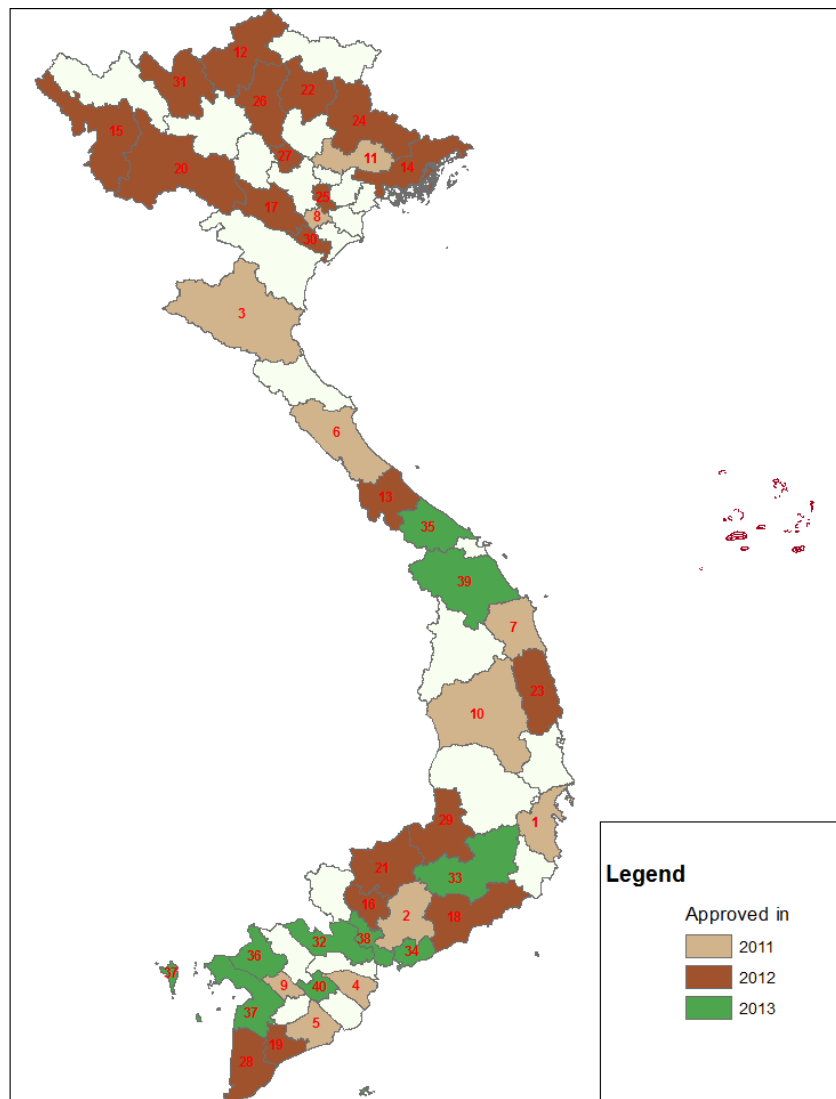
**Figure 4.4: Number of climate action plans approved vs. analysed**

There are sixty-three climate action plans, which were approved by provinces and cities in 2010 (three plans), 2011 (eighteen plans), 2012 (twenty-three plans) and 2014 (nine plans); and forty climate action plans were taken into the content analysis, which were approved in 2011 (eleven), 2012 (twenty) and 2013 (nine). No climate action plan that was approved in 2010 or 2014 was included in the sample for analysis, as at the time of data collection, the action plans approved in 2014 were not completely available, and the three climate action



plans of 2010 were not sufficient in number to represent the first generation of climate action plans. Therefore, only forty of the fifty-two plans approved in 2011, 2012 and 2013 were selected for content analysis (Figure 4.4).

All action plan documents were copied and stored with codes from 1 to 40, randomly based on availability and collection date to avoid or reduce personal bias when analysing. Then, a list of themes was prepared for initial analysis of the content of the adopted action plans: (1) objectives; (2) timeline for implementation; (3) proposed budget; (4) intervention areas; (5) institutional arrangements for implementation; and (6) evaluation and monitoring plans. Supplementary interviews were undertaken with relevant stakeholders at the national and the provincial levels to explore the nature of planning process or the actual procedure of the action plan-making processes.



**Figure 4.5: Locations of forty provinces in the study**

Based on results of the content analysis, similarities and differences among forty climate action plans were identified, explained and compared by year of approval and geographical distribution (location/region). Locations of forty provinces in this study are presented in Figure 4.5, in which 11 provinces approved their climate action plans in 2011, 20 provinces approved the climate action plan in 2012, and nine provinces in 2013 (no province in the North that approved the action plan in 2013 was selected).

#### 4.3.1.2 Code and Criteria for analysis

Coding is an important stage of content analysis. Weber (1990) suggests eight steps (Table 4.1) for creating, testing, and implementing a coding scheme, to overcome concerns about the bias at this critical stage.

**Table 4.1. Steps in coding text (the Weber Protocol)**

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1	Definition of the recording units (e.g. word, phrase, sentence and paragraph)
2	Definition of the coding categories
3	Test of coding on a sample of text
4	Assessment of the accuracy and reliability of the sample coding
5	Revision of the coding rules
6	Return to step 3 until sufficient reliability is achieved
7	Coding of all the text
8	Assessment of the achieved reliability or accuracy

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Source: Weber (1990)

In the present research, not all of the eight steps discussed by Weber (1990) were completely applied. For example, not all the texts were coded, but only the main information or key policy messages of the action plans were considered and coded. This was sufficient to provide a high-level cross-comparison of the plans in accordance with the research design. Following this step, development, refinement, and implementation of the coding scheme are central to the quality of textual analysis, particularly in case of latent content analysis.

In this research, the criteria for analysis is mainly focused on the structure and content of each adopted action plan, with regard to their: (1) objectives; (2) timeline for implementation; (3) proposed budget for the implementation, (4) intervention areas; (5) institutional arrangement for implementation; and (6) evaluation and monitoring plans. The comparison

was conducted vertically with the national action plan for climate change, and horizontally among the provincial climate action plans.

The objectives were assessed based on specific statements with a clear indication, and the proposed activities were grouped into three themes - 1- Awareness; 2- Analysis; and 3- Action - in order to investigate the priority of the activities, according to whether for adaptation or mitigation measures, and which are for 'hard' components (for example, building infrastructure such as dykes, roads, drainage and irrigation systems) or for 'soft' components (such as training, workshops, and community participatory adaptation planning). Timeline for implementation of the action plan was assessed as either short term (3-5 years) or long term (more than 5 years), to illustrate the differences of time duration for implementation of the action plans adopted by provinces. Implementation arrangement, or institutional arrangement for implementation of the action plan, was also analysed to understand stakeholder involvement, such as institutional arrangement among agencies in the implementation process. Areas of intervention, including a list of proposed projects, were analysed to understand the priority of each province and to compare with those of the other provinces. Requested budget for implementation of the action plan was also considered, to compare with the total budget allocated to the province and with budgets granted to other sectors, annually or in the same period. In addition, the evaluation and monitoring framework of the action plans were also taken into the analysis.

#### *4.3.1.3 Procedure of Content Analysis*

After climate action plans were collected and themes for analysis constructed, the content of the selected action plans was analysed. Firstly, as indicated above, all the action plans were coded from 1 to 40, in order to reduce the bias from the researcher's previous knowledge of some provinces. Secondly, objectives, timelines for implementation, proposed budget, areas of intervention, institutional arrangement, and evaluation and monitoring framework of every action plan, were inserted into an Excel sheet. Year of approval was also added in the analysis, in order to investigate the differences by time (to see how the learning process and evolution of the policy in the context of the centralised policy-making system have taken place); and also location was added in the analysis (in order to see the effect of geographical distribution and characteristics on content of the action plan).

#### *4.3.1.4 Interpretation of the content analysis*

Results of content analysis of forty provincial climate action plans will be intensively discussed in Chapter 5, and partly mentioned in Chapter 7. In general, five areas of the provincial climate action plans were analysed: (1) objectives; (2) timeline for implementation;

(3) proposed budget; (4) intervention areas; (5) institutional arrangement for implementation; and (6) evaluation and monitoring framework. Objectives, Timeline for implementation, and Proposed budgets of the forty climate action plans were analysed and compared by time of approval and by geographical locations. Meanwhile, intervention areas and institutional arrangement were only analysed and discussed but were not compared by year of approval and by the location, as there was no significant variation by time and by the location.

### **4.3.2 Methods for Phase 2: Climate action plan making**

#### *4.3.2.1 Selection of provinces to investigate action planning process*

In order to understand the plan-making process of local climate action plans in Vietnam, three provinces were chosen as case examples. Based on the initial results of the content analysis of forty provincial climate action plans, three case examples were selected for analysis of the plan-making process, in particular the formulation and implementation. The plan process analysis identified key stakeholders involved, their roles, their consultations, the challenges encountered during the formulation stage, and factors affecting the plan implementation.

According to Evera (1997), the case example method is a particularly appropriate design in the following situations: (1) when the researcher wants to establish a theory or theories; (2) when testing theories that already exist; (3) when identifying a previous condition or conditions that led or contributed to a phenomenon or antecedents; (4) when the researcher wants to establish the relative importance of those contributing conditions; and (5) when trying to establish the fundamental importance of the case with regard to other potential examples. In the present research, a case-study approach was applied in order to establish the fundamental importance of the case with regard to other potential examples.

Three provinces were identified to investigate the process of formulation and implementation of the adopted climate action plans, which investigation includes the action plan-making process and the status of implementation. The following section will discuss the case example selection, and procedures of data collection and data analysis.

For this research, it was appropriate to use a single case study (Vietnam), and within this, to select three case examples to analyse plan-making processes. This provides appropriate variability and capacity to handle the complexity of the phenomena under the study (Eisenhardt, 1989). Climate change policies in Vietnam, particularly local climate action plans, were formulated by the provincial authorities, where natural conditions and climate change impacts differ from province to province; thus, a multiple case example approach allows a direct comparison between the similarities and differences of the formulation and

implementation of the action plans in these different contexts (Silverman, 2000). In addition, the multiple case study approach uses replication logic to achieve methodological rigour (Yin, 2009), and allows the researcher to triangulate evidence, data sources and research methods (Eisenhardt, 1989). As result, the results may be more substantial (Yin, 2009), and allow for improved precision, validity and stability of the findings (Miles & Huberman, 1994).

There is no agreement on how many cases should be included in a multiple case study. The number of cases depends more on the purpose of the research, the questions asked, the resources available, and the constraints being faced. Therefore, Patton (2002, p. 244) recommends that, “the decision regarding the number of cases should be left to the individual researcher”. Gummesson (2000) suggests that the researcher should stop adding cases when theoretical saturation is reached, at which point incremental learning is minimal. In contrast, some researchers give a specific number of cases as suitable for case study research, by suggesting the upper and lower limits of cases. For example, Miles and Huberman (1994, p.29) suggest that the maximum number of cases should be 15, because any case study design with more than 15 cases may generate too much information, and therefore, the researcher is not able to follow the possible local dynamics. For the lower limit, two cases that are believed to be literal replication for the simplest multiple-case design (Yin, 2009).

Selection of appropriate cases is an important aspect of building theory from case studies (Eisenhardt, 1989). It is generally recommended that both literal and theoretical replication should be considered when selecting cases for the multiple case study approach. In order to obtain literal and theoretical replication in a multiple case study approach, each case should be chosen in such a way that it either predicts similar results for predictable reasons or produces contrary results for predictable reasons (Yin, 2009).

Local climate action plans in Vietnam may have been developed by provincial governments with different approaches and different timelines, and also with different resources allocated. Therefore, the selection of examples to investigate the climate action plan-making process, in this study, was purposefully carried out in order to achieve theoretical and literal replication. Based on the initial findings from content analysis of forty climate action plans of central cities and provinces, three action plans were chosen to explore the plan-making process and the execution of proposed activities in practice. The study examples were selected based on their representation of ecological conditions or geographical spread, agro-climate variability, size and economic prosperity. In order to maximize the variation of cases and to ensure the feasibility of the research, cases were selected containing the criteria listed in Table 4.2.

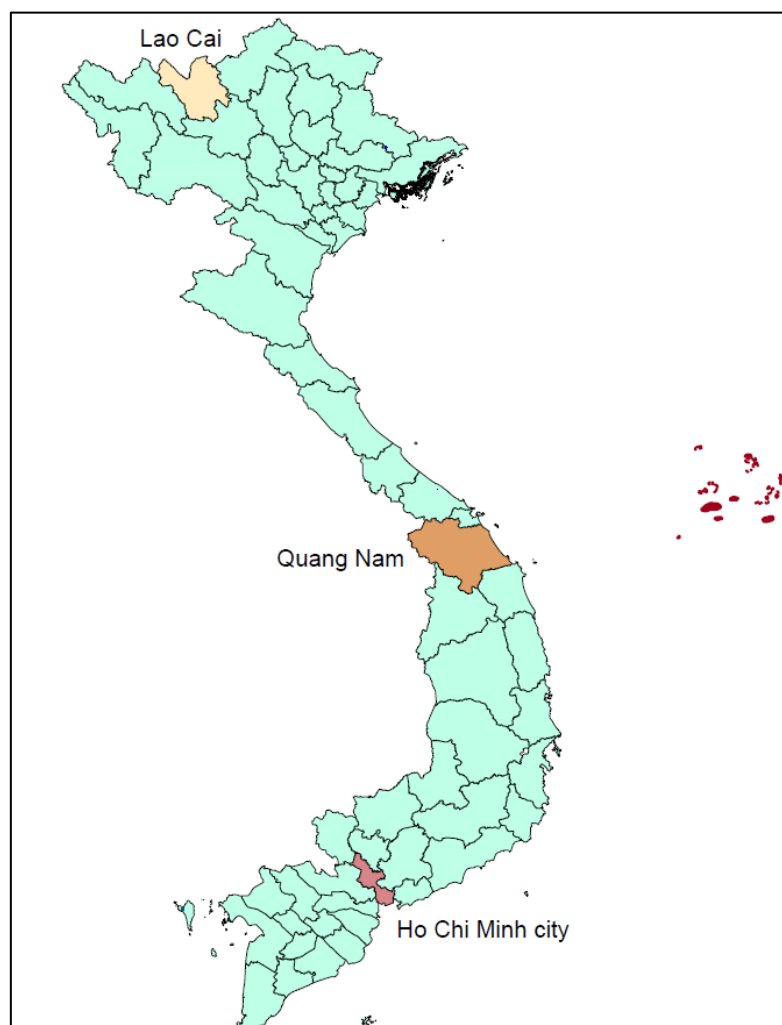
**Table 4.2. Criteria for selection of cases**

<b>Criteria</b>	<b>Explanation</b>	<b>Reasons</b>
Geographic spread	The selected places should be located in different region with different natural conditions.	Level of climate change impacts is varied among the location, depends on the exposure of the place to climate risk/climate induced factors.
Area of the province/city	The size of the province should be varied in order to understand the process of the climate action planning in relation to the areas/natural condition.	These provinces range from small to large in their areas
Year of formulation	The formulation year should be the most recent year, to see the learning process of policy-making.	The longer time of formulation duration, the better for evaluation of the learning process. The most current the adopted action plan, the more information, knowledge and good practices are incorporated.
Duration of implementation	Duration of the implementation will help to explain how the action plan was proposed. Therefore, implementation duration should range from 3 years to 10 years	The variation in timeline for implementation will allow understanding of the activities proposed and how the action plan will be coordinated and implemented.
Ability to access action plan documents	Available and supported by relevant authorities	The more policy documents collected, the better the content analysis. Without sufficient policy papers, the input for content analysis will be affected.
Proposed budgets for implementation of the climate action plans	Budget for implementation is essential for every action plan.	Understanding budget allocation and total budget will provide more information on the planning process. No proposed budget is considered as the typical action plan that needs to explore reasons why the province did not include the budget in their climate action plan.

These criteria were developed by the researcher, with the literature and variables pertinent to the study question in mind. Based on these criteria, one mega city, and two provinces, located in different geographical regions of Vietnam were selected. The unique proposed budget for implementation of each climate action plan was also considered in the selection of these three provinces. State budget planning in Vietnam is a key issue in effective climate action planning (Nguyen-Hoang & Schroeder, 2010). The two provinces (among three in a total of 40 provinces) did not propose a budget for implementation of their climate action plans, and this is of interest for the study of plan-making processes.

#### 4.3.2.2 Case description

The three case examples selected were Ho Chi Minh city (HCMC) in the South, Quang Nam province in the North Coastal and Coastal Central Region, and Lao Cai province in the Northern Midlands and Mountains (Figure 4.6).



**Figure 4.6: Geographical locations of three studied provinces**

As the objective of the second phase of this study is to understand the plan-making process in different locations within a centralised policy-making system, it was appropriate to use these three locations (cases) for investigation of the provincial climate action plan-making process. Of these cases, two climate action plans were approved in 2013 by provincial authorities, and one was approved in 2012. These three locations represent different characteristics of socio-economic and natural conditions (Table 4.3). This design allowed the researcher to investigate whether the socio-economic and natural condition conditions influence the making process, and whether it was possible to generate some common critical procedures or lessons learnt of the plan-making processes from these three locations.

**Table 4.3. Overview information of three studied example provinces/city**

<b>Provinces/ cities</b>	<b>Area (km<sup>2</sup>)</b>	<b>Population (x1000)</b>	<b>Region</b>	<b>Geographical characteristics</b>
Ho Chi Minh city	2,095.6	7,681.7	South East	Low land and mainly urban areas, with a relatively dense river and canal networks
Quang Nam province	10,438.4	1,450.1	Coastal Central	Coastal line in the East, mountainous landscape in the West. Urban areas (Hoi An and Tam Ky cities) in the east, and rural areas in other locations.
Lao Cai province	6,383.9	656.9	North Mountain	Mountain landscape, with the highest peak of 3143 m (Fanxipan mountain peak).

#### *4.3.2.3 Selection of interviewees*

After the locations (provinces or cities) were chosen, the following step was to select interviewees. In order to understand the action plan-making process in each selected location, the interviewees were purposely invited to participate in the research. As the plan making takes place over a long period of time, the participants for interviews should ideally be involved in the process from the beginning until approval of the action plan or after. Based on these particular requirements, a limited number of participants were chosen in the three locations. Table 4.4 presents the number of interviewees in each location and the agency they were representing.



**Table 4.4. Key informants in the case study**

Stakeholder group	Case A	Case B	Case C	Total
Coordination agency	2	2	2	6
Key collaboration agencies	3	2	2	7
NGOs/CSOs	1	1	1	3
Independent researcher	2	1	1	4
Total	8	6	6	20

Note: Coordination agency in this research is Department of Natural Resources and Environment (DONRE). Key collaboration agencies include Department of Planning and Investment (DPI), Department of Finance (DoF), and Department of Agriculture and Rural Development (DARD) of the province.

The interviews are complemented by analysis of provincial action plans and supporting documents. After three provinces were selected as case studies, an official letter from the host institution of the PhD candidate in Vietnam was prepared and sent to provincial authorities in the case study provinces. Recipients were the Department of Natural Resources and Environment (DONRE) in two provinces and one city. The procedure for arranging interviews with key stakeholders in the climate action plans of Quang Nam, Lao Cai provinces and HCMC can be viewed in Appendix 5 of the present thesis.

A list of thirty guiding questions, under five main stages of a policy-making circle, was prepared. The guiding questions led to discussion with interviewees in: the action plan agenda setting (three questions); plan formulation (eight questions); plan approval or decision-making (six questions), plan implementation (eight questions); and plan evaluation-monitoring (five questions). Details of guiding questions for the first round of interviews are presented in Appendix 1. These questions were used to help interviewees to recall the process of climate action planning step by step. During each interview, which often lasted in one hour, the research tried to capture key messages and focus on the issues that were identified in Chapter 2, in particular the factors that influenced the planning process.

Interviewing were conducted with twenty key participants, of which eight interviewees were in HCMC, named as H1 to H8 (Table 4.5), six interviewees in Quang Nam province, named as Q1 to Q6 (Table 4.6), and six interviewees in Lao Cai province, named as L1 to L6 (Table 4.7). Then, information obtained was categorised or grouped into five main themes for analysis: (1) institutional setting and coordination; (2) participation of relevant stakeholders; (3) learning process and knowledge transfers; (4) local capacity and resources; and (5) innovation and autonomy (include motivation and power sharing) in local climate action

planning. Results of interviews related to these themes will be discussed in Chapter 6 and Chapter 7.

**Table 4.5. List of interview participants in HCMC**

Code	Position/description	Date	Location
H1	Senior official of Climate Bureau Office	17/9/2014	HCMC
H2	Senior official of DPI	18/9/2014	HCMC
H3	Senior officer of DONRE	17/9/2014	HCMC
H4	Senior official of Climate Bureau Office	17/9/2014 10/10/2015	HCMC and in Ha Noi
H5	Senior official of Centre for Flood control	15/9/2014	HCMC
H6	Lecturer at National University of HCMC	22/9/2015	HCMC
H7	Researcher of a Research Institute	16/10/2015	HCMC
H8	Researcher of a Research Centre	16/10/2015	HCMC

**Table 4.6. List of interview participants in Quang Nam province**

Code	Position/description	Date	Location
Q1	Senior official of DONRE	20/9/2014	Quang Nam
Q2	Former senior official of DONRE	21/9/2014	Quang Nam
Q3	Senior officer of SCCO	21/9/2014 25/9/2015	Quang Nam Ha Noi
Q4	Senior official of DPI	21/9/2014	Quang Nam
Q5	Senior official of DoF	15/9/2014	Quang Nam
Q6	Independent expert	22/9/2014 25/9/2015	Quang Nam and Ha Noi

**Table 4.7. List of interview participants in Lao Cai province**

Code	Position/description	Date	Location
L1	Senior official of DONRE	24/9/2014	Lao Cai
L2	Senior official of DPI	24/9/2014	Ha Noi
L3	Senior official of DARD	25/9/2014	Lao Cai
L4	Senior official of DONRE	25/9/2014	Lao Cai
L5	Senior official of DONRE	25/9/2014 16/9/2015	Lao Cai Ha Noi
L6	Director of consulting company	5/10/2015	Ha Noi

#### 4.3.2.4 Analysis of climate action planning process

From notes and transcripts obtained from interviews with relevant stakeholders in the three provinces, information was grouped into five main stages of the policy-making cycle (see Section 2.2.2). Based on the information obtained from interviewees using the guiding interview questions (Appendix 1 for the first interviewing round and Appendix 3 for further interview with one key interviewee in each province (H4 in HCMC, Q3 in Quang Nam and L5 in Lao Cai province) in the second round of interviewing), elaboration of the information was conducted to describe the plan-making process in the three different studied provinces. In addition, information was also grouped into themes that were considered as the key factors influencing the plan-making process. Based on supporting information for each theme (or factor), the elaboration of the information was conducted and compared among the three studied locations. In addition,

#### 4.3.3 Methods for synthesizing the findings

In order to synthesise the findings from analysing the content of forty provincial climate action plans and from investigating processes of climate action planning in the three provinces, and to seek consensus, consultation meetings and discussions with related policy makers and experts were organised to present the study results. Eight experts were interviewed in separated meetings at their offices or at the conference venues. Each meeting lasted about one and half hours (Table 4.8); and these interviewees were named as N1 to N8 (i.e. N stands for national experts and 1-8 is the order of participants involved in the meeting).

**Table 4.8. List of participants in consulting discussion**

Code	Position/description	Date	Location
N1	Climate policy advisor of an international development agency	21 <sup>st</sup> May 2015	Ha Noi
N2	Program Officer of international financing institution in Vietnam	26 <sup>th</sup> May 2015	Ha Noi
N3	Expert of a university, Vietnam	16 <sup>th</sup> Sep. 2015	Ha Noi
N4	Program Manager- of international NGO in Vietnam	1 <sup>st</sup> October 2015	Ha Noi
N5	Lecture and researcher of a university in HCM city	22 <sup>nd</sup> Sep. 2015	Ho Chi Minh city
N6	Senior officer – A standing office for climate change	22 <sup>nd</sup> April 2015	Ha Noi
N7	Director of a research and consulting center in Ha Noi	25 <sup>th</sup> September 2014	Ha Noi
N8	Senior official of a research and consulting center in Ha Noi	25 <sup>th</sup> September 2014	Ha Noi

The information obtained in these meetings was used for the discussions in Chapter 7 and Chapter 8. The discussion was focused on challenges of climate action planning at provincial in Vietnam and potential options to overcome the challenge. The main purpose of these consultation meetings was to find supplementary explanations for unique results of climate action plan content, and to find recommendations for overcoming challenges that provinces encounter in the development and implementation of their climate action plans.

Informal meetings with eight national-level policy makers and experts who were involved in formulating national policies related to climate change and understanding the current policy-making system in Vietnam were organised. The meetings were scheduled individually, in order to obtain information and views of the different experts and also to meet the working agendas of all participants.

## **CHAPTER V: CONTENT OF FORTY PROVINCIAL CLIMATE ACTION PLANS**

### **5.1 Introduction**

This chapter addresses the first part of Research Question 1: How does content of the provincial action plans for responding to climate change vary, and what might explain this variation? The second part of this question is explored in Chapters 6 and 7. Together, these two sub-questions constituted the first phase of the research, and involved an analysis of the similarities and differences in forty provincial and climate action plans in Vietnam. The results of this analysis directed the selection of the sample provinces that were investigated in more detail in the second phase of this research, which sought to understand the climate action plan-making process.

The forty provincial climate action plans that were analysed included all those that had been officially released (approved) in 2011, 2012 and 2013, in time for the first phase of this study (see Appendix 6). The analysis focused on the content of these climate action plans, and included the identification of patterns of similarities and differences in various elements of each plan, in Section 4.3.1.1: (1) objectives; (2) timelines for implementation; (3) proposed budget; (4) intervention areas; (5) institutional arrangements for implementation; and (6) evaluation and monitoring framework. In particular, the proposed intervention strategies and activities were identified. This analysis is more comprehensive than the reported analyses of climate action plans in the USA, Europe and Australia, which have tended to focus primarily on the planned activities, as reviewed in Chapter 2, Section 2.5 of this thesis. This analysis was undertaken within the context of the national climate change policy framework of Vietnam, which has been discussed in Section 3.2.4.

### **5.2 The content of forty selected provincial climate action plans**

The forty climate action plan documents were collected as hard copies. They revealed a great variation in structure and detail. For example, the length of action plan documents ranged from less than ten pages to hundreds of pages. Some provinces included policy papers and other background documents as a package for approval; while other provinces provided only the plan document (e.g. a formal decision paper), containing only objectives, activities, prioritised projects, and the list of agencies responsible for implementation of the action plan. The content of the action plans also revealed a wide diversity of timelines and proposed budgets, despite great similarity in the objectives of many of the plans. However, even when the proposed budget and timeframes were similar, other parts of the content of the plans (e.g. areas of intervention, structures of the action plans) varied. This was

generally the case when the years of plan formulation varied. The following sub-sections analyse these general patterns in detail.

### **5.2.1 Objectives of the action plans**

Objectives can be considered as the core element of any action plan. Thus, it is important to identify both the overall and specific objectives of the action plans, before comparing similarities and differences in planned actions and resources needed.

#### *5.2.1.1 General objective*

The general objective of the climate action plans of the forty provinces and cities displayed little variety, with statements such as the following from action plans developed in 2011 as typical:

*“Improve ability of the province to respond to climate change in specific stages, prevent and mitigate negative impacts of climate change, ensure sustainable development and protect lives of communities”.* (Quang Ngai PPC, 2011, p. 3).

*“Effectively respond to climate change in the short term and long term in order to ensure sustainable development of the province”* (Khanh Hoa PPC, 2011, p. 14).

The climate action plan of provinces that were approved in 2012 often aim to:

*“Improve ability to respond to climate change in the short term and long term in order to ensure sustainable development of sectors and districts in the province. Protect lives of communities, prevent, avoid and mitigate the impact of natural disasters”* (Ha Giang PPC, 2012, p. 2).

*“Improve ability of the province to respond to climate change for 2011-2015 and vision to 2025 in order to ensure sustainable development, protect lives of communities, prevent and mitigate risks of climate change and contribute to implementation of the national targeted program to respond to climate change (NTP-RCC)”.* (Dien Bien PPC, 2012, p. 1).

*“Strengthen the capacity to respond to climate change, human and natural systems, economic development of low-carbon to protect and improve the quality of life, guaranteed security and sustainable development, protect the lives of citizens, prevent and mitigate the risks of climate change”.* (Lao Cai PPC, 2012, p. 28).

It is clear that the overall objective of the climate action plan of Lao Cai province emphasises

the importance of strengthening capacity and highlights low-carbon economic development, to protect and improve quality of life and prevent and mitigate the risks of climate change

The provinces that approved their climate action plans in 2013 tended to set up the objectives to be more aligned with the newly developed national policies on climate change. For example, the action plan of HCMC, which was officially approved in 2013, has the following strategic objective:

*“Assess the impact of climate change on the sectors and industries to build and step by step to successfully implement the action plan specifically, suitable and feasible for each stage, to ensure economic development in the direction of energy consumption effectively, working with international communities to mitigate climate change, to protect human existence and living creatures on earth”* (HCMC's People Committee, 2013, p. 3).

The overall objective of HCMC's climate action plan stresses the urgency of assessing the impact of climate change, and highlights the need to work with international communities to mitigate climate change as well as to protect human existence and living creatures on earth. Meanwhile, Quang Nam province proposes the strategic objective of their climate action plan as:

*“Assess the extent of the impact of climate change and sea-level rise on the sectors; capacity building, awareness cope with climate change; building action plan feasible to cope with climate change impacts in order to ensure the socio-economic development of the province by 2020; propose projects, prioritised programs responding to climate change by 2030”*. (Quang Nam PPC, 2013, p. 2)

Indeed, Quang Nam province set the objective to assess the impact of climate change and sea-level rise on sectors, and also highlights the need for capacity building and awareness raising in order to cope with climate change. In addition, the province has setup a long-term vision to 2030:

*“Assess the extent of climate change impacts on sectors of the province in each stage and develop effective responding action plan in order to ensure sustainable development and capture opportunities to shift forward to low-carbon economy, and join with international communities to mitigate the impact of climate change”*.(Long An PPC, 2013, p. 1).

There is a common objective of the studied climate action plans, to assess the climate change impacts and to strengthen capacity to cope with climate change. It is understandable

for provinces to align their strategic objectives with the national policies on climate change. In addition, climate change impact assessment and strengthening capacity to respond are clearly urgent tasks to effectively adapt to climate change, particularly in developing countries.

The wording of this general objective was derived from national policy statements, particularly the National Targeted Program to Respond to Climate Change (NTP-RCC) and the National Strategy for Climate Change (NSCC). The NTP-RCC has the following strategic objectives:

*“to assess climate change impacts on sectors and regions in specific periods and to develop feasible action plans to effectively respond to climate change in the short-term and long-term to ensure sustainable development of Vietnam, to take opportunities to develop towards a low-carbon economy, and to join the international community’s efforts in mitigating climate change and protecting the climatic system”.* (GoV, 2008, p. 1)

As discussed in Chapter 3 (Section 3.4), the National Strategy for Climate Change (NSCC) of Vietnam set up the overall objective as follows:

*“Optimize all the capacity of the country in dealing with climate change; adopt climate change adaptation, greenhouse gases emission reduction measures; safeguard people’s lives and properties; promote sustainable development goals; strengthen human and natural system resilience to climate change; develop a low-carbon economy to protect and enhance the quality of life; ensure national security and sustainable development in the light of climate change impact; and share efforts with the international community to protect the global climate system”* (GoV, 2011c, p. 5).

Besides NTP-RCC and NSCC, Vietnam also set up its National Strategy for Green Growth (NSGG), with the overall objective as follow:

*“Green growth, as a means to achieve a low carbon economy and to enrich natural capital, will become the dominant trend in sustainable economic development which requires that mitigation of greenhouse gas emissions and increased capacity to capture greenhouse gases are gradually becoming essential indicators in social economic development”* (GoV, 2012, p. 2).

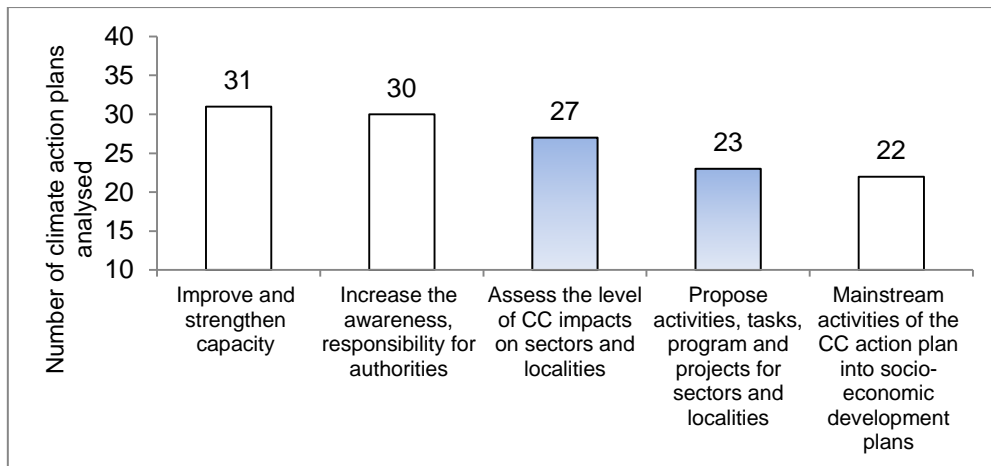


As mentioned in Chapter 3 (Section 3.2.4), the national policy framework has been developed quite comprehensively in Vietnam, to incorporate global policy trends in responding to climate change. Thus, the NSGG has also influenced the general objective of local action plans, which were formulated in 2012 and 2013, to some extent. For example, the climate action plans of Lao Cai (2012), Hoa Binh (2012), Quang Tri (2012), Bac Lieu (2012), Binh Phuoc (2012), Lam Dong (2013), and so on have mentioned green growth as part of the objectives of their climate action plans. For instance, the second specific object of Lao Cai's climate action plan highlights that, *".... green growth will be mainstreamed in sustainable development and it will mitigate greenhouse gas emissions and increase the ability to absorb GHGs and will gradually become mandatory targets in socio-economic development"*.

This repetition of national goals in local plans reflects the centralized nature of the policy-making system in Vietnam (Ohno, 2009), in which the national government (normally the ministry in charge of the policy issue coordinating the plan-making process, in which line departments of provinces participate as contributors as well receivers of the new policy) (see Section 3.1). Despite climate change emerging as a cross-sectoral issue that requires extensive resources (e.g. information, finance, technical knowledge and human resources) to develop and deliver effective action strategies, local-level governments in Vietnam lack such resources. As a result, it is often deemed safer to retain the objectives and areas of intervention that have been developed by the national government than to be innovative in development of the local policies. While doing so could take local contexts into consideration in the planning process, specifically local interventions would require resources that were in short supply, and also risk not closely linking to the national objective/s. These factors have led to a similar reflection of national priorities in specific objectives in local plans.

#### *5.2.1.2 Specific objectives*

More than a half of provinces and cities established the same specific objectives. As Figure 5.1 indicates, 'improve and strengthen capacity' (in thirty out of forty local plans, or 77.5%), and 'increase the awareness and responsibility' of authorities and communities (in 30 out of 40 plans or 75%), were the most commonly included specific objectives in the climate change action plans of the 40 provinces. These two were also specific objectives in the national climate change framework, again illustrating the pervasive influence of national plans on the content of local action plans.



**Figure 5.1: Objective of climate action plans and frequency of their presence**

The next most common specific objective in the climate change action plans was, ‘assess the level of climate change impacts on sectors and locality’ (in 27 out of 40 plans, or 67.5%). This implies that 27 action plans were formulated without taking account of existing assessments, or at least with a limited knowledge of climate change impacts. Furthermore, the plans of 23 out of 40 provinces (57.5%) state, ‘propose activities, tasks, programs and projects’, as the next most common specific objective. The juxtaposition of these two objectives reflects a conundrum. If it is necessary to ‘assess the level of climate change impacts on sectors and locality’, then it might be assumed that these 27 action plans were formulated in the absence of local climate change vulnerability assessments or local scenarios of varying potential impacts, such as sea-level rise. Good practice internationally is to base plans on local climate change adaptation strategies upon such assessments, as well as upon the analyses of local capacity to deliver the proposed activities (Boswell et al., 2012; Moser & Ekstrom, 2010). This means that first understanding the climate impacts on a locality is important in developing any corresponding action plan (Boswell et al., 2012). Having no climate impact assessment report or study before formulating a climate action plan may result in developing a climate action plan without sufficient evidence (for example, what will be impacted and to what level), thus reducing the effectiveness of efforts in responding to climate change. As a result, at the very least, it is hard to imagine how the objective of proposing ‘activities, tasks, programs and projects’ can have much validity when so many of these interventions were not based upon local assessments of vulnerability, future scenarios or adaptive capacity.

The fifth most common objective was to mainstream climate change action planning by linking it with other priority plans (in 22 out of 40 plans, or 55.0%). This is significant, as it would draw the attention of local authorities who were required to develop five-year socio-

economic development plans (2016-2020) in 2015. The requirement for mainstreaming most likely would also draw the attention of policy makers in other sectors, e.g. in the Department of Planning and Investment. While such mainstreaming augers well for effective climate action, it also poses a difficulty. This is because the up-till-now primacy of five-year plans up to the present may override what is already in the prepared climate action plan, and necessitate a revision of the latter, which had only just been developed as a stand-alone plan one to three years ago. Indeed, mainstreaming climate change issues into socio-economic development plan is a challenging task at the national level in Vietnam and elsewhere (UNDP & UNEP, 2015). It is thus even more difficult for provincial policy makers, with their limited technical capacity and resources identified at the beginning of this section, to mainstream complex issues such as climate change into their socio-economic development plan.

#### *5.2.1.3 Objectives vs. year of formulation*

The five common objectives proposed in the 40 action plans are presented in Table 5.1, but tabulated according to year of adoption (2011, 2012 or 2013). This table shows that a pattern of differences in the action plans can be seen across the years, even though the action plans share the same common objectives. Two examples illustrate this, in that the newer action plans have a tendency to: (i) put the objective of 'improve and strengthen capacity to respond to climate change' (88.9% in 2013 compared to 63.6% in 2011), but (ii) reduce the emphasis on first undertaking a climate impact assessment (down from 72.7% in 2011 to 66.7% in 2013), presumably because this had already been undertaken. Similarly, the 2013 action plans also place more emphasis on proposing specific actions and on mainstreaming than do the plans formulated in earlier years.

Another common objective in the provincial climate action plans is to '*mainstream activities of the plan into socio-economic development strategies*'. This is particularly notable in the later climate action plans approved in 2013. In general, this objective increasingly received more attention from provinces in 2013 (6/9 provinces) than in those of 2011 (6/11 provinces) and 2012 (10/20 provinces). This may be because of the increasing emphasis in discussions of national climate change policy to integrate or mainstream climate change actions into socio-economic development and sectoral development plans/strategies (CPV, 2013; GoV, 2011c, 2012). The preparation of the 5-year socio-economic development plan (2016-2020) of the province, which were to be formulated in 2015, as well as the development of knowledge on climate change adaptation approaches, also emphasised mainstreaming climate change into sectoral development plans and 5-year socio-economic development plan (SEDP) of the provinces.

**Table 5.1. Action plan objectives by year of formulation/adoption**

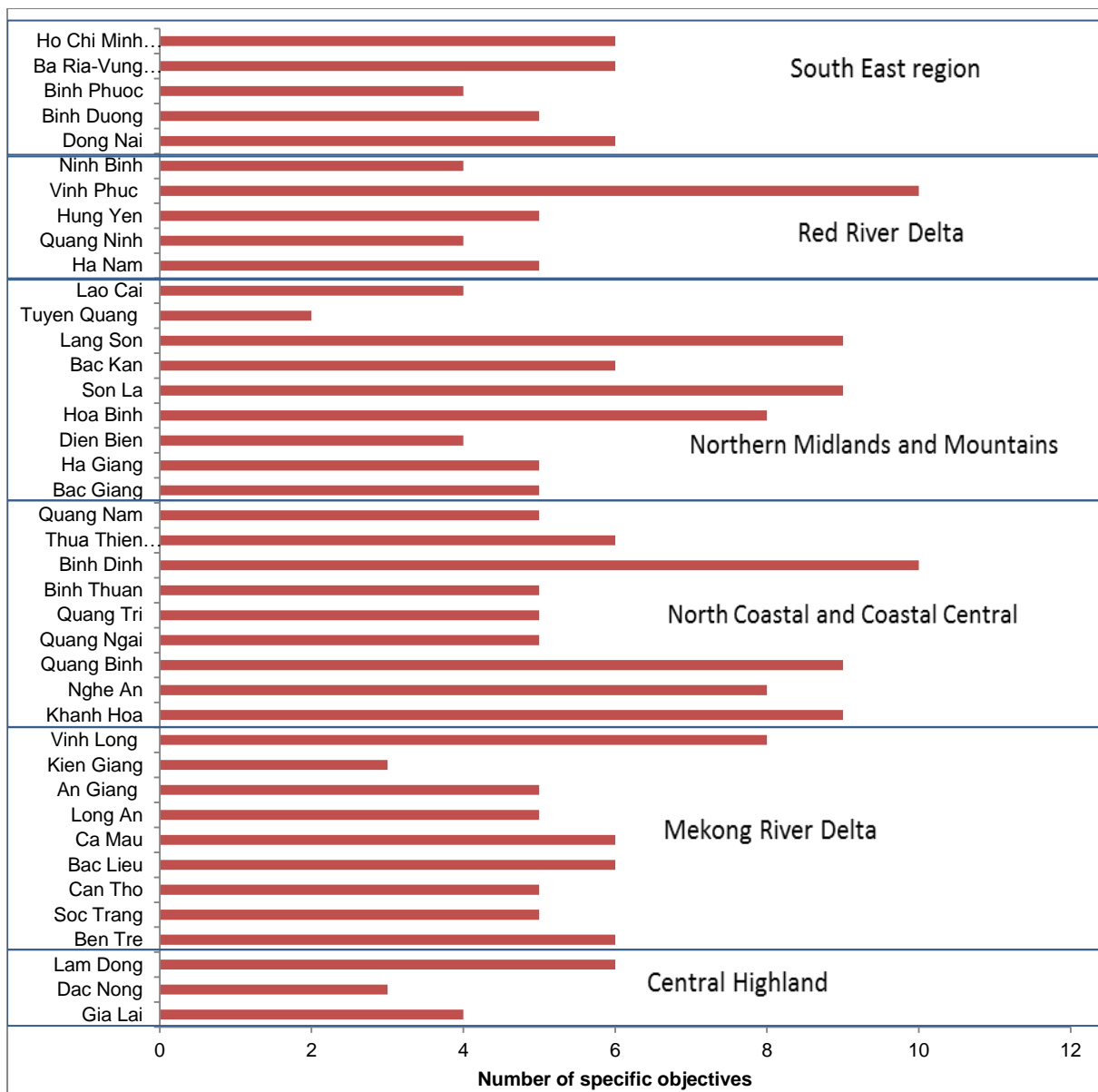
Objectives	Year of Formulation/Adoption		
	2011	2012	2013
1. Improve and strengthen capacity to respond to climate change	7/11 (63.6%)	16/20 (80%)	8/9 (88.9%)
2. Increase awareness and capacity of local government officers and communities	8/11 (72.7%)	15/20 (75%)	7/9 (77.8%)
3. Assess the level of climate change impacts on sectors and locality	8/11 (72.7%)	13/20 (65%)	6/9 (66.7%)
4. Propose activities, tasks, programs and projects	5/11 (45.6%)	12/20 (60%)	6/9 (66.7%)
5. Mainstream activities of the action plan into socio-economic development plans	6/11 (54.5%)	10/20 (50%)	6/9 (66.7%)

**Source:** Results from the analysis of 40 climate action plans

How these objectives might be achieved becomes a separate question, of the implementation process, which can only be verified through evaluation of plans and monitoring of works. Some insights of the learning process and evolution of plan-making practices will be explored and presented in Chapter 6 and Chapter 7 of this thesis.

#### 5.2.1.4 Objectives vs. geographical distribution

Vietnam has six widely recognised geographical regions: the Red River Delta (two provinces and two national-level cities), the North Midlands and Mountains (fourteen provinces), North Coastal and Coastal Central (thirteen provinces and one national-level city), the Central Highland (five provinces), the South East (five provinces and one national-level city), and the Mekong River Delta (twelve provinces and one national-level city). Just as the objectives proposed in the forty climate action plans varied among the provinces and there was no clear linkage between the year of formulation and the objectives of the action plans, so too there is great variation among objectives according to the ecosystem region, but no clear linkage between location and objectives. It seems that Northern Midlands and Mountains, North Coastal and Central Coastal regions have more variation in the number of specific objectives than have the other four regions (Figure 5.2).



**Figure 5.2: Number of objectives in action plan by the location of provinces**

Figure 5.2 indicates that a number of specifics set out in the climate action plans of provinces and cities were not influenced by the local contexts but instead appear to have been influenced by the plan-making approaches and the national guidelines for formulation of the action plan. This can be explained by the natural conditions of these regions being more diverse than those of the other four regions. In addition, the variation is sometimes due to the consultants who decided the structure and direction of the action plan. The role of consultants in new issues such as planning for climate change is clearly observed and is considered as one of the important factors (N4).

The variation in number of specific objectives of the 40 provinces across six ecological regions is significant, and this indicates that provinces were setting up their objectives

differently. On average, there are 4-5 specific objectives for each action plan. However, there are some provinces, such as Binh Dinh, Quang Binh, Khanh Hoa and Nghe An provinces in North Coastal and Coastal central, that set 8-9 specific objectives. In particular, Vinh Phuc province in Red River Delta set 10 specific objectives. The number of specific objectives in one climate action plan does not reveal that a higher number is better. This finding also shows that the province has authority to set the number of objectives and priorities to achieve their climate action objectives.

### ***5.2.2 Proposed budgets for implementation of the climate action plans***

Among the forty action plans analysed, resource requirements were typically presented via a bottom up, project-by-project cash budget. The exception, Quang Nam province in the Central Coast of Vietnam, proposed a long-term climate change action plan, with implementation to 2030 divided into two phases (2013-2015 and 2016-2030). This plan includes 65 programs and projects; but no budget was identified.

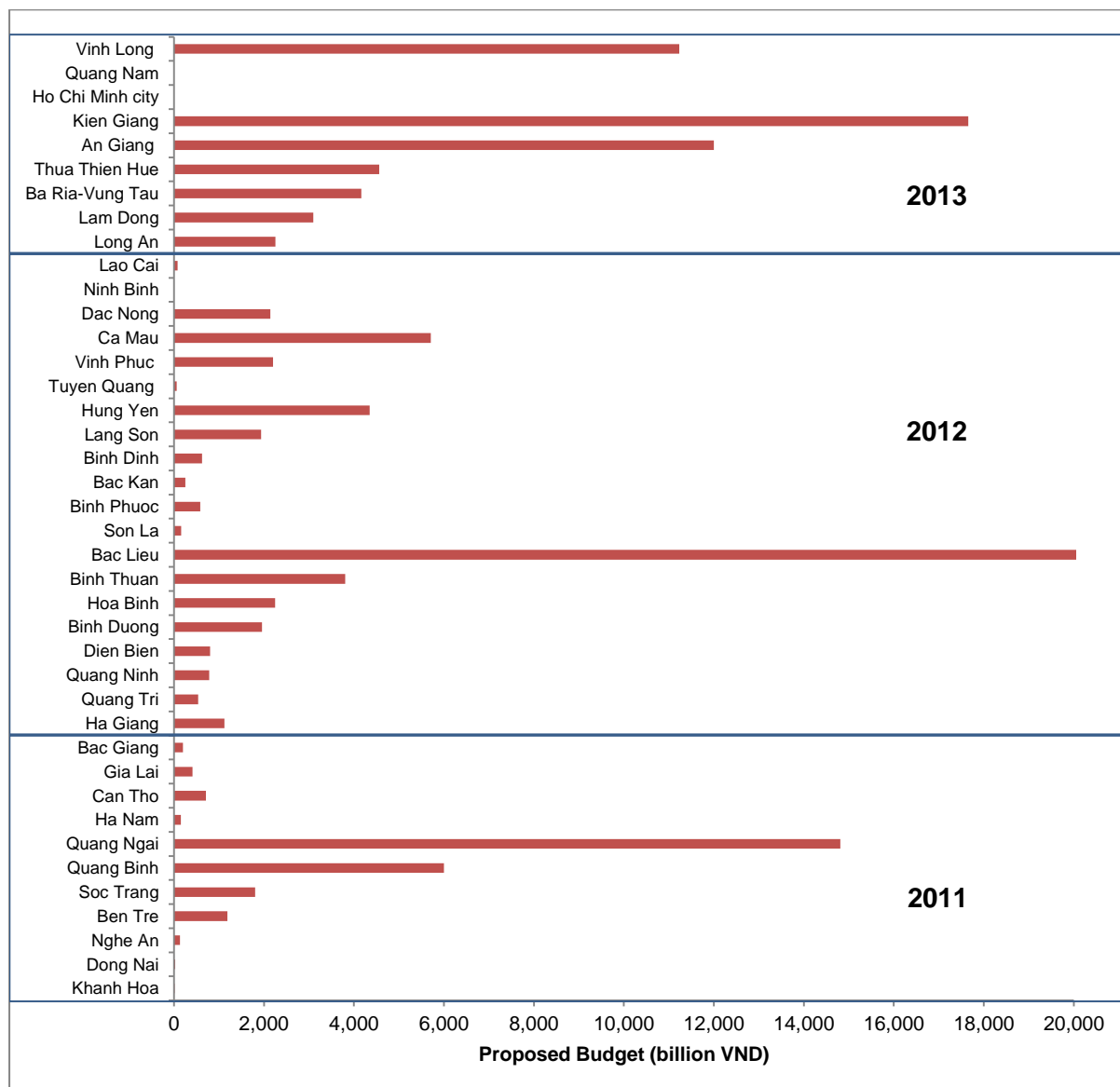
Of those who did present budgets, the lowest outlier, Khanh Hoa, indicated that implementation would cost only 11 billion VND (523.000 USD). The highest outlier, Bac Lieu province in Mekong Delta region, requested a total budget of 20,140 billion VND (1 billion USD). Thus, the variation in proposed budget for implementation of the action plans among provinces is considerable. While the provinces are of different sizes, with different populations and levels of built assets and economic infrastructure, this variation is most clearly explained by examination of the list of prioritised projects and areas of intervention. For example, provinces in Mekong Delta region and North Coastal and Coastal Central prioritised more infrastructure projects than did provinces located in other regions. This can be explained by the vulnerability of these regions to climate change, particularly sea-level rise and flooding.

#### ***5.2.2.1 Proposed budget vs. year of approval***

Figure 5.3 presents the proposed budget and year of approval of the 40 climate action plans. While this shows variation among provinces, in general the newer action plans (approved in 2013) appear to have higher proposed budgets. Some provinces proposed a total budget for implementation of their action plan of less than 100 billion VND; meanwhile some provinces proposed as much as 20,000 billion VND.

The biggest proportion of the budgets is allocated to infrastructure works, including sea dykes, drainage systems and riverbank works. Not all these expenditures appear to match

the plan period. For example, Bac Lieu province proposed as much as 20,140bn VND (more than \$US 1bn) for implementation of its climate action plan from 2012 to 2020.



**Figure 5.3: Proposed budget and year of approval**

In contrast, the action plan for Khanh Hoa province contains only 5 projects. These include assessment of climate change impacts, and awareness-raising activities. No infrastructure project was proposed. Thus, it is challenging to explain the huge variation in the amount of proposed budgets to implement the action plans. It can be concluded that the proposed budgets for the climate action plan were mainly based on estimation of the formulation team or consultation rather than on available resources to select adaptation options, as Boswell et al. (2012) argued.

Across the plans, the sectors for intervention varied, but most proposed priorities for agriculture, forestry, transportation and infrastructure, water resources, and health care. In each area of intervention, a number of activities were proposed, although some provinces grouped these into broad categories such as capacity building, rather than organising them by economic sectors. Plans formulated in 2013 referenced the 'low carbon economy', indicating the new influence of the National Strategy for Green Growth approved in September 2012.

#### *5.2.2.2 Proposed budget vs. geographical location of provinces*

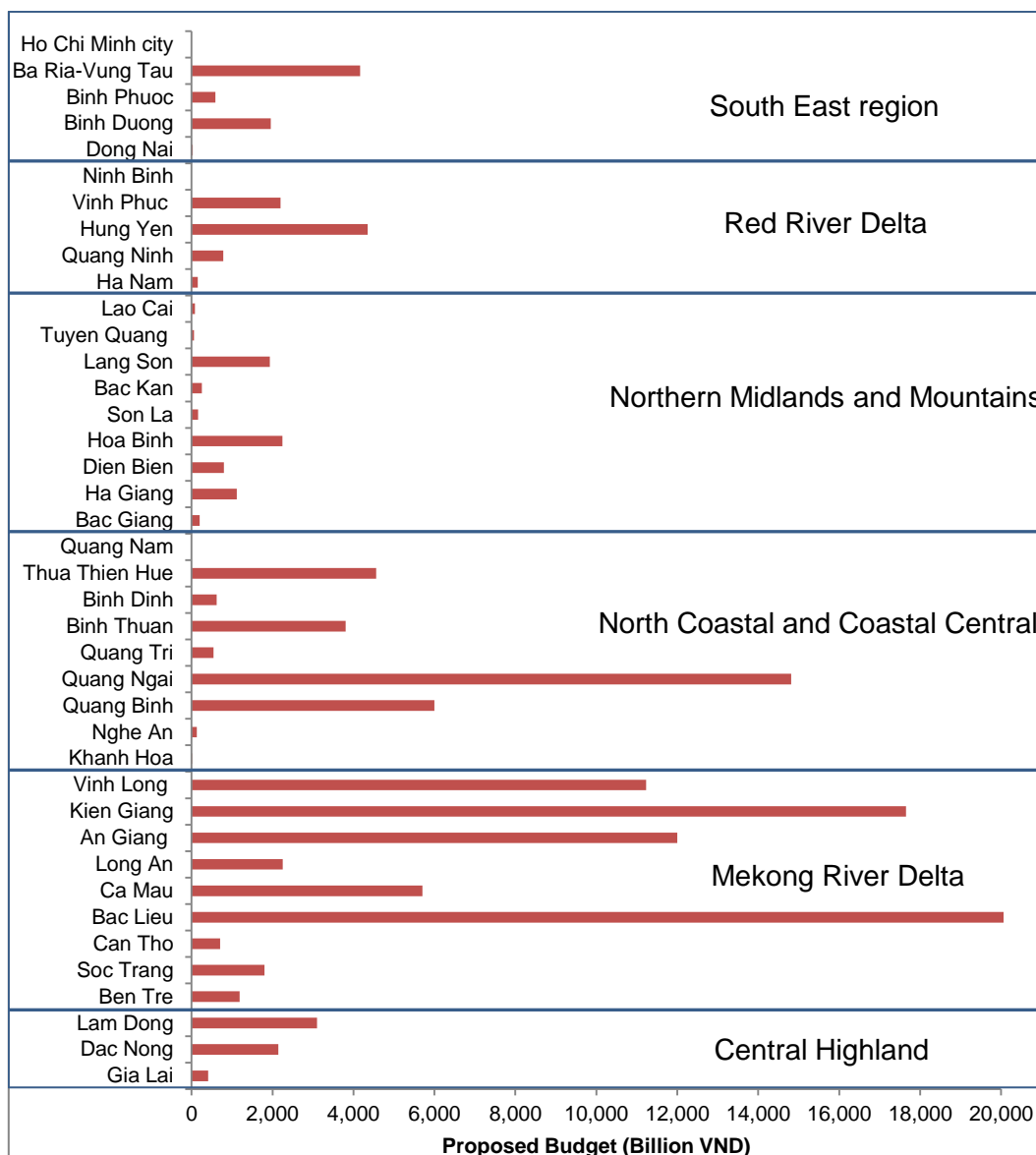
According to Tang et al. (2010), the wealthier and more vulnerable municipalities or counties often prepare higher quality climate action plans and allocate more budget resources for the implementation of their action plans. In the case of Vietnam, most of the budget for implementation of any public policy is from the national budget. Budget for implementation of the climate action plan is not an exception. Meanwhile, provinces and cities have limited finances to implement their own action plans, with at least 50% of the total proposed budget requested through the central budget allocation system. However, huge variation in the totals of proposed budgets for implementation of climate action plans among the provinces are observed, regardless of the year of approval. There is a significant correlation between total proposed budget for implementation and location of provinces. Figure 5.4 indicates that provinces in the Mekong River Delta region tend to propose higher budgets compared to provinces in other regions, except Quang Ngai province, which proposed many infrastructure projects such as sea dykes and roads, with a total budget of 14,810 billion VND or 700 million USD for 9 years of implementation.

It is understandable that provinces in the Mekong River Delta region proposed a higher budget for implementation of their climate action plans, as these provinces are more vulnerable to climate change impacts than are other regions, particularly sea-level rises. Can Tho city and Ben Tre provinces proposed lower budgets than other provinces, as they approved their climate action plans in 2011 when the infrastructure projects were not officially considered as climate change projects under the public budget allocation system of Vietnam (World Bank, 2012a).

Altogether, there is no correlation between area of the province and its budget proposal. This can only be explained by further study on the climate action plan-making process, in particular the procedure to propose budgets for the implementation of the action plan, as well as the steps to prioritise areas of intervention in each of the provinces and national-level cities. It is clear that many provinces have prioritised hard infrastructure components in their



climate action plans, by investing more in infrastructure projects. However, the government of Vietnam has a budget deficit, and difficulties in allocating budgets to all provinces to meet all their demands. Meanwhile, the provinces have been relying on allocations from the national budget as they have limited resources and are themselves struggling to mobilise resources for many priorities.



**Figure 5.4: Plan proposed budget vs. geographical location of provinces**

The emphasis on hard infrastructure in planned actions and budget requests is problematic, not just because of the difficulty in funding them but because there are less expensive alternatives. ‘Soft’ interventions, focused on capacity building, information collection, and vulnerability assessment, require much less budget; and experiences around the world (Adger et al., 2009; Baker et al., 2012; Massey et al., 2015; MPI et al., 2015; Neil Adger et al., 2005) indicate that investment in ‘soft’ intervention projects is more effective, particularly

in places where resources for intervention is limited, and eventually increases the local adaptive capacity.

In the present study, results also reveal that there is no clear linkage between the area of a province and total budget proposed for implementation of their climate action plan. No discernible correlation exists between economic growth and the content of climate action plan of provinces and cities (Appendix 7 presents some background information of areas, population, economic growth and GPD of the 40 studied provinces). This finding contrasts with those of Tang et al. (2010) and Tang et al. (2013). Tang and his colleagues found that there is a relationship between the content of the climate action plan of a city and the level of economic development of that city, in the USA. It may be explained that, in the USA, the city authorities are more autonomous than provinces in Vietnam; and, furthermore, the climate action plans focus on mitigation rather than adaptation, which requires more tailored, local and specific solutions.

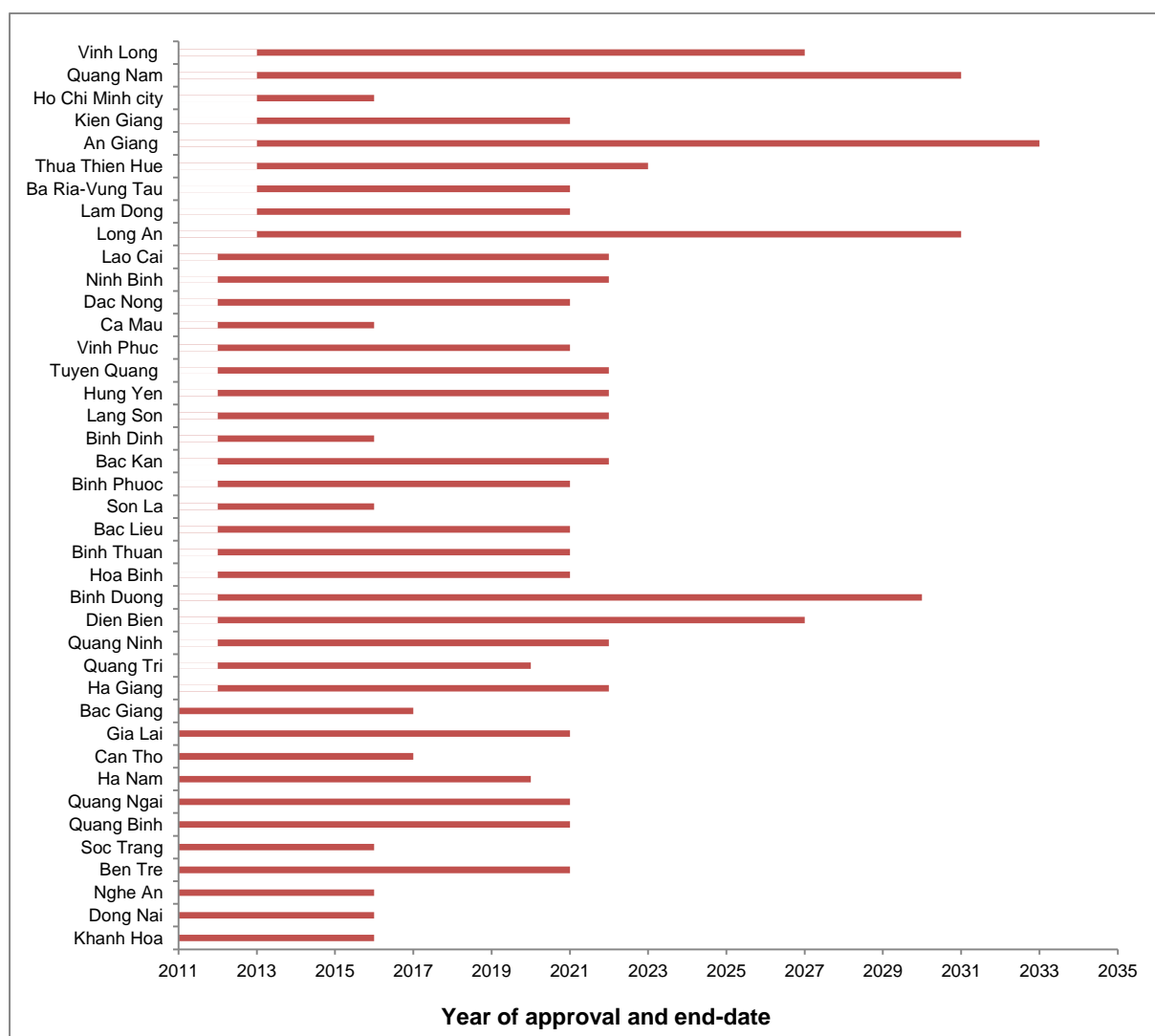
Dates of plan making and budgets may relate to the form and timing of the directive that they originate from. Climate action plans were first introduced in Vietnam as part of the National Target Program to Respond to Climate Change (NTP-RCC) in 2009. All national ministries and provincial level governments were required under the NTP-RCC to prepare climate action plans indicating their proposed responses to climate change. During the initial phase of NTP-RCC (2011-2015), adaptation to climate change was recommended as the emphasis, particularly in provinces. Each province and national-level city (same level of government as a province) had an agreement to receive up to one billion VND (approx. 50,000 USD) from the national government (through NTP-RCC's budget) for development of the climate action plans, except three provinces received more than one billion VND to formulate their climate action plans, Ho Chi Minh city, Quang Nam, and Ben Tre province (MONRE, 2015). During this initial period, there were relatively few consulting firms in Vietnam who were technically qualified to undertake this type of work, including institutes based at universities and state research institutions. MONRE assisted local governments in identifying suitable consultants to support the climate action plan formulation process if requested.

### **5.2.3 Timelines of the climate action plans**

#### *5.2.3.1 Timelines vs. year of approval*

The 40 climate action plans were approved in 2011, 2012 and 2013, by respective provinces. The results presented in Figure 5.5 show that the timelines for the implementation of these action plans varied greatly, from just 2 years (e.g. Ho Chi Minh city) to more than 15

years (e.g. An Giang, Binh Duong, Long An and Quang Nam provinces). However, in general, the action plans approved in 2011 had short timelines for implementation (6 years) compared with those approved in 2012 (8 years) and in 2013 (11 years).



**Figure 5.5: Year of approval and end-date of 40 provincial climate action plans**

In summary, the number of years allotted for plan implementation increased from the early to later action plans. This can be explained by linking with the duration for implementation of NTP-RCC and the NCCS. NTP-RCC was designed to implement in three phases, with the second phase being five-year (2011-2015), clearly indicating its influence on the action plans approved in 2011. Those action plans approved in 2013 averaged 11 years to implement, which reflects the timeline established in the NSCC (up to 2020, and vision to 2050), as reflected in the climate action plans of provinces.

It appears that the national climate change framework (direction) is a clear influence on the timeframe of provincial climate action plans. Newer action plans tend to have longer time for

implementation, as the new national climate policy direction also indicates long-term vision and considers climate change as a long-term intervention priority.

### 5.2.3.2 Timelines vs. geographical location of the province

Timelines for implementation of the climate action plans of provinces and cities may also be influenced by the context of local conditions: the provinces that are more vulnerable and require more resources to increase adaptive capacity, in particular infrastructure system, often require more time to deliver their plan's activity. It appears that timelines for implementation of climate action plans of provinces located in Red River Delta and Northern Midlands and Mountains are quite similar, having an average of 9 years, except Son La, Bac Giang and Dien Bien provinces, which have a shorter duration (Figure 5.6).

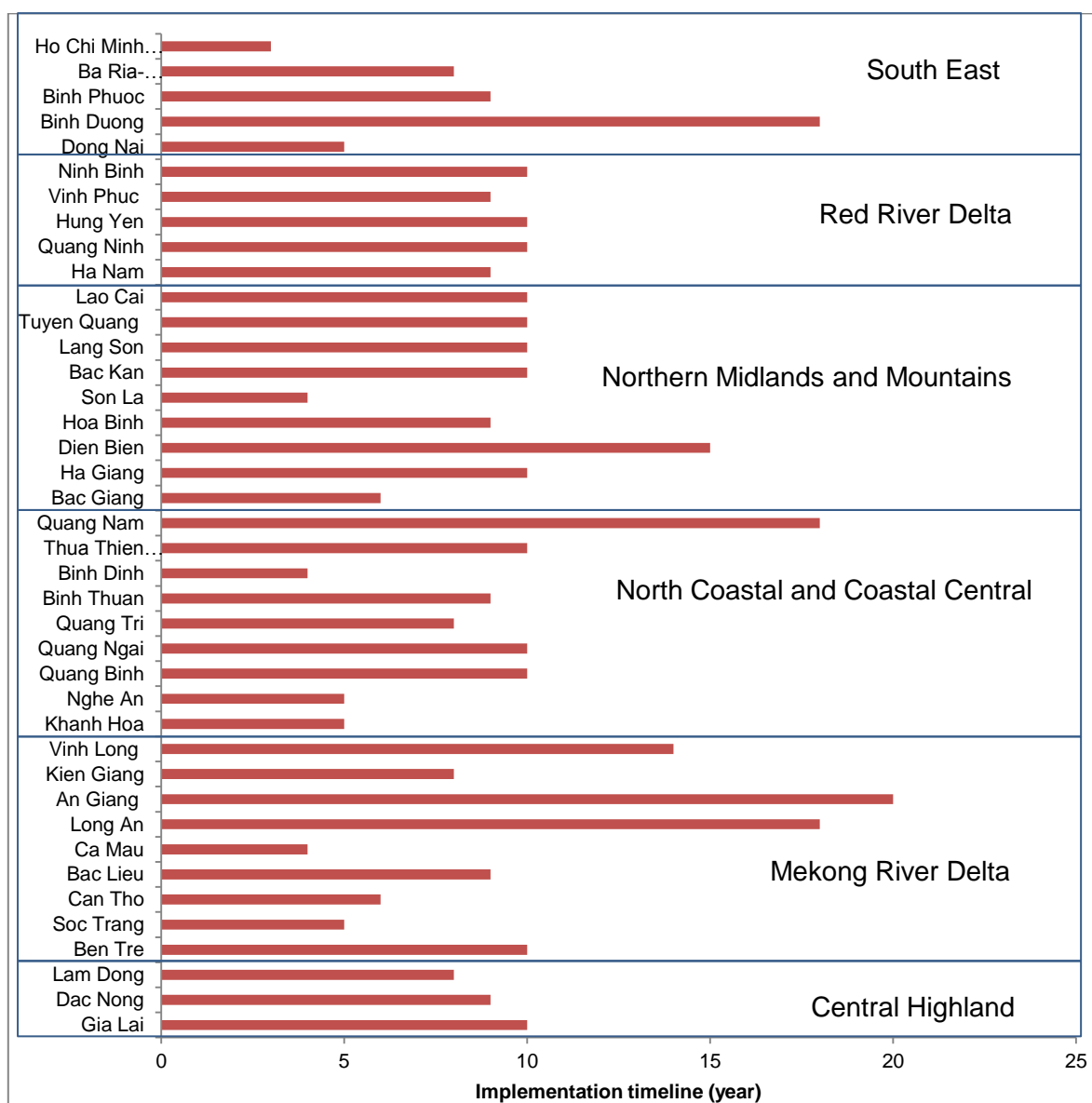


Figure 5.6: The plan implementation timelines vs. locations of provinces

This may be due to the influence of the consulting organisations that supported these provinces to formulate their action plans or shared their experience during the formulation process among these provinces. However, just by analysing the climate action plans, it is not possible to provide the evidence whether the above assumptions are valid, as not all the action plan papers mentioned the institutions or consulting organisations that supported the provinces to prepare the document. Interestingly, this result is closely linked with the duration for implementation of the National Strategy for Climate Change (NSCC). Particularly, An Giang province in Mekong River Delta region proposed the longest timeline for implementation of their climate action plans; in particular, An Giang province established a timeline of 20 years. Meanwhile, Soc Trang, Can Tho and Ca Mau each proposed a timeline of less than 5 years. Notably, Soc Trang and Can Tho approved their climate action plans in 2011, indicating that early action plans tend to have a shorter timeline for implementation (strictly influenced by NTP-RCC's timeline).

The plans approved in 2013 appear to have longer timelines for implementation compared to early plans that approved in 2011 and 2012, but this variation is mainly influenced by the national climate change policy framework, in particular the National Strategy for Climate Change approved in December 2011. In summary, there is no clear link or strong correlation between timeline for implementation of the climate action plans and the location of the provinces, regardless of whether the province is in the North or located in the South, except the provinces in Mekong delta region.

#### ***5.2.4 Intervention areas in the climate action plans***

Most provinces proposed areas of intervention by 'state management' sectors or areas. For example, interventions often link to agriculture, transportation, construction, health care, and environment, and so on. This state management approach makes it easy to assign tasks to provincial departments and agencies for implementation. However, in order to tackle climate change issues, in particular climate change adaptation, it should be able to identify impact factors, then propose responding actions accordingly. While accepting that there are other starting points for climate change recognition and response, in this thesis and the research upon which it is based, the starting position is the broadly-accepted one as articulated in for example the work of Boswell et al. (2012) of moving from climate science to climate impacts (e.g. sea level rise and precipitation), then to local vulnerability and local available resources, before proposing any adapting option (see Section 2.3.3 and Figure 2.3 in Chapter 2). Therefore, the intervention areas should rely upon the impact factors that are critically related to local climatic contexts.

Most common areas of intervention in the 40 analysed climate action plans are community health and agriculture, which appear to have received more attention from local authorities. These two areas also received more works from academics as research priorities. Throughout the 40 action plans of provinces in Vietnam, it is indicated that most projects and activities are channelled into hard components of adaptation such as building infrastructure, including sea dykes, riverbank embracement, and irrigation and drainage systems, in particular for the provinces that proposed large budgets for implementation. For example, Ca Mau province proposed a budget of 5.706,8 billion VND, but there is only 9,4 billion VND for capacity building and awareness raising (3 projects) and 162.7 billion VND for management and formulation of policies and institutional setting up (25 activities or projects); meanwhile an amount of 5,534.7 billion VND was allocated to 11 infrastructure development projects. It appears that, if the intervention areas focus on hard projects, then the proposed budgets were much higher than those provinces that designed intervention areas into a soft component.

Most intervention areas were based on the state management areas such as agriculture, forestry, water resources, land use planning, health care, industry and transportation. For example, Quang Ninh province grouped intervention areas in: (1) water resources; (2) agriculture; (3) health care and health; (4) energy; (5) waste treatment; (6) CDM projects; and (7) other areas. Meanwhile, Ha Giang province proposed intervention areas into: 1) agriculture, forestry and food security; (2) water resources; (3) transportation and infrastructure; (4) industry and energy; and (5) health care and community health. Quang Binh province grouped interventions into: (1) awareness raising; (2) social security; (3) energy; (4) biodiversity; (5) infrastructure; (6) disaster management; (7) forestry; (8) coastal management; (9) water resources; (10) land-use planning; (11) agriculture; (12) aquaculture; (13) marine ecology; and (14) environmental protection.

Other provinces proposed measures or intervention areas into 'non-construction' and 'construction'; or even mentioned 'soft' and 'hard' interventions; in which 'non-construction' or 'soft' intervention focuses on training, capacity building and awareness raising; while 'construction' or 'hard' intervention focuses on sea dikes, drainage system, road and reservoir building.

### ***5.2.5 Institutional arrangements for implementation of the action plans***

With regard to the institutional arrangements for the implementation of the 40 climate action plans, the results show that there is no significant difference among provinces. In general, provincial authorities assigned their Departments of Natural Resources and Environment

(DONRE) as the coordinating agency to implement their climate action plans. The Department of Planning and Investment (DPI) and Department of Finance (DoF) are key agencies, in collaboration with DONRE, to arrange and allocate and to disburse budgets for implementation of the action plans. In addition, other departments and public agencies were assigned to implement related activities under their management responsibilities. There was no non-governmental organisation (NGO) included in the implementation setting. This kind of formal institutional setting for climate action plan implementation is similar to that mentioned in the NTP-RCC (2008) and the NSCC (2011).

There was no difference in institutional arrangements mentioned in the forty climate action plans by year of formulation or by regions. It appears that the DONRE was assigned as the leading agency to implement the climate action plan in all provinces. This is understandable, as DONRE is the department to manage all activity related to natural resources management and environment, including climate change. The kind of institutional setting is the same as the setting of national-level policy documents such as NTP-RCC and NSCC.

How the actual collaboration and interaction among the agencies in formulation and implementation of the provincial action plans take place can only be revealed through investigation of the plan-making process in the three case studied provinces (Chapter 6).

#### **5.2.6 Evaluation and monitoring framework**

Evaluation and monitoring is particularly important in designing climate policy. In the literature, as mentioned in Chapter 2 (Section 2.3.4), evaluation and monitoring is one of the most important components of any climate action plan. Tang et al. (2010) have taken evaluation and monitoring strategies as one of the indicators to assess the quality of climate action plans. On the other hand, Moser and Ekstrom (2010) view evaluation of the options and monitoring of implementation outcomes as one of the key stage processes in identifying barriers in climate adaptation. In national climate change policy documents of Vietnam, evaluation and monitoring have been taken into consideration when designing policy objectives: for example, in NTP-RCC, the third objective is “*strengthening capacity, communication, monitoring and evaluation of the program’s implementation*” (GoV, 2008). However, content analysis of forty climate action plans indicates that evaluation and monitoring were mentioned broadly in the action plan documents. Most of the provinces did not propose evaluation and monitoring tasks or framework as part of their climate action plan documents. There are no specifications of evaluation and monitoring frameworks that point out who will be assigned to conduct evaluation and monitoring activities. There are some provinces that mentioned preparing reports of the implementation progress annually or on

the request of PPC or MONRE. For example, information presented in annual reports on the implementation of the action plan, or in the assessment report on the implementation of the first generation of its action plan (used as the background document for formulation of the city's second climate action plan, 2016-2020) of HCMC, is superficial and does not provide any evidence of how many proposed activities were undertaken, or how much budget was allocated for implementing the action plan. This means that there has been no comprehensive evaluation work taken place in HCMC regarding the implementation of their first climate action plan for the duration of 2013-2015.

Reviewing forty climate action plans, it can be concluded that evaluation and monitoring were not designed or included. Lack of evaluation and monitoring framework in the action plan documents will create challenges in overseeing the effectiveness of resources allocation for implementation of these climate action plans as well as the level of success in achieving objectives of the action plans.

### **5.3 Chapter summary**

The content of forty provincial climate action plans analysed in this study reveals that, even within the centralised policy-making system of Vietnam, there are differences among provinces in their climate action plans that extend beyond those expected due to local variability of climate vulnerability. For example, variations can attribute to whether the action plans were approved in 2011, 2012 or 2013. In general, newer action plans (e.g. approved in 2013) have longer timelines for implementation, with an average of 11 years compared to those plans approved in 2011 (7 years). The analysed results also reveal that the implementation timelines of climate action plans of the provinces in Red River Delta and Northern Midlands and Mountains were more or less of the same duration, of 10 years.

Another significant variation is the total proposed budget presented in the climate action plans. Some provinces proposed as much as 20,000 billion VND (more than 1 billion USD), other provinces requested as low as 11 billion VND (0.5 million USD), and still others did not include budget for implementation even though there are many projects and activities proposed. These differences appear not to be due to the year of the action plans' approval or the location and area of the provinces, but rather related to variation in approaches in designing the action plans. The proposed budget for implementation of the action plans is not correlated with the income or economic perspectives of the provinces, but rather related to the level of vulnerability to climate change and the areas of intervention preference. This finding varies from result of a study conducted by Tang et al. (2010) in the US.



Most provinces and cities proposed budgets for implementation of their climate action plans. However, there are three provinces among the forty provinces that did not propose a budget for implementation, HCMC, Quang Nam, and Ninh Binh provinces. In the case of HCMC, the climate action plan mentions the total budget of all finished and ongoing projects related to climate change implemented in HCMC, but no activity under the climate action plan was allocated a budget for implementation. This will be further discussed in Chapter 6, where the city's climate action plan making process is explored.

Multi-level governance influences are partly discernible from the content analysis. The involvement of national government agencies and international development or donor agencies as dynamic actors is apparent, as is the variability of the plans accordingly, and as mentioned above by the year in which they were formulated. The unfolding transformation of national climate change policies is reflected in the scope of objectives and timelines, as clearly revealed in the content analysis of provincial climate action plans. The requested budget for implementation of the climate change action plans varies greatly from province to province. Reliance upon national budgets for local projects may delay implementation of measures or activities proposed in the action plan; and ultimately, objectives of these action plans may not be delivered as expected, which it also raises the question of how local actions to respond to climate change can be delivered with limited resources in the hands of local authorities. Baker et al. (2012) also highlight this finding in their study in Australia. For example, Baker et al. revealed a reluctance of councils to commit to adaptation actions that need ongoing financial liabilities, if there is no ongoing funding secured.

It is apparent from the content analysis that few provinces (twenty-seven out of forty) formulated their climate action plans without conducting the climate change impact assessment first; as a result, the 'cause and effects' approach was not used to identify appropriate actions or solutions. Supporting documents are very important to design sound and effective action plans, particularly in the case of climate change at provincial level. The climate change impact assessment reports, if prepared for provinces, were based on the national climate change and sea-level-rise scenario, which could not be scaled down to the provincial level without reduction of interpretation quality of the impacts or vulnerabilities. Hence, it is necessary to prepare supporting documents, in this case, climate impact assessment and climate vulnerability reports, in order to provide a better foundation for formulation of a sound climate action plan that takes into consideration the local characteristics.

The national guideline prepared by MONRE in 2009 (Document No. 3815/BTNMT-KTTVBDKH dated 13th October 2009) is in fact the template for the climate action plans of

provinces rather than the procedure or steps to formulate action plans for the provinces. Most provinces chose to have their climate action plans prepared by technical consultants who were qualified and knowledgeable about climate change (MONRE, 2015). However, there were relatively few of these in Vietnam at the time; and frequently these were institutes under MONRE or national-level universities and institutes with expertise in meteorology, hydrology and environment.

It can be concluded that most of the action plans analysed in this chapter show that, in order to implement these action plans, detailed work-plans for implementation are needed. The current action plans can be seen as the climate policy framework rather than as an action plan for implementation. It is difficult to evaluate the intention and practices of those involved in the making of the plans, by this initial content analysis; but it can be concluded from the gaps and focus areas that there is variable awareness amongst local policy makers regarding climate action.

In order to understand these and the climate action plan-making processes in more detail, Chapter 6 will provide information on the actual climate action planning processes in three provinces located in different geographical locations of Vietnam; and it reveals insights into how their climate action plans were developed and delivered, and what factors determined the development and implementation of their climate action plans.

## CHAPTER 6: PROVINCIAL CLIMATE ACTION PLAN MAKING PROCESSES

### 6.1 Introduction

The purpose of this chapter is to address Research Question 2: *'How were provincial climate action plans prepared and how are they being implemented?'*. This follows the broad analysis of forty climate action plans across the provinces and major cities of Vietnam, which was presented in Chapter 5. The analysis in Chapter 5 alluded to several possible factors that could have contributed to the patterns of similarities and differences among these action plans. This chapter probes these factors empirically through intensive interviews about the plan-making process in three sample jurisdictions. The scale and depth of this empirical work made it impossible to undertake such an analysis of all forty plan-making processes. Hence, the decision was made, as explained in Chapter 4 on Research Design and Methods, to select three diverse but representative provinces for investigation.

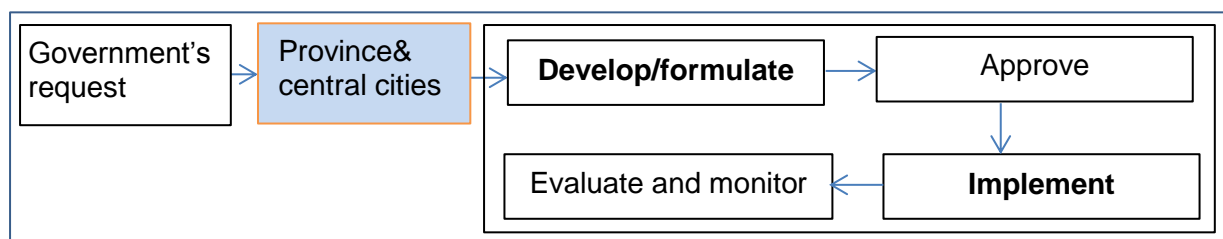
In Vietnam, the public policy-making process in general, and the climate action plan-making process at the provincial level in particular, are subject to guidelines provided by national government agencies. As already mentioned in Chapter 3 (see Section 3.2), at the national level, the public policy development process in Vietnam typically includes eight steps (Spratt, 2009). At the provincial level, these eight steps are normally merged into seven steps, as the first step is only applied at the national level where agenda setting is needed. At the provincial level, these seven steps in reframing any national policy are as follows:

- (1) Drafting its various versions (policy formulation);
- (2) Sending it to provincial departments for feedback (policy formulation);
- (3) Returning it to the authorizing department (policy formulation);
- (4) Sending it for review to other departments (policy formulation);
- (5) Accepting comments (policy formulation);
- (6) Getting experts to review and approve the policy (policy adoption); and
- (7) Obtaining the approval from Provincial People Committee.

Climate action plans of provinces have been formulated following the guideline prepared by Ministry of Natural Resources and Environment (MONRE) in 2009 (MONRE, 2009). However, this guideline only recommends the outline and structure of the action plans of provinces and sectors. The actual process of the climate action plan making solely depends

upon provincial governments; there is no obligation to submit provincial climate action plans to MONRE. The climate action plan-making process of three studied provinces may follow the above steps, or be developed through different processes that will be explored in the following sections.

In this chapter, results of the qualitative research into the plan-making process will be presented and compared. The research primarily consists of interviews with relevant stakeholders (20 interviewees) in three locations, in order to understand the climate action planning process at provincial level. The five-stage policy-making cycle discussed in Chapter 2 (see Section 2.2.2) was used as a platform to design guiding interview questions to understand the climate action plan-making processes in the three case studies. The assumption is that, within a centralisation-oriented policy-making system such as in Vietnam, the climate action plan-making process in the three locations will be the same. This chapter, therefore, will test this assumption by looking at actual climate action planning practices in Ho Chi Minh city, Quang Nam, and Lao provinces, to identify the nature of climate action planning in these three provinces.



**Figure 6.1: Generic procedure in climate action planning at provincial level**

## 6.2 Climate action plan making process in three selected provinces

### 6.2.1 Overview of the climate action planning process

Ho Chi Minh city (HCMC) approved the climate action plan in 2013 after almost five years of preparation. This was the longest duration among the three studied provinces (Table 6.1). Meanwhile, Quang Nam and Lao Cai provinces kicked off their climate action plan preparations in 2011 and 2010, respectively. After four years of preparation, Quang Nam also approved its climate action plan in 2013. Lao Cai approved its climate action plan in 2012 after just two years of preparation (Table 6.1).

Duration for implementation of the three climate action plans also varied: HCMC proposed only three years for implementation (2013-2015); Quang Nam province strategically set up an eighteen-year duration for implementation (2013-2030), divided into two stages, 2013-2015 and 2016-2030; while Lao Cai province proposed nine years for implementation of its climate action plan. It appears that HCMC adhered closely to the timeframe of the National

Targeted Program to Respond to Climate Change (NTP-RCC); Quang Nam province was more oriented to the timeline of the National Strategy for Climate Change (NSCC), but also followed the implementation timelines of NTP-RCC; Lao Cai province's climate action plan timeline is shown to have been more or less aligned with the NSCC. Table 6.1 presents key information of the three climate action plans of HCMC, Quang Nam, and Lao Cai provinces.

**Table 6.1. Overview of three climate action plans**

Key information	Provinces/city		
	HCMC	Quang Nam province	Lao Cai province
Starting year of formulation	2009	2010	2010
Year of approval	2013	2013	2012
Duration for implementation/timeline	3 years	18 years	9 years
Number of intervention area	12	9	4
Number of objectives	5	7	5
Number of projects	41	65	54
Policy paper or official decision (number of pages)	2	1	2
Content of the action plan, including list of projects (number of pages)	22	37	161 <sup>6</sup>
Background documents (number of. pages)	96	115	163
Total budget proposed (billion VND)	Not Available	Not Available	80

Source: Adapted from the Climate Action Plans of HCMC, Quang Nam and Lao Cai provinces, and information received from interviewing relevant stakeholders in three locations.

The three provinces also proposed a number of prioritised projects (HCMC - 41 projects; Quang Nam province - 65 projects (27 projects for period 2013-2015 and 38 projects for the period of 2015-2030) and Lao Cai province - 54 projects). Within these, HCMC grouped prioritised projects into twelve intervention areas (adaptation - six intervention areas; Mitigation - two intervention areas; Supporting/cross-cutting tasks - 4 intervention areas).

<sup>6</sup>The province did not separate background documents and the action plan document, but rather included these together in one document.

Quang Nam grouped sixty-five projects into nine intervention areas; and Lao Cai province channelled their fifty-four priority projects into four intervention areas (Table 6.1 and Table 6.2). Interestingly, agriculture, health care and transportation are three intervention areas that all three provinces focussed on. However, only HCMC proposed a research program under adaptation tasks. HCMC also proposed a task to build up a database under the mitigation agenda, which indicates the ambition of the city not only adapt to climate change but also to proceed with reducing greenhouse gas emissions.

**Table 6.2. Areas of intervention in three climate action plans**

<b>Province/City</b>	<b>Areas of intervention/priority</b>	<b>Remark</b>
HCMC	<p><b>Adaptation tasks/sector engagement</b></p> <ol style="list-style-type: none"> <li>1. Set up and kick-off science-technology research program (12 projects)</li> <li>2. Urban Planning (4 projects)</li> <li>3. Water Resources (3 projects)</li> <li>4. Agriculture (1 project)</li> <li>5. Health care and community health (1 project)</li> <li>6. National defence and security (2 projects)</li> </ol> <p><b>Mitigation tasks</b></p> <ol style="list-style-type: none"> <li>7. Energy (7 projects)</li> <li>8. Wastes (3 projects)</li> </ol> <p><b>Supporting tasks</b></p> <ol style="list-style-type: none"> <li>9. Strengthening international cooperation (1 projects)</li> <li>10. Database (3 projects)</li> <li>11. Increase awareness and human resource development (3 projects)</li> <li>12. Establish and update climate action plan (1 projects)</li> </ol>	Divided into adaptation and mitigation priorities; also lists supporting tasks in the action plan.
Quang Nam province	<ol style="list-style-type: none"> <li>1. Agriculture</li> <li>2. Forestry</li> <li>3. Transportation</li> <li>4. Industry</li> <li>5. Culture and Tourism</li> <li>6. Education and training</li> <li>7. Health care and community health</li> <li>8. Land resources</li> <li>9. Water resources</li> </ol>	Channelled intervention areas into sectors (2013-2015) and sectors+spatial areas for 2015-2030) <sup>7</sup>
Lao Cai province	<ol style="list-style-type: none"> <li>1. Natural resources and environment include water resources, biological resources and biodiversity; environment and waste management</li> <li>2. Agriculture includes crop cultivation, husbandry, agriculture, forestry and aquaculture</li> <li>3. Energy, transportation and infrastructure development</li> <li>4. Community health</li> </ol>	Divided into different catalogues/group of intervention. Basically also sector-oriented intervention approach

**Source:** Adapted from the Climate Action Plans of HCMC, Quang Nam and Lao Cai province

<sup>7</sup> In the list of prioritised projects, the province did not group projects into sectors or mitigation-adaptation but did classified as infrastructure projects and non-infrastructure projects.

Among the three action plans, only Lao Cai province proposed a budget for implementation, with an amount of 80 billion VND (around 4 million USD) for nine years of implementation. HCMC lists all related finished and on-going projects with a total approved budget of 70,500 billion VND (around 3.5 billion USD), but none of the projects listed in the action plan included a proposed budget for implementation. Quang Nam province did not propose a budget for implementation of its climate action plan but presented the sources of finance, which are mainly from the state budget (50% of total budget requested). The three studied provinces all requested that 50% of the budget for implementation of their climate action plan come from the state budget. This rate of budget request is similar to what has been proposed in the NTP-RCC, which was approved by the Government of Vietnam in 2008 (GoV, 2008).

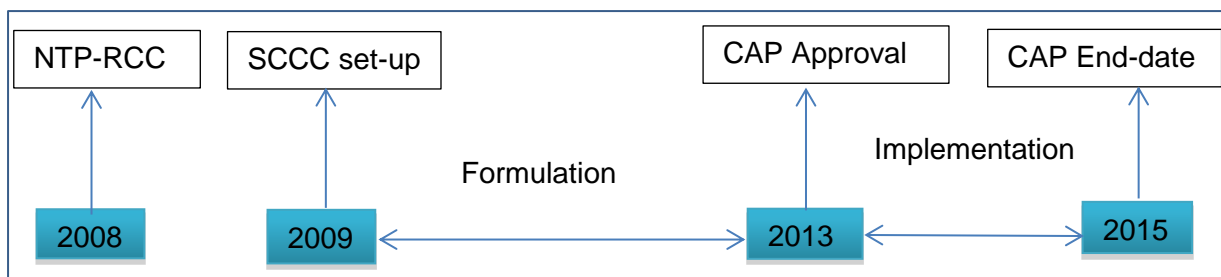
Ho Chi Minh city proposed 41 prioritised projects which can be grouped into three components, in which; Adaptation component covers six areas of intervention/management which includes set up and kick-off science-technology research program; urban planning; water resources; agriculture; health care and community health; and national defence and security; Mitigation component covers two areas of energy and waste management; and Supporting component covers four areas of strengthening international cooperation; database; increase awareness and human resource development; and establish and update climate action plan.

It is clear that each province has its own way of presenting prioritised projects and areas of intervention. For example, HCMC channelled the projects into mitigation and adaptation groups; meanwhile, Quang Nam province grouped the projects into sectors (Quang Nam even classified projects as infrastructure and non-infrastructure. In period 2013-2015, there were 24/27 projects are infrastructure projects; for period 2015-2030 there are 16 non-infrastructure projects, 18 infrastructure projects and the remaining 4 projects were granted for planning and communication); and Lao Cai province prioritised the projects into broad sectors.

The next sections of this chapter provide the results of the qualitative research on the plan-making process in each of the three jurisdictions. Following these three accounts, Section 6.3 provides a synthesis of the factors that affected the development and implementation of climate action plans across the three areas.

### **6.2.2 Climate action plan making process in HCMC**

The process of climate action planning in Ho Chi Minh City (HCMC), which started as early as 2009, is presented in Figure 6.2. The action plan was officially approved in 2013.



**Figure 6.2: Climate action planning timeline in HCMC**

According to H1<sup>8</sup>, the formulation activities of the climate action plan of HCMC started as early as 2009, when the Standing Office for Climate Change (SOCC) of the city was established as a taskforce to formulate the climate action plan. The Department of Natural Resources and Environment (DONRE) was assigned to coordinate the taskforce during the formulation process. Beginning with the collection of data and information and thematic reports on aspects of climate change, cooperation with counterparts from the Netherlands and Japan was established to support the formulation of the action plan, particularly in key technical areas such as urban planning, solid waste treatment and flood control. Several consultation workshops/ seminars on the structure and content of the action plan were organised by SOCC during the period of 2010-2011. HCMC officially set up the Climate Change Bureau (CCB) as an independent unit to coordinate all related climate change activities in the city (Decision No.2861/QD-UBND dated 21 May 2012). This new group is the same as the Climate Change Committee (CCB) at the national level, which was established by a recommendation in the National Strategy for Climate Change (2011). The CCB has the following responsibilities:

- To assist SCCC in formulating a climate action plan and target programs to respond to climate change issues in the city.
- To propose policies and mechanisms for collaboration in order to effectively implement actions to respond to climate change in the city.
- To coordinate and implement climate change-related projects in the city.
- To promote domestic and international cooperation in the field of climate change.
- To support high quality human resource development, especially among managers, to effectively respond to climate change.
- To carry out general awareness-raising activities.

<sup>8</sup> Each of the interviewees are depicted by a letter and a number. In this case, H1 refers to informant No. 1 from Ho Chi Minh city (see Table 4.5).



The establishment of CCB has been considered a key factor in influencing the climate action plan formulation activities of the city. CCB has acted as a hub to collect information and synthesise comments from the city's departments and agencies. According to H2, all related departments and agencies of HCMC were requested to nominate a representative to a joint working team/group to prepare the background documents (e.g. thematic reports) and to draft the action plan. HCMC also sent officers to learn experience in development of the climate action plan from Da Nang city; however, one of CCB's official remarked that:

“We learnt from Da Nang on the structure of their climate action plan and also the supporting documents, particularly the vulnerability assessments conducted by international and national experts. But we found that it was hard to conduct such studies as we did not have supports from international-funded projects”. (H4)

Thus, HCMC decided that the climate action plan had to be developed by city officers, and no comprehensive vulnerability assessment report was prepared. After the collection of all relevant information on climate change impacts and vulnerabilities and the preparation of supporting documents, the content of the action plan (rational and scope of the action plan) was drafted. This draft was circulated to city departments and agencies for comments. In order to include prioritised projects/ activities, all concerned or related departments and agencies were requested to propose a list of projects that related to their management areas. By receiving the prioritised projects and activities from departments and agencies, the city only needed to consolidate these into the CAP's list of proposed projects/ activities. However, some departments (sectors) did not have the climate-impact assessments, and the proposed activities were not closely related to climate change or were just a wish-list rather than appropriate intervention measures to respond to climate change (H4). In addition, resources for implementation of these proposed projects and activities were not clearly identified or estimated (H6). Despite these concerns, this approach did ensure that all departments (or sectors) had a voice in developing the Climate Action Plan.

After reviewing comments from relevant stakeholders, the CCB developed and costed a final draft of the action plan, and submitted this to the SCCC for final consideration before it was submitted to Chairman of the City's People Committee for decision-making (approval of the action plan).

It is clear that the formulation process of the climate action plan in the city involved mostly representatives from city departments and agencies. For example, during this formulation stage, the participation of research institutions and universities was quite limited due to time constraints and the lack of a platform for consultation between policy makers and academia. Academia only participated in the consultation workshop on the final documents of the action

plan, when most of key contents and structure had already been developed (H6).

According to an official (H3) who worked at CCB, the drafted climate action plan was finalised in 2011 but the final approved decision was only made in June 2013. It took more than two years to have the climate action plan officially approved by the People Committee of the city. Interestingly, the draft prepared in 2011 included a budget for every single project and activity, but the final action plan approved by People's Committee of the city in 2013 did not include a budget for implementation of activities in 2014 and 2015. Instead, these were consolidated into a budget of ongoing climate change projects and activities since 2003 (including pre-existent projects already approved and allocated funds/ budget). This perhaps shows the commitment of the city in responding to climate change.

Interviews with relevant stakeholders (H1, H2, H3 and H4) all reveal that the People's Committee paid special attention to sources of funding in the budget proposal, particularly when the project proposed that the finance should come from the local sources. This was because new regulations for state budget planning requested ministries and provinces to clearly state all sources of budget to implement their proposed projects before making official approval (decision making). In order to secure the budget, the province has to follow the priority of public investment regulated by the Directive No.1792/CT-TTg of the Prime Minister, dated October 15, 2011, on strengthening the management on investment funded by state budget and government bonds (GoV, 2011e).

These new regulations put additional pressure on the provincial authorities to decide which projects should be prioritised, and to identify the sources of budgets for their implementation. This led to the SCCC being requested to revise the budget for the climate action plan. Due to these new budget regulations, SCCC and the task-force removed all the budget information for the prioritized activities, in order to get the climate action plan approved by the People's Committee of the city. As noted above, a total budget of more than 70 thousand billion VND, which covered all climate change activities since 2003, was listed in the action plan, but none of new priority activities for 2013-2015 were allocated resources for implementation. It appears that budget calculation and identification of budget sources for the prioritised projects and activities were the most challenging tasks, and resulted in delayed approval of the climate action plan (H1, H4 and H5). This is why the final approval took two years. Once revised, the People's Committee took only thirty-three days to give its approval (H4, H6).

This experience reflects the findings of Amundsen et al. (2010), that local governments often lack funding to address climate adaptation properly, especially where adaptation at the

national level has barely been commenced. Even in a developed country such as Norway, local governments still encounter difficulties in securing funding for climate adaptation. Thus, it is understandable that HCMC was severely challenged in the area of budget planning to implement their climate action plan.

HCMC proposed a list of 41 prioritised projects for the period of 2013-2015, under eleven areas: (1) a scientific research program, with twelve projects; (2) a database, with three projects; (3) urban planning, with three projects; (4) water resources, with three projects; (5) agriculture, with one project; (6) awareness raising and human resources development, with four projects; (7) health care and community health, with one project; (8) national defence and security, with two projects; (9) energy, with seven projects; (10) waste management and treatment, with three projects; and (11) two projects to be implemented by CCB.

According to one interviewee (H1), by October 2014 about 75% of the proposed projects had been implemented by the assigned agencies. However, due to the lack of budget allocations being made for the proposed projects, the interview information could not reveal to what level the proposed project is being implemented. However, two interviewees (H1 and H3) indicated that the city is on track in implementing its climate action plan. Indeed, several private sector projects, in addition to the city action plan, were reported. These were, in particular, in the areas of solid waste collection and treatment. For example, in partnership with Japanese enterprises, several small and medium enterprises in HCMC are implementing projects to obtain carbon credits for the Bilateral Carbon Offset Mechanism (BCOM). In addition, learning experiences from national and international counterparts also contributed in developing the first generation of climate action plans, and also improved the capacity of the city officers who are in charge of climate change, as pointed out by a respondent:

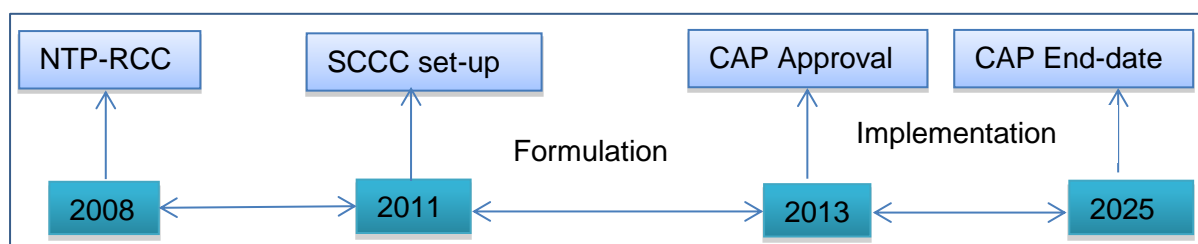
“You know that, information exchange was a critical strategy for the city moving ahead to deal with challenges, particularly with the climate change issue. It allowed us to share our priorities and concerns on climate change to our international partners. We also learnt from other provinces such as Da Nang and Can Tho cities in preparation of supporting documents for the formulation of the action plan”. (H1)

However, there is no evaluation and monitoring framework or similar requirements for the climate action plan. Indeed, while the CCB is responsible for collecting reports on projects from the implementing agencies and departments, the plan does not contain any legal requirement for evaluation and monitoring (H4). In addition, most of proposed and prioritised

projects in the action plan were not implemented due to the budget problem (H3). This indicates that even HCMC took four years to develop their climate action plan, budget and monitoring challenges were still unsolved, and delivery of the climate action plan has been in question.

### 6.2.3 Climate action plan making process in Quang Nam

The process of climate action planning in Quang Nam province is presented schematically in Figure 6.3.



**Figure 6.3: Climate action planning timeline in Quang Nam province**

As requested by the national government, Quang Nam province started to prepare its climate action plan by establishing a Steering Committee for Climate Change (SCCC) in 2009. The SCCC of Quang Nam province was formed to oversee the development of the action plan and to establish a standing office to support SCCC in development of the climate action plan. The formulation and implementation of the climate action plan is under the framework of the National Targeted Program to Respond to Climate Change (NTP-RCC), with budget allocations to also come from the implementation budget of NTP-RCC.

The province contracted Tran Nguyen Environmental Technology Limited Company (Tran Nguyen Ltd) to conduct primary studies of anticipated sea-level rises and other climate change impacts, as well as scenario and vulnerability assessment. An international technical consultant employed by the DANIDA project also contributed to the reports prepared by Tran Nguyen Ltd. This primary research was outsourced because the sea-level rise and climate change scenarios developed by Ministry of Natural Resources and Environment (MONRE) for the whole country could not be accurately downscaled for Quang Nam, where geographical conditions are very complex, ranging from coastal landscapes to mountainous area. Based on the studies conducted by Tran Nguyen Ltd, the draft climate action plan was formulated, before being distributed to different departments and other relevant stakeholders for feedback. Quang Nam started to prepare the action plan in 2009, and the Provincial Peoples' Committee (PPC) approved their climate action plan in 2013. This process took almost 4 years (Figure 6.3). However, the final year was taken up by the approval process and obtaining the official decision of the PPC's Chairman. One interviewee (Q1) claimed that

there was great concern about the scope of the action plan and the possible sources of finance for implementation. Balancing existing priorities in the state budget with the demands of the new climate action plan was a particular concern, as there were no clear guidelines on budget planning for climate change from the national government, particularly when the activities were to be funded by state budget. As a result, the climate action plan did not include any budget calculation for implementation, even though a comprehensive list of location-specific and sectoral priority projects were identified. The final approval was given by the Chairman of PPC in May 2013, with Quang Nam being one of the last provinces to officially approve their climate action plan.

Good practices and experiences were shared during the plan-making process, but these were not optimised or consistent. As one interviewee stated:

“The consultant team worked quite independently and had less interaction with the project implementation team, particularly with the international consultant of the project, due to limitation in working time and barriers in languages. As the technical consultant team have limited knowledge in using English and the international consultant could not use Vietnamese in discussion, assigning an interpreter in discussion was not always easy because of time constraint and budget difficulties. Quang Nam’s SCCC and SOCC had shared information with NTP-RCC’s office on the difficulties in implementation of the project. The province also exchanged information and experiences with Ben Tre province regarding the implementation of projects funded by DANIDA but did not pay much attention to the climate action plan-making process as the natural condition of the 2 provinces are different and the institutional setting to support the plan making process was also varied. Ben Tre province is a small province and located in Mekong delta and its climate change impacts only related to sea-level rise but in Quang Nam the climate change impacts are more complex”. (Q3)

Late approval of the climate action plan in Quang Nam indicates that, even with technical and financial supports from the national government, and overseas development assistance (ODA) and consultants, the decision-making of the province still encountered challenges due to the complexity of climate change issues in the province and the budget planning regulations. These challenges delayed the final decision-making process, even though approval took only four days once the plan was tabled officially.

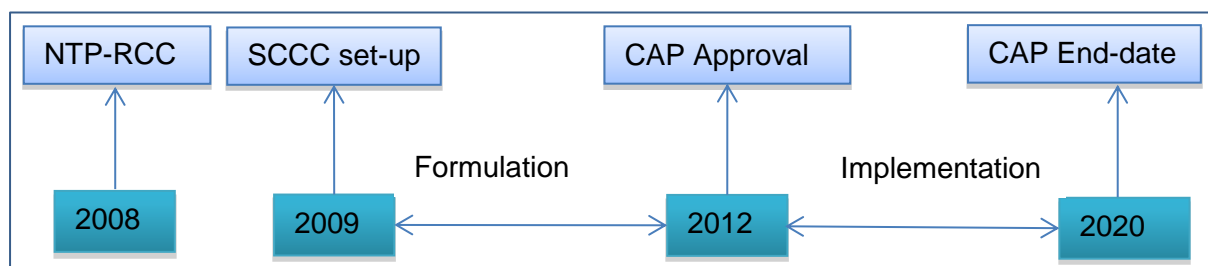
Quang Nam province was implementing its climate action plan on schedule up to the date of the interview (24th September 2014), despite these challenges. This is due to the fact that

2014 was only the first year of implementation of an eighteen-year timeline. It is impossible to evaluate the long-term success of the climate action plan of Quang Nam province after just one year of implementation. However, it is clear that the first year of the action plan implementation was on track; and this is a good starting point. However, interviews that probed more deeply into the implementation process reveal that the focus of the first year was a continuation of the activities of the DANIDA project, and that no starting and ending dates had been set for new activities. This may be seen as flexibility in planning; but it makes any assessment of progress difficult.

This problem is exacerbated by the lack of an evaluation and monitoring framework in the climate action plan. However, the provincial Department of Planning and Investment (DPI) was assigned the task of developing such a plan to assist the Department of Natural Resources and Environment (DONRE) in its role as coordinating agency for the action plan implementation. DONRE is responsible for reporting the implementation status to PPC annually, or whenever PPC requests. Interviews reveal that, up to September 2014 (after more than one year of the action plan approval), no such mechanism had been formulated (Q3). Interestingly, Quang Nam encouraged the participation of civil society organisations and enterprises in the implementation of the climate action plan. For example, the province encourages NGOs and the private sector to be active in awareness raising, information exchange, education, and communication related to climate change. Interviews with stakeholders (Q1, Q2, and Q6) indicate that an evaluation of the participation of NGOs and private sectors could be required under the Law of Public Investment (2013), even though this is not a requirement in the action plan document.

#### 6.2.4 Climate action plan making process in Lao Cai

The process of climate action planning in Lao Cai province started in 2009, when the provincial Steering Committee for Climate Change (SCCC) was established. The province approved the climate action plan in 2012 for implementation until 2020 (Figure 6.4).



**Figure 6.4: Climate action planning timeline in Lao Cai province**

The SCCC of Lao Cai province chose to develop the climate action plan through a working group, instead of forming a separate SOCC as in other provinces. In part, this was because

provincial officials did not see climate change as a major issue in Lao Cai, as it is located far inland compared with other regions of Vietnam. This, in fact, reflected a lack of knowledge of temperature increases, fluctuation in rainfall, and more regular flooding predicted for the province with climate change.

The province contracted the Center for Hydromet and Environment Consultancy, under the Vietnam Institute of Meteorology, Hydrology and Climate Change, to prepare the climate action plan, with financial support from NTP-RCC. The consultant team was responsible for conducting primary studies related to climate change issues, including background information on climate change impacts, extreme weather events, natural disasters, etc. (L3). Lao Cai province staff played a minor role in this research or the formulation of the plan. Interviews reveal that there was little participation by local community members, as the consultant team only conducted the study in some locations and collected most of its information from provincial departments and agencies. The consultation team prepared a draft of the climate action plan before it was distributed to provincial departments and agencies for comment, and prior to organising workshops with relevant stakeholders (L4). Furthermore, participation in the workshops was limited to member of the Steering Committee for Climate Change (SCCC), the working group, and officers from provincial departments and agencies. Even then, the discussion focused mainly on the structure and management processes for the action plan, rather than on its overall aims and content (L3). The effectiveness of the consultation workshops was reduced by their short duration and distribution of the research reports and draft action plan to many participants on the day of the workshops. This led to difficulties for stakeholders in trying to contribute to the content of the action plan (L4).

The passive nature of the consultation was the result of a lack of urgency and knowledge of provincial officials at that time, as almost all of the information on climate change being propagated through media (e.g. television, radio, newspaper) during the 2008-2010 period focused on sea-level rise and flooding of low lands in the delta regions. There was a marked lack of information on climate change impacts in mountainous regions. This focus led to the belief that climate change impacts on mountainous regions such as Lao Cai province were unlikely and the plan was outsourced to a consulting company as one of the interviewees noted:

“at the time the climate action plan was formulated (in 2010), awareness of the province’s leaders on the issue of climate change was not complete. We did not know what to do and how to start the planning process, then a consulting centre under a research institute in Ha Noi provided us information on the national

budget for formulation of the action plan under NTP-RCC. The province then contracted with the centre to prepare a proposal to get funding in order to develop a climate action plan. The coordination among the departments of the province was undertaken by DONRE- the executive agency to work with the consulting centre. The other departments and agencies of the province just provided related information to the consultant team; the consultant drafted the action plan which including documents as part of the plan. The participation of provincial leaders in the planning process was quite passive”. L1

The climate action planning process in Lao Cai province took just over two years (Figure 6.4). The action plan was developed by a consulting company, and the role of local officers was only focused on the coordination and information shared. As one member of the working group highlighted, the information exchange and learning interaction were as follows:

“Most of information exchange was related to climatic data and socio-economic development information that departments of the province could share with the consultant team. No information on approach in setting up an innovative and effecting climate action plan was discussed and exchanged due to the technical complexity of the climate change issues and the working approaches of the consultation team. In addition, the action plan was on the policy-making agenda that was setup by the national government; it is not the priority of the province and we lack human resources, knowledge and awareness on the issue of climate change”. (L1)

Due to the nature of climate change as an emerging issue and the limited time for participants to understand the information provided by the consultation team, there was a curtailed contribution from relevant stakeholders. The consultation team and the working group used the feedback they had received to revise the climate action plan before submitting to SCCC for final comments and revision. The Department of Natural Resources and Environment (DONRE), which acted as the responsible agency for the development of the action plan, then submitted the plan to the Provincial Peoples’ Committee (PPC) for approval (L3).

Unlike the lengthy processes in HCMC and Quang Nam province, Lao Cai province approved its climate action plan in 2012 after only a year or so of development. The approval process was not difficult, because the action plan only proposed major projects related to database development, awareness raising, and further studies about the possible impacts of climate change. A budget request accompanied each proposed project. There were no ‘hard’



projects such as infrastructure development and construction. In addition, the proposed activities and projects were also assigned to the relevant department and agencies responsible for the state management functions; hence, the climate action plan easily received consensus and agreement from the departments within the province. The official approval of the Provincial's People Committee was obtained in twenty-two days.

Despite this, interviews with stakeholders in Lao Cai province indicate that the implementation of the climate action plan has been difficult (L3). Indeed, none of these proposed activities had been or were being implemented. The implementation of the action plan could thus be considered as neglected, as there are only some training workshops. However, there were other activities that were not included in the action plan being implemented in Lao Cai province. For example, the climate action plan for Lao Cai city (an administrative unit under the province) was formulated, with the support of the Rockefeller Foundation, in cooperation with technical support of The Institute for Social and Environmental Transition-International (ISET) and National Institute of Science and Technology Strategy and Policy (NISTPASS), in 2013. However, the project of formulating a climate action plan for Lao Cai city was not initially proposed under the prioritised project in the provincial climate action plan.

As happened in HCMC and Quang Nam province, there was also no evaluation and monitoring framework for implementation of the climate action plan. As none of the proposed project was being implemented at the time of interviewing, no further information on the evaluation and monitoring concern was collected. However, the information on why the evaluation and monitoring mechanism was not included in the action plan was raised. It appears that the evaluation and monitoring mechanism is not a common priority in the planning process, particularly for an action plan such as the climate action plan of the province. The evaluation and monitoring framework or mechanism is normally designed in the specific project, such as upgrading a highway or building up a dyke, but it is not normally applied to action plans or such like policies, which tend to provide general directions rather than to propose specific actions or projects. Interviews with stakeholders (L1, L2, and L6) indicate that, due to the guideline and common practices, the climate action plan of the province did not propose a monitoring framework. It was explained by interviewees that the evaluation and monitoring would be designed and assigned for each prioritised project/activity according to the regulation and requirement on public investment procedure. It is worth mentioning that, besides the climate action plan, the province has also to prepare other climate change documents as a stand-alone report or the incorporated reports, following requests from the national government and Communist Party of Vietnam (CPV).

### **6.2.5 Summary**

The formulation stage of the climate action planning process involved both technical and political commitment. In this section, the formulation process is considered as a stage of the plan-making process, which included activities on collecting data and information, and drafting the structure and content of the action plan. In fact, formulation is an important stage in the policy-making cycle. In this stage, consultation workshops to receive comments and suggestions from various stakeholders will take place; and, more importantly, the content of the action plan is constructed and sharpened during this stage, before submission to authorities for official approval (decision-making).

The climate action plan-making process in the three studied examples shows that there was a variety in plan-making approaches. In HCMC, the climate action plan was formulated by the city officials. Quang Nam province hired a consultant company to support the formulation process; and Lao Cai province outsourced the job to a research centre to formulate its climate action plan. Plan-making duration was also different among the three studied examples. HCMC took the longest time; while Lao Cai province spent the least time in preparation of the action plan. Decision-making also varied. HCMC, one again, experienced a delay in decision-making (official approval) when receiving the first draft of the climate action plan, but quickly approved the plan when it was presented and indicated no budget commitment. Quang Nam province also took more than three years from formulating to decision-making. Meanwhile, Lao Cai province approved the action plan after less than two years from the inception. It can be concluded that, if the province out-sourced the formulation to consulting companies (research institutions and universities, for examples), less time was required for the climate action plan formulation. This relates to the responsibility of consulting companies, which can put full-time staff on the job. Meanwhile, if the province formulated the action plan by themselves, then the staff could only be assigned on a part-time or dual-role basis, which then could affect the formulation process and timeline of the action plan. The factors influencing the making of the climate action plans in these three studied examples will be further discussed in Chapter 7.

In general, the three studied provinces followed seven out of the eight steps of public policy-making that Spratt (2009) notes, with the first step being excluded due to the order from the national government to develop provincial climate action plans. Therefore, there was no policy agenda setting in all three provinces, as they received the order from the national government. However, the intensity of and the way the provinces carried out the activities to develop their climate action plans were not the same. For example, Quang Nam province spent more time and resources in conducting research on sea-level rise scenario

development, and climate impact assessment by signing a contract with the consulting company (Q2). Meanwhile, HCMC used officials from various departments for collecting necessary data and preparing supporting documents for the development of its climate action plan (H1, H4). In general, there were a number of similarities in the climate action plan making in the three studied locations, such as the steps or procedure to develop the action plan, assigning of key departments for coordinating the plan-making process, and all received orders from the national government to develop their climate action plan. However, there were a number of variations observed in the planning process in the three studied provinces. The next section will elaborate more on these variations, institutional arrangement, stakeholder participation, budget planning, and delivery of the climate action plan, in the three locations.

### **6.3 Key variations of the plan making processes in three provinces**

#### **6.3.1 Introduction**

This chapter attempts to address the third research question, “*What factors influence the implementation of the national policies at the provincial level?*”, by taking into consideration key factors influencing the plan-making processes in the three provinces.

Based on the analysis of the interview transcripts and interview notes, as well on the content analysis presented in Chapter 5, a number of themes (factor groups) that are critical in the action plan-making process will be discussed in this chapter. The three studied examples offer contrasting approaches in preparing/ making climate action plans. The variations in plan-making processes in the three provinces comprise: (1) institutional setting and coordination; (2) timeframe and participation of relevant stakeholders; (3) requested budget and area of intervention; and (4) approval and delivering of the action plans.

#### **6.3.2 Institutional setting and coordination**

As noted in Chapter 2, institutional setting is a very important factor in climate action plan making (Massey et al., 2014; Massey & Huitema, 2013; Preston et al., 2011; Uittenbroek et al., 2014). For example, Massey et al. (2014) highlights that lack of institutional capacity is one of the internal barriers to climate adaptation. Uittenbroek et al. (2014), on the other hand, stress the role of institutional entrepreneurs in mobilising resources in dealing with climate adaptation at municipal level. Interviews with local stakeholders in the three studied examples indicate that there are differences in setting up the institutions to assist action planning. Table 6.3 presents dates of establishment of the Steering Committee for Climate Change (SCCC) and dates of setting up the Standing Office for Climate Change (SOCC), in the three provinces.

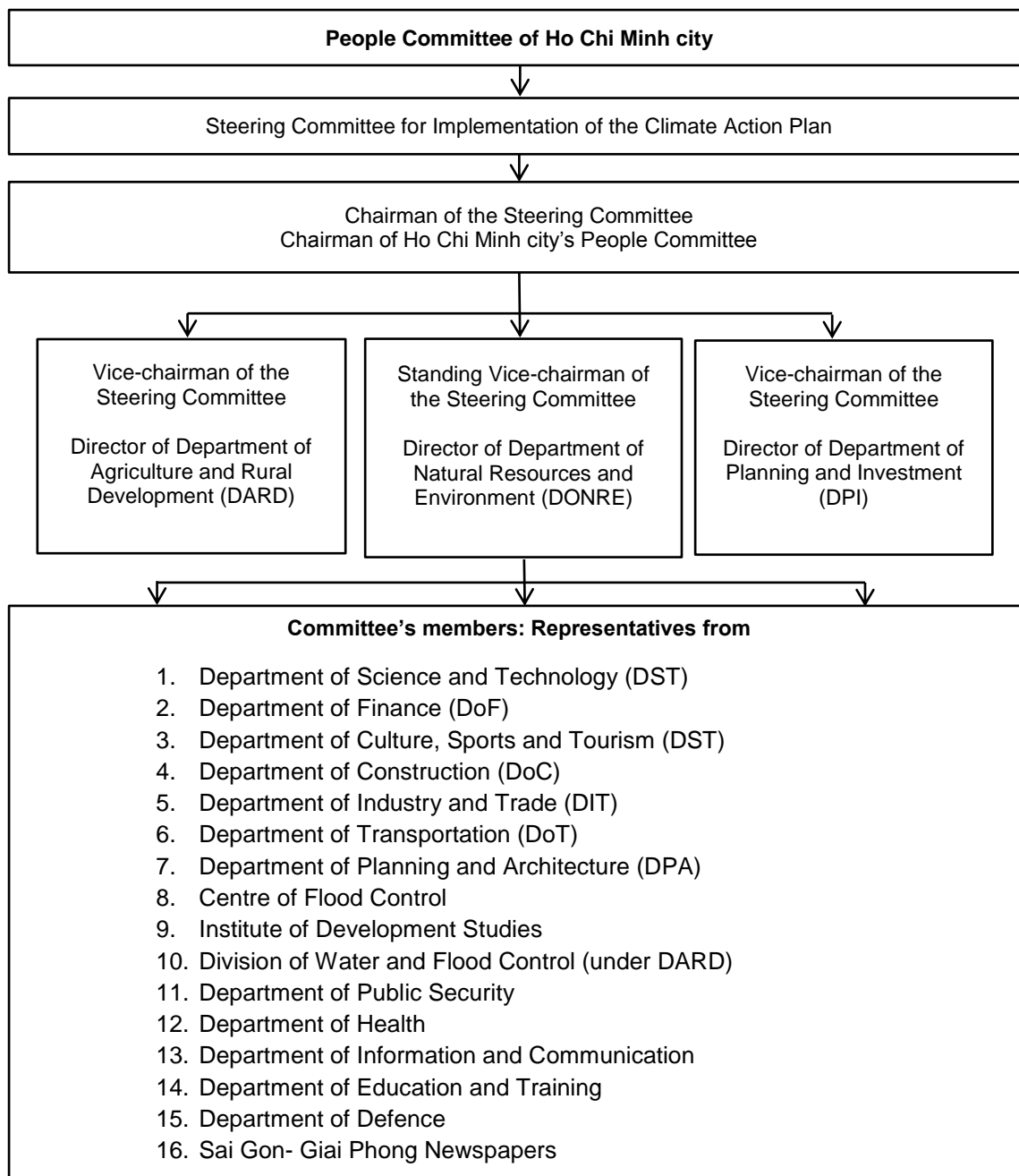
**Table 6.3. Establishment of Climate Institutions in Three Provinces**

Province/City	Year of Establishment		Remarks
	SCCC	SOCC	
HCMC	2009	2012	Climate Change Bureau
Quang Nam province	2011	2012	Implementation of a project as part of action planning, Steering Committee for implementation of the climate action plan of the province re-established in 2014
Lao Cai province	2011	n/a	At time of interviewing, Standing office for Climate Change (SOCC) was not established in the province

Source: Interviews with staff from (1) HCMC's Climate Change Bureau, (2) Department of Natural Resources and Environment of Quang Nam province, and (3) Department of Natural Resources and Environment of Lao Cai provinces.

One of the distinguishing characteristics of HCMC is that they formulated the climate action plan of the city through assigning the city officers representing SCCC's member agencies. The institutional arrangement for formulation and implementation of its climate action plan can be seen as the key factor influencing the formulation and implementation of its climate action plan. HCMC is considered as one of the most active local governments in Vietnam in responding to climate change (H1, H6, N5).

HCMC was the first sub-national government to set up the Steering Committee for Climate Change (SCCC) in Vietnam. As early as 2009, functions and tasks of the committee were approved by the chairman of the city. Figure 6.5 presents the organisational structure of the committee and its members. There are three vice-chairmen of the committee, and the director of the Department of Natural Resources and Environment (DONRE) has been assigned as the standing-vice chairman, besides other two vice-chairmen, from the Department of Agriculture and Rural Development (DARD) and Department of Planning and Investment (DPI). Interestingly, representatives from research institutions such as the Institute of Development Studies and news agencies such as Sai Gon-Giai Phong Newspaper have also been included as committee members. Other specialised agencies, such as the Centre for Flood Control, Department of Defence and Division of Water and Flood Control under DARD, are also members of the SCCC.



**Figure 6.5: Structure of the Steering Committee for Climate Change in HCMC**

Under the recommendation of the Steering Committee for Climate Change (SCCC), the Bureau for Climate Change (CCB) of HCMC was formulated in 2012 by the city's People's Committee as the coordination office to support SCCC in formulation and implementation of the climate action plan. CCB has its own bank account and an official stamp, which allows it to officially contact and cooperate with relevant stakeholders in the formulation of the climate action plan. Furthermore, CCB can also act as a bridge between private actors of HCMC and other city partners such as Osaka in Japan and Rotterdam in Netherland. These partners have been carrying out climate change-related projects in HCMC (H1). CCB also presents as the coordination office of the city to organise seminars and workshops with

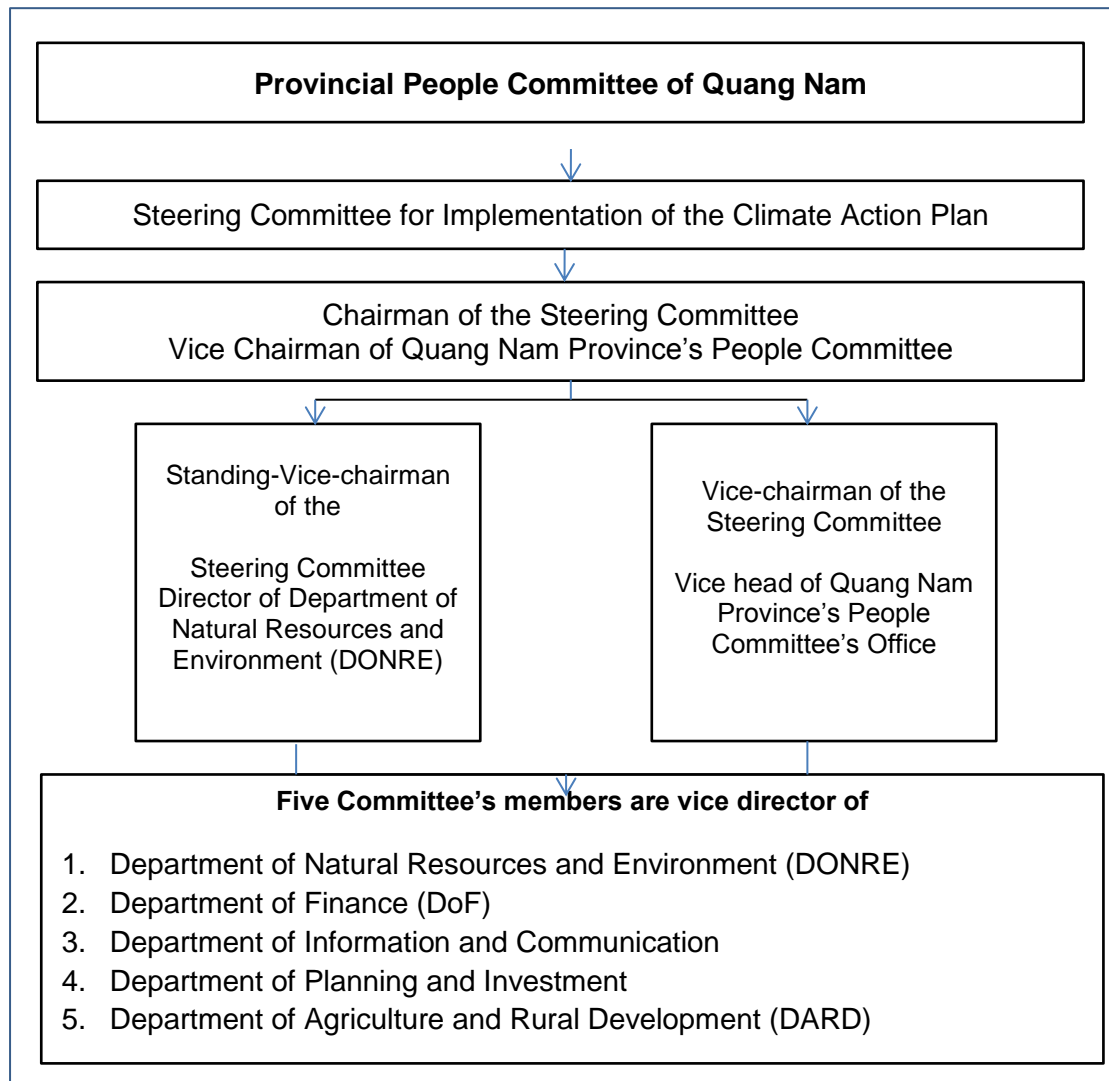
SCCC members and other interested parties. It is clear that HCMC has created a well-structured institution to support the formulation and implementation of its climate action plan, with the presentation of CCB as the executive office of the city in mobilising resources and coordinating activities related to climate change. Interview information reveals that, with this type of institutional setting, HCMC is more active in calling for funds and technical support from international partners.

This kind of institutional setting has demonstrated the advantages of having an independent office to coordinate all related climate change activities in the city. The establishment of the Bureau for Climate Change (CCB) can be seen as evidence of a strong commitment of HCMC to deal with the climate change issue, which, it has been predicted, will impact the city severely. CCB has been actively working on climate change since its formulation, and engaging other stakeholders to support the formulation and implementation of the climate action plan (H1). However, the CCB was formulated in 2012, when the climate action plan had already been under formulation since 2009; thus, it is not easy to point out how important the role of the CCB has been in developing the city climate action plan. Since the CCB was set up in the last stage of the formulation process of the climate action plan, the institutional setting appears to be playing a lesser role in the formulation process, but is critically important in implementation:

“We have formulated our climate action plan by ourselves instead of outsourcing to research institutions, universities or consulting companies. This helps us in improving capacity of the staff as well as to strengthen partnerships with relevant stakeholders at local, national and international levels. We also organised and hosted seminars and workshops to share our experience with other provinces, particularly the experience in setting up and operating our CCB office, as CCB was first successfully established in HCMC”. (H1)

Officials in charge of formulating the climate action plan who work at the Department of Natural Resources and Environment (DONRE) were assigned to work in the CCB. Basically, key personnel were continuously working on the formulation of the climate action plan since the establishment of the CCB. This indicates that, during formulation of the climate action plan, the experience and good practices of Can Tho and Da Nang cities were applied in HCMC. However, there is still far from being an office that can effectively coordinate and work with other departments and agencies of the city (H5, H6). One interviewee (H6) suggested that HCMC should establish an institution (Standing Office for Climate Change - SOCC) such as is currently operating in the Can Tho city. In this case, the CCB would be directly under the management of the PPC instead of under DONRE. The suggested institutional structure would allow CCB to be putting more direct orders and communication

to departments and agencies in the city regarding implementation of collaborative activities mentioned in the climate action plan. In addition, such a new institutional structure could also attract more collaborative projects and activities with international and national agencies and organisations. A new CCB could also promote motivation for policy makers, as they would have more interest in making an 'effective' policy to respond to climate change (N3).



**Figure 6.6: Structure of the Steering Committee for Climate Change in Quang Nam**

Like HCMC, Quang Nam province also set up its Steering Committee for Climate Change (SCCC) under the Provincial People Committee, in 2011, which was renewed in 2014. Figure 6.6 presents the structure of SCCC in Quang Nam province, with one chairman and two vice-chairmen, and five members who are representatives from the Department of Natural Resources and Environment (DONRE), Department of Finance (DoF), Department of Information and Communication, and Department of Agriculture and Rural Development (DARD). The director of DONRE has been assigned as the standing vice-chairman of SCCC, and the other vice-chairman as vice head of the office of Provincial People's

Committee.

Compared to HCMC, the institutional setting in Quang Nam province to support the formulation and implementation of the climate action plan is slightly different. Most notably, the vice head of the Provincial Peoples' Committee office, instead of a representative from Department of Planning and Investment (DPI) or from Department of Agriculture and Rural Development (DARD), was assigned as one of the two vice-chairmen of SCCC. Members of SCCC are vice directors of five departments (Figure 6.6). However, there are no representatives from research institutions (e.g. universities) or news agencies, as in HCMC. This kind of institutional setting is not representative of all sectors within the management of the province. It is important to point out that the institutional setting is only the starting point; it is more important to operate the setting effectively and mobilise necessary resources for development and implementation of the climate action plan.

Various industry and residential sectors are differentially affected by climate change impacts. In addition, they may play important roles in responding to climate change, such as in transportation, construction and education. In addition, Quang Nam province also set up a SOCC under the management of DONRE. However, SOCC does not have its own bank account and official stamp, like that of the Bureau for Climate Change (CCB) in HCMC. The Head of SOCC is also assigned to be one of DONRE's staff on a dual-role basis, which has created difficulties in delivering tasks requested by SOCC effectively.

Information obtained from interviews with a DONRE official indicates that this type of institutional arrangement (for example, SOCC) has limited effectiveness, as SOCC does not have power, resources, and all staff were on part-time assignment. SOCC encountered many difficulties in mobilising resources and organising meetings with stakeholders in the formulation of the climate action plan. If SOCC were to be granted an independent agency status, such as for the CCB of HCMC, this may present more opportunities for it to engage stakeholders in the plan-making process. On the other hand, this would invest some power and autonomy in SOCC, and hence introduce increased political contestability (H6, N3).

The setting up of SOCC has supported the SCCC in coordination of activities related to formulation of the climate action plan within the province. However, the SOCC in Quang Nam exhibits limitations in coordination and mobilisation of resources. As pointed by an official of DONRE (Q3), without a bank account and official stamp, this has limited the function of the office. Furthermore, due to the dual-role basis, the head of the office could only devote a limited time to SOCC's activities (Q3). There were only some staff assigned to work for SOCC, which shows insufficient human resources to effectively support SCCC in the delivery of its mandates and functions, particularly in mobilising resources and



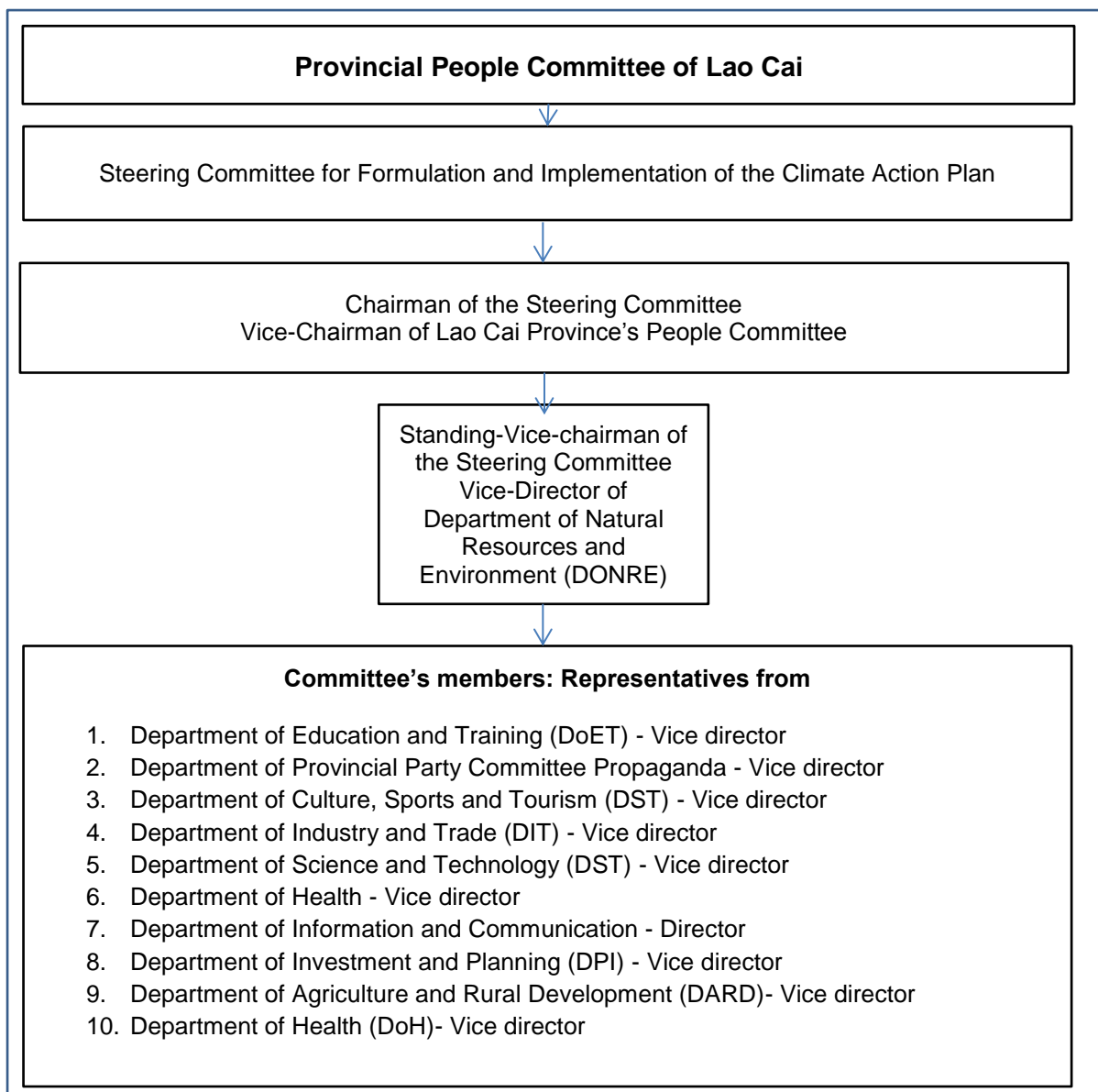
coordinating with other agencies and interested parties in the development of the province's climate action plan:

“... it took quite a long time because Quang Nam is a large province (the area of 10,438.4 square kilometres) and has a complexity of geographical conditions ranging from coastal landscape to mountainous areas bordering with Lao PDR. You know, if we do not know how climate change impacts on these landscape and areas, we cannot prepare a good action plan to respond to that impact. In addition, the sea-level rise and climate change scenario developed by MONRE is for nation-wide, it cannot be used for climate action planning in Quang Nam. So we had to develop sea-level rise and climate change scenario at provincial scale. Climate change is also a new issue that we do not have enough knowledge about, that is the reason why we had to outsource to the consulting company, which may have better technical capacity to do, and the plan-making process took a longer time than expected”. (Q1)

When asked why the province received more support from NTP-RCC than did the other provinces in preparing the climate action plan, the other interviewee also revealed that:

“We had some big projects in the past; it gave us opportunities to engage with international donors and national experts. The project that DANIDA supported for Quang Nam to implement the NTP-RCC in the province was a result of the previous project on environmental management that was also funded by DANIDA. When we worked with donors, they found that the climate change will be a big challenge for the province and building capacity is necessary”. (Q2)

Lao Cai province set up its Steering Committee for Climate Change (SCCC) in 2011. Figure 6.7 indicates that there is only one vice-chairman of SCCC, instead of three as in HCMC or two in Quang Nam province. The institutional setting of SCCC in Lao Cai province shows that one important department is missing, namely the Department of Finance (DoF), which is included in the SCCC of both HCMC and Quang Nam province. In planning, especially in budget allocating, the role of the DoF is essential. However, in Lao Cai province, the DoF was not present in the SCCC, which may result in less involvement of the department in the climate action planning process, particularly for budget allocation for implementation of the action plan (L1, L6). Figure 6.7 shows only one standing vice chairman of SCCC and ten members; and most of the members are vice directors of the provincial departments/agencies, which may indicate less political commitment from provincial leaders in dealing with climate change.



**Figure 6.7: Structure of the Steering Committee for Climate Change in Lao Cai**

Interestingly, at the time of formulating the climate action plan, no SOCC was established in Lao Cai province. Only a working group was formulated, to support SCCC in coordinating and organising the formulation activities of the climate action plan. However, the working group could not mobilise resources and coordinate effectively with other related departments and agencies, particularly with national and international organisations, in formulation and implementation of the climate action plan. The working group met only a few times during the planning process, as the province outsourced the preparation of the climate action plan to a research centre that was under the management of MONRE and located in Ha Noi. Roles of the working group were limited to providing information to the research team, and to commenting on the content of the climate action plan and supporting documents before

submission to the SCCC and then to the Provincial People's Committee for approval. A member of the working group revealed through an interview the following:

"We had limited time and information contributing to the climate action plan, as climate change is new to us. On the other hand, we only met a few times and we were not able to participate with the research team when they conducted research in the province. We participated in workshops organised by the research team and only accessed the research results in a short time of notice; we could not comment much on the document due to the time limitation". (L1)

It is clear that the organisational structure of SCCC, and also number of members of the committee, in the three provinces are different. This indicates that, even within the same national policy framework and in a centralised policy-making system such as in Vietnam, the institution setting for formulation and implementation of the climate action plan varied across the provinces, regardless of time of formulation.

Having no executive office to coordinate climate change activities has limited the opportunities for the province to promote networking with national and international partners in dealing with climate change issues or in calling for support from international development agencies and donors. Lack of a Standing Office for Climate Change, in the context of limited staff time, has resulted in weak coordination with relevant stakeholders in formulating the action plan, and in the implementation of the activities proposed in the plan. As one interviewee stated:

"You know, there is no priority project proposed in the action plan that has been undertaken so far. The climate action plan proposed many projects and activities, but we did not have a budget to carry them out. As we were on temporary duty in development of the action plan, we could not follow up to see how the action plan has been implemented. If there is an office in charge for climate change, it may be better as it can be assigned to coordinate and monitor the implementation of the action plan". (L3)

It is clear that, in the three studied provinces, the institutional settings for formulation and implementation of the climate action plans were not the same. For example, in HCMC, the Steering Committee for Climate Change (SCCC) was established in 2009, considered to be the first one in Vietnam (H6). In 2012, the city formulated its Climate Change Bureau (CCB) as the coordination office in charge of climate change-related activities, including implementation of the city's climate action plan and other assigned missions and tasks. The

CCB of HCMC works as an executive office that has its own bank account and official stamp, and which is under the management of People's Committee of the city. Its independence, and having a representative of the city government authority, has given the CCB a better position in contacting international and national agencies for mobilising resources and exchanging information on climate change (H6, H1). For instance, in 2013 the CCB arranged and supported an event in which HCMC and Osaka city of Japan signed a 'city to city' cooperation memorandum, in which Osaka city would support HCMC to prepare the climate action plan for the period 2016-2020 (H1).

Quang Nam and Lao Cai provinces both set up a Steering Committee for Climate Change (SCCC) in 2011; but only Quang Nam established its SOCC to assist the Steering Committee in formulation and implementation of the climate action plan, as well as to support the implementation of a project funded by Danish Development Agency (DANIDA) in implementation of a National Targeted Program to Respond to Climate Change in Quang Nam province (2009-2013). However, Lao Cai province has not established SOCC to assist the SCCC in development of the provincial climate action plan, but has instead set up a working taskforce group to support the preparation of the action plan. It is clear that, even under the same national climate change framework, the same arrangement of provincial departments and the same guideline from the national government, the three provinces (in the centralised policy-making system) each have their own organisational and institutional setting in formulation of their climate action plans.

The institutional settings for climate action planning in the three studied locations show no presence of business and non-governmental organisations, but rather were formed within the government system. There was no such kind of institutional entrepreneurs as Uittenbroek et al. (2014) mentions; and as a result, networks and other resources of entrepreneurs were not mobilised during the development of climate action plan in the three locations.

### ***6.3.3 Participation of local government agencies***

The Steering Committee for Climate Change of Ho Chi Minh city, as stated in Decision No. 4842/QD-UBND signed by the City's Chairman of People Committee on 21<sup>st</sup> October 2009, is responsible to: (1) formulate the city's climate action plan; (2) implement, monitor, evaluate and report on the implementation of the climate action plan regularly; (3) study and propose supporting policies for sustainable development and to mitigate impacts of climate change; and (4) organise activities to mitigate losses and respond to urgent situations caused by climate change.

HCMC also referred to experiences of Da Nang city in making their climate action plan. Da Nang city received technical support from international organisations, and conducted climate change vulnerability assessment (ACCCRN, 2009). Furthermore, that city has been closely linked with universities and research institutions in preparation of supporting documents for climate action planning. The director of the city's Bureau for Climate Change was previously a lecturer at the university; therefore, his existing networks have benefited the formulation process as the network actors have known who they were going to interact with (H1):

“...we have a close relation with lecturers, researchers and experts from universities, institutions and enterprises in HCMC as well as in other places. Particularly, we have cooperation with Osaka city of Japan and Rotterdam city of Netherlands; their experts also participated in providing experience to support the formulation of our climate action plan by joining group meetings and seminars” (H1).

However, the institutional setting in Da Nang is a project-based setting; which HCMC could not apply effectively, as the latter city did not have a supporting project at that time to fund the formulation of a Standing Office for Climate Change, as in Da Nang. The experience from Can Tho city should be considered more appropriate to HCMC (N3).

The implementation of numerous projects funded by international partners such as the World Bank (WB), Asia Development Bank (ABD), and Japan International Cooperation Agency (JICA) has also created and transformed networks of different stakeholders across HCMC. The experiences of working with international partners also helped the city in mobilising resources during formulation of its climate action plan. However, the participation of local NGOs has not been strongly encouraged, due to the scope of the action plan, which focussed more on the hard infrastructure dimensions of priorities. As pointed out by a staff member in the Bureau for Climate Change:

“You know, in fact, consultation for the development of the action plan was mostly through seminars and workshops, where participants were city's officials from different departments and experts who have knowledge in climate change issues. Involvement of local communities, NGOs and private companies was still very limited. Climate change is a technical issue and only experts can understand the impacts and solutions to cope with it”. (H2)

Networking with academia in climate action planning has been recognized as an important factor (Ayers, 2010; Uittenbroek et al., 2014); however, in the first generation of the climate action plan of HCMC, the participation of academics was quite limited:

“You know that the formulation process in HCMC did not include many researchers from research institutions and universities directly; people involved in the formulation of the climate action plan came from departments and agencies of the city”. (H5).

In order to understand the reason why academics, and research from research institutions and universities, were not actively involved in climate action planning of HCMC, a member of the National Committee for Climate Change (NCCC), who is also an academic of National University of Ho Chi Minh city, provided some insight:

“...we were invited to a consultation workshop when the last version of the climate action plan has been prepared. You know, we could not comment much as it was too late to include our comments into the action plan document. We actually do not know whether our comments were not taken into consideration or not as we did not receive feedback from the formulation team”. (H6)

It appears that the networks are now shifting to international partners who can support the city with both technical and financial resources (expectations may be high in this case). Examples of partnerships with Osaka and Rotterdam cities indicate this kind of transition. Networking with local experts and research institutions has not been actively promoted or engaged. As pointed out by the same interviewee:

“... you may know that our comments were only to the outline of the action plan document but not on the objectives and measures. Our knowledge on local issues such as flooding, urban planning and solid garbage management, which can be used to set up more feasible objectives, were not acknowledged”. (H6)

Quang Nam province has received financial and technical support from the Danish Development Agency (DANIDA) to implement the National Target Program to Respond to Climate Change (NTP-RCC) in the province. This project was considered as continuing support from DANIDA, as before that, DANIDA supported Quang Nam to improve its environmental management institution and practices (Q2).

Quang Nam also has actively liaised and cooperated with NTP-RCC's office as a part of the DANIDA project. Implementation of other environmental projects with international agencies has helped Quang Nam in establishing and maintaining a network of experts that are able to have input into the formulation of the climate action plan. Furthermore, the implementation of the DANIDA project to implement the National Target Program to Respond to Climate

Change in Quang Nam province has strengthened the relationship between the province and NTP-RCC's office, as the project was coordinated by NTP-RCC and the Danish Embassy in Ha Noi. With financial support from DANIDA through the NTP-RCC project, a number of national and international consultants were deployed in Quang Nam to carry out studies on impacts of climate change and to develop a sea-level rise scenario for the province. In addition, an international technical consultant was employed by the project to work directly with Quang Nam province from 2010-2012 as part of the technical support in implementation of the NTP-RCC project in the province.

"You may know that we had been going through an intensive process of study and discussion during the formulation of the action plan, particularly the climate change impact assessment work was required to complete before proposing the action plan, and the DANIDA project supported us a lot and a consulting company was contracted to undertake the study". (Q6)

Unlike HCMC, Quang Nam partly outsourced the formulation of the climate action plan task to a consultant company, Tran Nguyen Environmental Technology Limited (Tran Nguyen Ltd). The company's headquarters are located in HCMC, but it has been providing technical consultation services to many provinces in Vietnam, for example for the formulation of climate action plans for Lam Dong, Vinh Long, and Dak Lak, and conducting climate change scenario impact assessment for Ben Tre Province. The lack of technical resources for climate change issues has led local authorities to contract consulting companies to undertake climate action planning. However, although the role of consulting company is normally limited to providing technical information and background documents, the content of the action plan is still heavily dependent on the province (e.g. SCCC).

The policy network of Quang Nam province in the formulation of the climate action plan was not as extensive as in HCMC, as the former province hired independent consultants to carry out research and formulation activities for the action plan. The consulting company was responsible to provide technical reports and/or background documents, and the structure and content of the action plan was decided by the Steering Committee for Climate Change (SCCC) of the province. SOCC provided coordination support for the consultant in conducting research and in collaboration with them in organising consultation workshops with relevant departments of the province. However, participation of NGOs and local communities during the formulation process was absent. The province also anticipated

challenges in improving its institutional capacity and capacity to implement their action plan. As one interviewee replied:

“We have consultants and experts working for the projects, but when the project completed, there were no more consultants and experts come to us. It becomes difficult for the provinces if we do not have support from the projects in the future. You may know that ODA projects that are funded by international donors will be limited in the near future, as Vietnam is a middle-income country now. We will encounter difficulties in seeking funds for implementation of a climate change action plan if we are not active and diversify the partnership with other potential actors such as the private sector and research institutions” (Q1)

Due to its location, Lao Cai province is regarded as avoiding some of the most extreme climate change impacts, such as sea-level rise. Before 2011, when most of information on climate change in Vietnam was focused on sea-level rise and delta regions, climate change impacts on mountainous regions such as Lao Cai were not considered seriously (N7). Due to its geographical location, Lao Cai in the past only received support from international donors to implement projects related to biodiversity conservation and some support from international NGOs for disasters and emergencies. There has been no project related to climate change or environmental management recently funded and implemented in Lao Cai province. A network of experts and consultants has not been set up, at least to date of development of the climate action plan:

“We should be more active in networking with international and national organisations and consultants as they have information on funding opportunities. As we do not have many contacts with international agencies and national experts on climate change issues, so we now should start to build up networks for updating our climate action plan, which will need involvement from wider stakeholders, particularly international agencies and national experts”. (L5)

Interviewees indicated that, as Lao Cai had been considered as less exposed to climate change impacts due to its location, there is no international donor support, and the province therefore started from a low base of awareness and knowledge in the formulation and implementation of its climate action plan. However, as one interviewee stated:

For your information, in 2013, Lao Cai city (an administrative unit of the province) successfully formulated and approved its climate action plan with financial support from the Rockefeller Foundation and technical support from ISET and



NISTPAS. We think that this will be a starting point for us to expand the networks to international organizations and to strengthen cooperation and exchange information with national agencies". (L1)

Formal institutions have been set up in three provinces (Figure 6.5, Figure 6.6 and Figure 6.7), indicating the political commitment of national and provincial governments in responding to climate change. The structure of institutional setting in three provinces appears the same, but the number of actors are different, even though all the actors come from governmental agencies. Lack of non-governmental actors has limited the interaction between different stakeholders in the plan-making process, and hence resources from non-governmental actors could not be mobilised for implementation of the action plan. This limitation appears common, as Juhola and Westerhoff (2011) found that, even in Finland and Italy, the ability of wider actors involved to plan adaptation is still limited due to lack of coordination at the national scale. In Vietnam, at national level the coordination is considered as good due to the support from international agencies in capacity building. However, the ability to effectively coordinate responding activities to climate change at sub-national level is apparently limited due to lack of capacity (MPI et al., 2015), particularly the capacity to mobilise resources for implementation of a climate action plan, which can be seen as a complex task that even developed countries find challenging.

#### **6.3.4 Budget planning and areas of intervention**

HCMC did not include the budget estimation for implementation of the climate action plan. However, forty-one projects in twelve intervention areas were proposed. Interestingly, HCMC has separated adaptation and mitigation. The adaptation component focuses on the research program, urban planning, water resources, agriculture, healthcare and community health, and national security. Meanwhile, the mitigation component focuses on energy and waste management. In addition, the HCMC proposed supporting component covers: (1) strengthening international cooperation; (2) creation of databases; (3) awareness raising and human resource development; and (4) updating the action plan.

Quang Nam province also did not include an estimated budget for implementation of their climate action plan. Intervention activities were channelled into management sectors including agriculture, forestry, transportation, industry, culture and tourism, education and training, health care and community health, land and water resources. Sixty-five projects have been proposed, under nine areas of intervention.

Unlike HCMC and Quang Nam province, Lao Cai proposed a budget for implementation of their action plan, with an amount of 79.85 billion VND (equivalent to 3.9 billion USD). This budget was proposed for implementation of fifty-four projects, and 50% of the total budget was requested from central government. However, the budget estimation was estimated roughly based on the advice of the consultation team for the fifty-four listed projects. As one of the interviewees expressed:

“At the time of the plan developed, our awareness on climate change was limited, and it was not clearly understood what the impacts on mountainous areas are. We had implemented projects related to biodiversity conservation, forestation and some natural risk disasters, but did not implement any climate change project, particularly to develop the action plan or a policy for climate change. Most of the works on development of the action plan was done by the research centre. We only participated in consultation workshops and provided feedback on the action plan document, before sending out to other departments and agencies in the province for comments. Then a requested letter was prepared by our DONRE to PPC for official approval. There are some concerns on budget for implementation; but we all knew that we need to put the number there; but we were not sure the budget will be secured and allocated or not”. (L4)

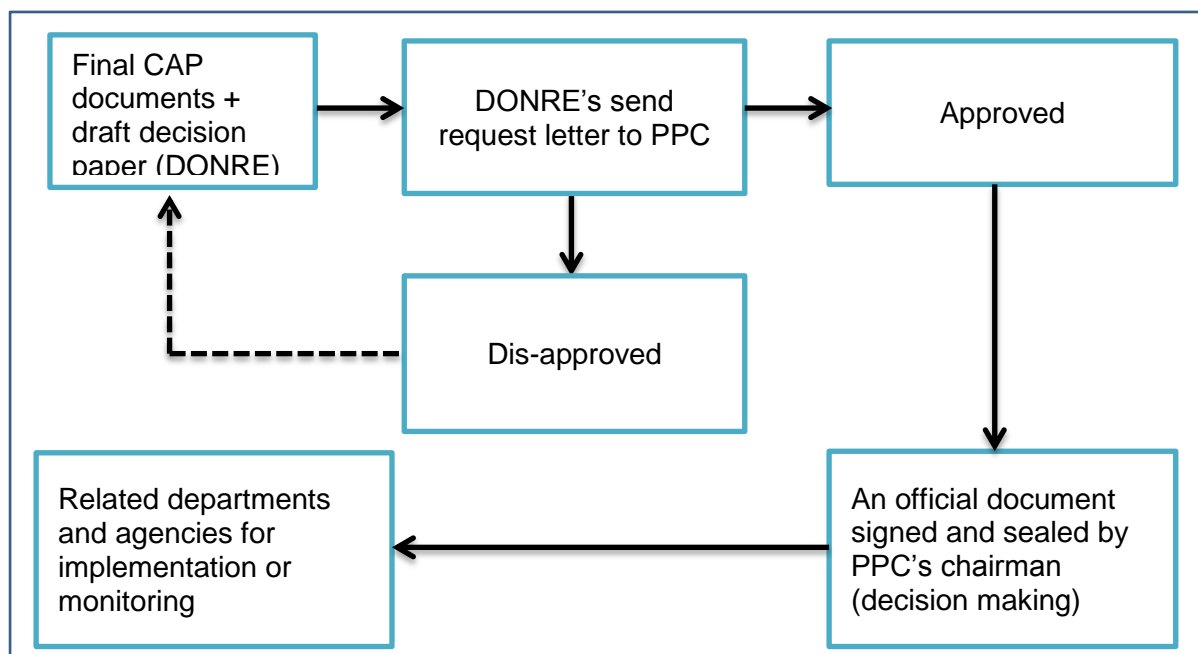
HCMC and Quang Nam province did not proposed budgets, for implementation of their climate action plan is clearly linked to the new regulation on public investment and budget allocation. One of the reasons HCMC excluded a budget estimation for its action plan was to avoid rejection by the Provincial People’s Committee (PPC) of the city, as the formulation team and relevant agencies could not identify where the budget could be located (H1, H3). In addition, budget estimations for some prioritised projects are also difficult as there are not cost-norms or guidelines for new and emerging projects. The budget planning for implementation of the climate action plan in Quang Nam province encountered the same difficulties as HCMC did. Interview information also indicates that the most challenging aspect is to estimate a budget for particular projects or priority activities, as well as to identify budget sources (Q2, Q3). As a result, both HCMC and Quang Nam province did not mention the budget estimation in their climate action plans. HCMC did mention the total budget of finished and ongoing projects, but not the budget for implementation of projects listed in the action plan documents.

A financial budget is a typical resource for implementation of any action plan to respond to climate change. The available resources, therefore, should be identified before proposing any responding option (Amundsen et al., 2010; Boswell et al., 2012). Two out of the three

studied provinces did not mention the resources needed for implementation of their climate action plans. This indicates that the execution of proposed projects and activities will be very challenging. In addition, 50% of the total budget (if mentioned) is expected from the national state budget, which is another challenge that the provinces will encounter when implementing their climate action plan. A joint study conducted by the Ministry of Planning and Investment (MPI) of Vietnam, the World Bank (WB), and the United Nations Development Programme (UNDP), reveals that the share of government financing for climate change response was constant from 2010 to 2013, but the total amount was slightly decreasing (MPI et al., 2015). This means that the government of Vietnam has difficulties in securing the budget for climate change response activities. However, as discussed in Chapter 5, provinces have requested more budget support from national government.

### 6.3.5 Adoption and delivery of the action plan

Approval of climate action plans was made upon the submission of SCCC (in most cases, the Department of Natural Resources and Environment (DONRE) - as the agency to submit the action plan document to PPC for approval). The procedure to get approval from the Provincial People’s Committee (PPC) in the three studied provinces is typically the same, shown in Figure 6.8.



**Figure 6.8: Procedure for provincial climate action plan approval**

Firstly, the final draft of climate action plan is prepared by CCB or SOCC based on supporting documents prepared by the provincial officials or consulting companies, then DONRE sends a letter to PPC for approval. If PPC finds that there are no conflicts with

political commitments and regulations, then the climate action plan is approved. The approved action plan is then sent to related departments and agencies for implementation and/or monitoring. In case the action plan document contains some mismatches or conflicts with political directions and regulations, then it is sent back to DONRE. For example, in HCMC the action plan document first contained a budget estimation, but they could not secure sources; then it broke the State budget investment regulations; hence, the action plan document was sent back to DONRE for reviewing, and finally budget information was removed from the plan document (see Section 6.2.2).

Interview information (H1, H3), however, indicates that the process may take months to years to get final official approval from the PPC. For example, in HCMC the document of the climate action plan was first submitted in 2011, but the final decision was only made in June 2013, after more than two years of reviewing and revising (H3, H2). During that time, many meetings and reviews requested by PPC were conducted; while the official decision to approve the action plan was made in 33 days from the final submission (H1, H2 and H3); in particular, one interviewee noted:

“You know that preparation of the action plan did not take a long time, but getting the document officially approved by the People’s Committee of the city took very long time. This was due to the scope of the action plan, and climate change is a new issue that some top leaders do not know thoroughly. And you know, the questions of where the budget for implementation comes from and how the budget was calculated were really challenging at that time. These questions were not easy to answer and explain. At the end, we decided to remove all budget requests for implementation of the proposed projects in the action plan document submitted for approval. However, we kept the budget that has been already allocated to implement the climate change-related projects” (H4).

The Provincial People’s Committee (PPC) approved the Quang Nam climate action plan in 2013, after more than four years of formulation. Official approval of the climate action plan in Quang Nam also took almost a year to obtain from the first submission. However, once the plan was tabled, it took only 4 days for the PPC to officially approve the action plan of the province. Quang Nam was one of the last provinces officially approving their climate action plan. Interview information also reveals that, in order to get official decision from PPC, a number of details on budget estimation were removed from the action plan document (Q1, Q2 and Q4). However, the action plan is being implemented under the proposed scheduled timeline:

“The implementation of the climate action plan of Quang Nam province is on track. Up to the present date, we have achieved around 70% of the proposed activities”. (Q3)

It is worth noting that the climate action plan of Quang Nam province did not include a detailed timeline for each proposed project or activity. In order to assess the effectiveness of the action plan, it is assumed that an evaluation at the end of the action plan in 2020 will be undertaken.

Unlike HCMC and Quang Nam province, Lao Cai province approved its climate action plan in 2012 after only a year or so of formulation. It took only 22 days to get the official approval decision from PPC from the final submission (L1, L4 and L5). It is interesting that the action plan of Lao Cai province did not propose any ‘hard’ projects or construction (L5), or infrastructure projects; rather, most of the requested budget is allocated for implementation of capacity building and awareness raising activities:

“The list of prioritised projects was proposed by consultation team and we knew that it is important to increase our knowledge and awareness on climate change. We believed it was reasonable to focus on capacity building and awareness raising but you know, to date we could not have budgets to carry out the training courses”. (L4)

Regarding the implementation or delivery of the proposed activities and projects in the three provinces, no data was collected on specific tasks/projects that have been implemented and evaluated comprehensively in three studied locations. However, the vehicles for implementation were apparent and they varied between locations. For example, HCMC formulated the action plan in-house, and prioritised projects were proposed by departments and agencies. These prioritised projects were then consolidated as part of the action plan. Implementation was then assigned to related departments and agencies. Only the projects proposed by DONRE (focus on data collection, capacity building) were being implemented at the time of this study (H1, H3); most of the projects proposed by other departments were not delivered due to lack of budget (Information shared at a consultation workshop for formulation of 2nd CAP for HCMC organised by CCB on 24.10.2015).

The delivery of proposed projects in Quang Nam also indicated only small number of projects on capacity building being executed (Q1). However, it is difficult to evaluate the climate action plan delivery of Quang Nam province, because the province did not indicate a specific timeline for each project, but rather spread these over the entire duration of 2013-2025.

Lao Cai province proposed a budget for implementation of sixty-two projects, but up to September 2014 there was no prioritised project implemented, due to there being no budget allocation (L4). Lack of resources was the main reason for delaying the implementation of the action plan. Budget planning was not fully taken into consideration, to identify sources of the budget and to secure the budget for specific projects. However, this challenge in public budget planning is very common in Vietnam, not only for climate action planning but also for other public areas (Nguyen-Hoang & Schroeder, 2010). Public budget deficits in recent years can be seen as one of the greatest challenges in delivering a climate action plan at national and provincial levels (MPI et al., 2015).

Budgets have undoubtedly constrained action. Data is available on climate change, for example, in 2016 the most updated version of Vietnam's Change and Sea Level Rise Scenario was released by MONRE with support from UNDP. However, amongst the projects in the action plans, there was limited evidence of projects specifically addressing physical actions such as wetland management or beach nourishment in the three studied provinces, although such projects are in evidence in other provinces such as Ben Tre in the south of Vietnam.

It can be concluded that no province in the three studied cases has effectively delivered the proposed activities and projects listed in their climate action plans. The biggest challenges in the three provinces are lack of resources for implementation of the action plan, and having a proper budget allocation mechanism (for example, identifying where are the budget sources, what kind of project will be prioritised for financial support). The implementation of the climate action plans in the three studied provinces shows some initial results; but to assess the success of these action plans is not possible at the time of undertaking this study, as their implementation is still ongoing. The findings of this research on implementation of the climate action plans is the same as findings highlighted by Nam et al. (2015), that the most consistent weakness of climate action plans across Vietnam is the provinces' lack of implementation mechanism.

### **6.3.6 Summary**

There are a number of variations in climate action planning processes in the three studied provinces. First and foremost of this variation is formal institutional setting, and operation of this institutional setting, in the three provinces. HCMC can be considered to have the most comprehensive institutional arrangement for development of the action plan. The Climate Change Bureau (CCB) was in charge of coordinating all the activities related to climate change in the city. In addition, its Steering Committee for Climate Change (SCCC) included

nineteen members from different departments and agencies. Meanwhile, Quang Nam province did set up the SOCC, but the office acts as small unit under management of Department of Natural Resources and Environment (DONRE). Lao Cai province, on other hand, did not set up a SOCC, but initially formulated a working group to support the development of the climate action plan. It is expected that, in all provinces, the formal institutional setting is the same, as they lie within the same political system and same structure of government (see Section 3.4.2)

Timeline for development of the climate action plan in the three provinces is also varied. HCMC took four years to formulate and approve its plan; Quang Nam also took almost four years. Lao Cai province spent only 2 years for development of their climate action plan. Regarding the implementation timeline, Quang Nam province proposed the longest duration, of 12 years (2013-2025). HCMC developed its action plan with only 2 years of implementation. Meanwhile, Lao Cai province proposed 8 years for implementation. All three studied examples set up a new institutional framework to support the development of their climate action plans. However, there is no evidence of institutional entrepreneurs such as Uittenbroek et al. (2014) discuss in their study in the Netherlands, or the like, in the three studied locations. Institutional entrepreneurs can use their networks and mobilise their resources for climate change adaptation. Lack of institutional entrepreneurs (for example business entities) can be seen as a lack of ability in developing a robust action plan, as through entrepreneurs and their networks, resources could be mobilised for implementation of an action plan. Juhola and Westerhoff (2011) stress that governance of climate change adaptation in Finland and Italy is mainly taking place through both formal agencies and networks across actors at various scales. In such networks, actors at subnational levels, resources and opportunities can be mobilised in development of the action plan. There also exists the opportunity for increased interaction and participation of actors across the scales and levels. Increased interaction of different actors in climate action planning at sub-national level, therefore, will engage participation and contribution of a wider range of stakeholders in designing and delivering a climate action plan. Indeed, among the three studied locations, HCMC indicates a better opportunity for a wider range of actors, compared to Quang Nam and Lao Cai provinces.

The three studied locations have been setting up their formal institution structure as the same at national level, where the National Committee for Climate Change was established after the government of Vietnam approved its national strategy for climate change in 2011. Prior to that, in 2008, the standing office for NTP-RCC was formulated in order to coordinate the implementation of NTP-RCC at the national level. Scholten et al. (2015) recognise that

institutional differences between two countries (the UK and the Netherlands) leads to different climate adaptation practices. It is understandable, therefore, that within the same country (Vietnam), institutional similarities result in similar climate action planning practices in general. However, it is necessary to note that the institutional capacity, or how an institution operates, is critically important.

Proposed budgets for implementation of the action plans also varied among the three provinces. HCMC and Quang Nam province did not propose any budget; but Lao Cai province did propose an amount of 79.81 billion VND (about 3.9 million USD) to deliver fifty-four proposed projects. The budget planning was different in the three provinces. In HCMC, priority projects were proposed by related departments; Lao Cai province estimated a budget by consultants; and Quang Nam did not propose any budget for implementation. It is hard to say how much budget is needed, and which province is better in budget planning; but the absence of budget estimation in the action plan document can be considered as a shortcoming. However, the all three provinces requested that 50% of budget should be sourced from the state budget regardless of whether they proposed the budget estimation or not.

Approval and delivery of the climate action were also different between the three provinces. HCMC and Quang Nam provinces took a longer time to prepare and to get their action plans officially approved by the PPC. Meanwhile, Lao Cai province spent less time (2 years) on development of their climate action plan.

The above variations among the three studied provinces indicate that, even within the top-down policy-making system (climate action plan-making agenda of the province having been decided by the central government), provinces and central cities each still have opportunities to organise an action plan-making process that can best suit their own capacity and available resources. In addition, this leaves it to the provincial government to set up the institutional setting, or at least to operate those institutions to support the development of their action plans based on their socio-economic conditions. In this regard, the findings of Uittenbroek et al. (2014) in Netherland can be useful for provincial governments in sharpening their next climate action plan to respond to climate change. In particular, the mainstreaming approach is suitable when available resources are limited. It is, however, the capacity of local policy makers and relevant stakeholders that is the key element in successfully mainstreaming the climate responding activities into the socio-economic development plan or sectoral development plans. It is worth mentioning, in addition, that the capacity of local governments in Vietnam cannot compare with those in the Netherlands or in Norway; and as a result, successful implication of a mainstreaming approach may need



better preparation and stronger institutional capacity.

#### **6.4 Chapter summary**

Climate action plan-making processes in the three studied provinces, if we only look at the procedure to develop the plan, are the same. However, institutional capacity, participation, timeline, and budget planning varied from province to province. Among the provinces, HCMC reveals a more comprehensive institutional setting with the formulation of the Climate Change Bureau (CCB) as a coordinating body for all climate change activities, including climate action planning. Nineteen departments and agencies in the city had to be assigned representatives to participate in a working group to develop the action plan. Each department or agency then submitted a list of prioritised projects for their own managed sectors; then the projects were consolidated in the list of prioritised projects in the action plan document. In order to develop the action plan, seven of the eight steps mentioned by Spratt (2009) have been followed; but three provinces spent different resources and efforts for each step. For example, in order to formulate the action plan (steps 1-6), HCMC and Quang Nam province spent three years, but Lao Cai province spent only less than two years.

The findings in this chapter reveal that, even within a centralised policy-making system such as in Vietnam, sub-national governments still have a certain level of autonomy in developing their climate action plans based on the general guideline of central government. In the three studied provinces, climate action planning has been undertaken based on the order of central government. HCMC and Quang Nam province, which have been considered to be exposed more to climate change impacts, tended to have better capacity in developing their climate action plans, as well as better institutional setting. Likewise, Lao Cai province, assumed to be less influenced by climate change impacts, had a lower capacity in developing its climate action plan, and also an incomplete institutional setting. The differences in institutional setting, participation and budget planning, as well the plan adoption of the three provinces, appears to be influenced by factors such as motivation, institutional capacity, and knowledge of local governments; which will be discussed in Chapter 7.

## **CHAPTER 7: FACTORS INFLUENCING CLIMATE ACTION PLANNING PROCESSES**

### **7.1 Introduction**

This chapter responds to the third research question, “*what factors influence the implementation of the national policies at the provincial level?*”, by taking into consideration key factors influencing the plan-making process in three provinces.

Cloutier et al. (2014) point out that climate adaptation planning at local level faces many difficulties, such as data availability and adaptation measures invariably needing to compete with other priorities. Kern and Bulkeley (2009) also note that local governments have fewer opportunities to access political power as have national governments; but that they are able to identify and understand better the local resources and local vulnerabilities; and that local governments are able to be more focussed on key challenges than is the national government. Indeed, findings in the present research reveal that there are a number of factors that strongly influence the climate action planning processes at provincial level in Vietnam. The most common factors that influence the policy-making process have been reviewed in Chapter 2 of this thesis, for example: motivation and exercise of power (Flyvbjerg, 2002; Matheson, 2009; Qi et al., 2008; Uittenbroek et al., 2014); institutional setting and coordination (Jan Corfee-Morlot et al., 2009; Juhola et al., 2012); local capacity and available resources (Francesch-Huidobro, 2016; Measham et al., 2011; Uittenbroek et al., 2014); stakeholder participation, and networking (Nilsson et al., 2012; Serrao-Neumann et al., 2014). The following sections will be used to discuss the factors that influence the climate action plan-making process in the three case study provinces in Vietnam. These factors are: (i) Motivation and power sharing; (ii) Institutional setting and policy coordination; (iii) local capacity and resources; (iv) stakeholder participation, and networking; and knowledge and information exchange.

### **7.2 Motivation and power sharing**

Motivation of local governments in transforming national climate policies into local action plan is clearly important (Qi et al., 2008). However, the findings for HCMC, Quang Nam and Lao Cai provinces (see 6.3.3) indicate that there was a lack of motivation for them to actively transform national climate change policy into local action, due to the fact that the action plans are mainly for adaptation, which in turn requires huge investment, due to the fact that it is hard to identify incentives from developing the climate action plan. In addition, the provincial governments appear not to be ready to develop their own action plans in the context of limited resources and understanding of climate change impacts. The evidence is that they have developed their action plans upon the request of the national government

(Section 6.2). The provinces did not take climate change as a priority area in their local policy agenda. According to the order of the government of Vietnam (GoV), all provinces should develop their climate action plan by end of 2011; however, all three studied provinces had delayed the date to 2012 (Lao Cai province) and to 2013 (HCMC and Quang Nam province). This indicates that even though climate change was on the policy agenda, the provinces in Vietnam could not develop their action plans to respond to climate change as expected by the national government. This may be a result of low incentives in developing the action plan, or the challenge of competing with other policy issues that require local government to invest more effort.

As discussed in Chapter 2 (Section 2.4.2), Flyvbjerg (2002) highlights that the power that local government exercises in very complicated manners, which involved many stakeholders within and outside the government system. The present study on climate action planning in three provinces in Vietnam did not reveal the exercise of power during the whole planning process; but it can be concluded that the Provincial People Committee (PPC) showed its power when approving the climate action plan, in the way it was able to meet the request from the national government but it also indicated the responsibility of the local governments when budget for implementation was taken into consideration (e.g. PPC in HCMC and Quang Nam province decided not to include the proposed budget in their climate action plan documents). The chairman of the PPC was also the chairman of the Steering Committee for Climate Change (SCCC), which is the final decision maker to decide whether to approve the climate action plan or not (see Figure 6.8). In this context, the power in the climate action plan-making process appears to be exercised among the key involved departments only. There were no interest conflicts with other actors inside and outside the government system, due to the fact that most of the objectives set out in the climate action plans are broadly mentioned (Section 5.2.1).

During the planning process, for example in the five stages of public policy making (Howlett & Giest, 2013), the greatest challenge normally occurs in decision making (stage 3): the PPC in two of the three studied provinces requested the formulation team to revise the content of the climate action plan, particularly the budget estimation and allocation. The interaction among three key departments, including Department of Natural Resources and Environment (DONRE), Department of Planning and Investment (DPI) and Departments of Finance (DoF), was moderated, as the action plan was formulated, by a team of the city officials (in HCMC) or consulting companies (in Quang Nam and Lao Cai provinces). The roles of DPI and DoF were only commenting on the content that was relevant to their state management function; but they were not participating in the process of identifying the

possible options to mobilise resources (Section 6.2). The actors involved in the plan-making process indicated a low motivation, as climate change action could not bring incentives as did other areas such as land use planning, urban planning, or five-year socio-economic development planning. Therefore, many members of the SCCC in the three studied provinces were not highly motivated to actively participate in the climate action plan-making process, as they lacked time and also technical knowledge to share with other stakeholders (see more in Chapter 6). For example, in HCMC, the representatives from departments of the city only participated when there was a meeting or workshop organised by CCB. Due to technical capacity, time constraint, and the broad conception of climate change, the power exercise in the planning process was simply handed over to CCB and then the SCCC. In Quang Nam and Lao Cai provinces, the power was also exercised without any conflict arise as the members of SCCC were directors or deputy directors of the departments in the provinces, and the chairman of SCCC was also the chairman of PPC. The interaction among the members of SCCC in the three provinces was moderate, and therefore the conflict among participating actors during the plan-making process was minimal. The content of the action plan was developed by the consultants, and the officials of two provinces were only in charge of commenting on the sections that closely related to their state management functions, but not on the whole plan documents (Section 6.3.2). The power exercise in the climate action planning process, therefore, only took place among departments of the provinces. In this regard, power is under the control of the PPC, and the departments are also under the management of PPC. As a result, there were no conflicts observed in the planning process.

### **7.3. Institutional setting and policy coordination**

Institutional arrangement and policy coordination is interconnected. In a centralised policy-making system such as Vietnam, one key institution is in charge of coordinating policy formulation and implementation. Climate change is an emerging and cross-sectoral issue that needs the assigned institution, in the development of response policies, to work with other relevant stakeholders. The organisational structure for climate action planning in the three studied provinces is quite similar, at least the structure of SCCC (Chapter 6, Section 6.2); however, the operation and interactions within the structure were not the same. The differences in the institutional setting for climate change in the three studied provinces are in the operation of the supporting units (for example, in HCMC, the supporting unit is CCB, SOCC in Quang Nam province, and in Lao Cai province it is the working group). This section discusses variation in the institutional setting and policy coordination in the three studied provinces, during their first climate action plan-making process, and argues for the influence

of institutional setting on the development and implementation of the provinces' climate action plans.

The institutional setting for climate action planning in Vietnam at sub-national level (provinces) is defined by the provincial government under the national guidelines; but details of the institutional setting in each province is decided by the provincial government (see more in Chapter 3, Section 3.2). For example, in HCMC, the Climate Change Bureau (CCB) was set up, instead of the Standing Office for Climate Change (SOCC) in Quang Nam province. The Steering Committee for Climate Change (SCCC) was, however, set up in all three studied provinces. The structure of the CCB in HCMC is also different from that of the SOCC in Quang Nam province. In particular, the CCB in HCMC has its own official stamp and bank account that can be used when signing contracts with service providers or other stakeholders; meanwhile, SOCC in Quang Nam province does not have its own official bank account, which may have prevented the office from signing contracts with service providers directly (Section 6.2.3). Lack of an official bank account may have also prevented SOCC promptly signing contracts with service providers or partners to carry out supporting activities during the climate action planning process, and to have difficulties in implementation of the priorities in the implementation stage. It is necessary to note that the formal institution setting in HCMC indicates political commitment to respond to climate change; however, in order to effectively respond to the impact of climate change, informal institutions such as institutional entrepreneurs, which Uittenbroek et al. (2014) discuss in their study, are also necessary. Uittenbroek et al. (2014) point out that institutional entrepreneurs can mobilise resources and networks on climate adaptation. In this regard, HCMC and Quang Nam and Lao Cai provinces were not able to use institutional entrepreneurs (for example, NGOs, private companies and start-ups enterprises) in mobilising resources for implementation of their climate action plans, as during the development of the action plan, due to the fact that many entrepreneurs were not included during the development of the climate action plans.

The formal institutions observed in the three studied locations have been officially established, but their operations to engage the wider participation of various stakeholders were limited. This variation can be explained by the exercises of power of local governments undertaking to carry out the order from the national government. The formulation of a climate action plan was solely assigned to key departments of the province, and the assigned key department (e.g. DONRE) was ordered to work with other departments and agencies to carry out the planning process. In HCMC, for example, a list of prioritised projects for the climate action plan was prepared by each department of the city and submitted to the formulation team to include in the plan documents. There was a screening process to

remove overlapping projects; however, the wish-lists of the departments were fully taken into consideration, as there were not clear criteria to remove or to include them. By doing this, the power was equally given to all departments. The findings of Flyvbjerg (2002), in his study on urban planning in Denmark and the role of independent actors or non-governmental actors in designing the urban development plan, show a strong influence of the private sector, particularly the Chamber of Industry and Commerce, on shaping the urban development plan of the inner city of Aalborg, and that interaction between the technical group and the Chamber was dynamic. The climate action planning processes in HCMC and Quang Nam and Lao Cai provinces were less dynamic, and no such interaction among actors was observed. This may be because of the nature of climate issues (i.e. a new, technical and complicated issue), and of the common practices of planning processes in Vietnam, where top-down and command-control approaches still prevail (Ohno, 2009). The roles of non-governmental actors in the planning process can be seen as being quite neglected in all the studied provinces, as one of the interviewees expressed: "*Involvement of local communities, NGOs and private companies were very limited. Climate change is a technical issue and only experts can understand the impacts and solutions to cope with*" (H2). As a result, power sharing was not an issue during the planning process, but the dynamics of the exercise of power appears to be simple, as there were only actors from government agencies.

On the other hand, Lao Cai province did not set up any institution like the CCB of HCMC or SOCC of Quang Nam province. The lack of institutional capacity for climate action planning in Lao Cai province could be explained by the confusion of provincial leaders in dealing with new or emerging issues such as climate change. In addition to this confusion is the limited resource to support the operation of a new institution, which also leads to a lack of institutional capacity. Forming a new institution requires extra resources to maintain and to operate its functions (N3 and N6); and this requirement may have resulted some provinces such as Lao Cai province not establishing an SOCC or CCB. In the context of limited resources, it is understandable that the authority of Lao Cai province showed reluctance in establishing an office for climate change. It is also clear that, without an exclusive institution or agency to coordinate the plan-making process, this has led to the use of officers in various departments to support the plan-making process, on the dual-task basis (staff working on different roles and positions at the same time). This kind of arrangement can work and be effective in a case where the policy issue is clearly defined or not as complicated as is climate change (N1). However, when it comes to the climate change issue, institutional capacity to coordinate and mobilise resources to develop an action plan is increasingly important, in particular in a developing country such as Vietnam.

Compared to the findings of Uittenbroek et al. (2014), the institutional setting in the three studied provinces still lacks the capacity to become of what Uittenbroek and colleagues mentioned - “problem owner and budget owner”. The current institutional setting in these provinces shows limitation in mobilising resources for implementation of the climate action plans. For example, there was limited number of non-governmental actors involved in the planning process. In the so-called mainstreaming phase, when indirect political commitment takes place, strategic framing, institutional entrepreneurs (and their networking skills) and existing organisational structures emerge and become essential in climate adaptation planning (Uittenbroek et al., 2014). Indeed, strategic framing has been proven important in order to obtain some form of political commitment to climate adaptation. This approach can promote the participation of private sectors, as they can see opportunities to do business in the climate adaptation policy arena, by providing technical solutions in areas of sustainable urban development, renewable and energy-saving technologies, and so on. In Vietnam, such an institutional framework is largely missing; but if it were facilitated, it may be expected to act to partially overcome the limited resources from national government by encouraging the participation of wider stakeholders (and their resources) in implementation of the climate action plans. Looking at the key actors involved in the plan-making process in the three provinces, it appears that there is no formal institutional setting that promotes mainstreaming (or indirect political commitment) during climate action planning.

It has recently been argued that climate-responding activities should be mainstreamed into social-economic development plans, in order to sustain and secure needed resources for implementation. This requires, however, public participation to be promoted in framing policy objectives and measures in the first place, in order to secure long-term, cross-institutional buy-in to the plans and their initiatives. Another implication is that indirect political commitment appeals to the pioneering and networking skills of individuals working in different policy domains.

In climate adaptation, the issue is integrated into existing organisational structures and routines. Limited additional resources are made available to address climate adaptation. Alternative solutions, therefore, need to be implemented using existing or allocated resources. However, this is difficult, as most of existing resources are labelled or allocated and cannot be used differently for other purposes (Uittenbroek et al., 2014). It appears that, despite the overall willingness of policymakers to act upon climate adaptation, without alternations in the existing structures and routines, climate-adaptation responses remain limited and inconsistent. This is certainly true in the case of the three studied provinces, where resources were limited, and the financial and technical support that had been secured

for particular sectors could not be easily be re-allocated for other sectors such as climate change, as these sectors also still lacked resources to carry out their assigned mandates (Section 6.3.4). Therefore, it is challenging to mainstream climate change into socioeconomic development plans, technically and financially, in particular at provincial level in Vietnam, where both capacity and resources are limited.

As noted in Chapter 2, one of the factors that influences climate action planning is the institutional setting, which includes institutional capacity. The institutional capacity of the three studied provinces is clearly different; in which HCMC shows the better institutional capacity, as it formed a new institution and assigned officials to the development of the climate action plan. The formulation of the Climate Change Bureau (CCB), as an independent unit to provide advice for leaders of the city, can be seen as a strong commitment of city government in responding to climate change. Quang Nam indicated an ambition to improve the institutional setting by reviewing the Steering Committee for Climate Change (SCCC) structure in 2013 and increasing the number of SCCC members from 8 in 2010 to 29 members in 2013 (Q1). Meanwhile, Lao Cai province, at the time of interviewing (October, 2014), revealed a lack of clear institutional setting, with no SOCC established (L4). It is understandable that institutional capacity in HCMC is better than that of Quang Nam and Lao Cai provinces, as HCMC is an urban city and is therefore economically more advantaged due to its location

Indeed, institutional capacity plays a very important role in ensuring that the climate action plan is being developed comprehensively, and in mobilising the resources and contributions from different stakeholders, as well as their commitments in delivering climate action (Uittenbroek et al., 2014). In a recent report, MPI et al. (2015) also highlight that a strong coordinating body to manage climate change responses is a key to successful implementation of climate policies in Vietnam. Undeniably, findings for the three provinces also reveal that there was a coordinating agency or coordination group, but it was not a highly recognised institution to better connect with wider stakeholders in developing and implementing the climate action plans.

The other important factor that influences the climate action planning is coordination among actors involved in the process. Cloutier et al. (2014) and Burch (2010) both note that financial and human resource coordination covers all works that include mobilising resources to formulate and implement climate action planning. In the studied provinces, financial and human resources had not been taken into consideration thoroughly during the planning process. For example, the provinces received around 50,000 USD from NTP-RCC to formulate their climate action plan, but no budget for implementation was committed or



secured. This allocated budget could not cover all the primary studies, such as climate change vulnerability and impact assessments, which are critically important to the development of any climate action plan or measure. It is worth noting that HCMC and Quang Nam provinces each received 1.7 billion VND or around 85,000 USD, which is almost double the amount that other provinces received.

The coordination among agencies and departments within the administrative area is clearly important, as many departments still consider climate change to be a technical issue, which should be assigned to technical departments (Lund et al., 2012). In fact, climate change is a cross-sectoral issue that needs all departments and agencies of a city or municipalities to work cooperatively, in order to increase resilience of the locality and reduce risks of climate change impacts. Policy coordination in the climate action planning process was quite different across the three studied provinces. For example, the policy coordination in HCMC was assigned to the Climate Change Bureau (CCB). CCB is tasked, on behalf of the Steering Committee for Climate Change (SCCC), to contact with other relevant stakeholders, including the city departments and agencies, to participate in the development of the action plan. Representatives of these departments and agencies are also members of the SCCC (Section 6.2.3). This can be seen as an advantage for development of the action plan, as all members of the SCCC have to participate directly in or to assign representatives to participate in the process. In HCMC, the CCB acts as a hub to coordinate and supervise all related climate change issues. As a result, the information about climate change was better collected and shared among the city departments and agencies. The situation in Quang Nam province is slightly different, as the climate action planning process was supervised by the SOCC, but the coordination was limited to sending out SCCC requests to relevant stakeholders, including departments and agencies within the province, for them to comment on the action plan documents prepared by the consulting company. In fact, the SOCC could only act as a supporting unit to communicate with the provincial departments, but it could not promote active participation from other concerned stakeholders. The SOCC also was not able to provide strong commitments and roadmaps during climate action planning to concerned parties, as its mandate was only to act as a supporting unit, with the staff being on dual or triple roles. Meanwhile, in Lao Cai, no coordination office was created, and policy coordination was done by a group of supporting staff located in the Department of Natural Resources and Environment (DONRE). The lack of coordination office in Lao Cai could be a reason for poor implementation of its climate action plan (Section 6.3.2). The low level of public participation in Lao Cai during the climate action planning process can be considered to be the result of no SOCC being established, and to low climate change awareness due to its geographical location (Section 6.2.4). It is also worth noting that there

was no climate change-related project funded by international agencies or organisations in Lao Cai at the time that the climate action plan was developing, that could have partly supplemented the information for the formulation process, as was done in Quang Nam province. In addition, the province was not a 'hot spot' in terms of receiving public attention in regard to climate change (Section 6.2.4).

It is clear that institutional setting and policy coordination are two factors that closely interlink. A more effective institutional arrangement promotes better policy coordination and better policy coordination can only be promoted through an effective institutional arrangement (Uittenbroek et al., 2014). Among the three studied provinces, HCMC had a more comprehensive institutional setting as well as more effective policy coordination. However, the formal institutions alone are not enough to promote participation from wider stakeholders: it is necessary to include informal institutions to engage in developing climate adaptation measures. The function of an institution set up for climate change adaptation planning should be to promote the effectiveness of policy coordination. There was no Climate Change Bureau (CCB), as in HCMC, or SOCC, as in Quang Nam province; rather, the policy coordination in Lao Cai province relied on temporary staff who worked on a dual or triple task basis in coordinating climate action planning. This kind of arrangement may work for a less complicated policy issue; but it did not work with the complex policy issue of climate change action planning. More political commitment, and a recognition of the status of the Standing Office for Climate Change, will promote better participation of a wider range of stakeholders, and mobilise resources more effectively.

However, effective climate adaptation is also very challenging, even in developed countries where more comprehensive institutional settings and more resources can be mobilised than in developing countries. In addition, most climate adaptations are undertaken at local level, where the institutional setting is less comprehensive and resources are limited compared to the national level. Nilsson et al. (2012) point out that, even in the context of developed countries such as Sweden, the institutionalising of knowledge and knowledge exchange has been observed as not being strong, as has been seen in the implementation of Local Agenda 21, which calls for more action at local level. Nilsson and colleagues also conclude that the adaptation policy in Sweden has basically relied on soft government tools, and that there is a need to improve the feedback mechanisms from the local to national levels in climate change policy. In this regard, the three studied provinces lacked a robust feedback mechanism from local government to national government and vice versa, in order to share and exchange information and knowledge on climate change (Section 6.3.2). In fact, the national government also faces the challenge of having reliable and detailed information on

climate change, due to the complexity of the climate change issue and lack of fundamental studies. In addition, the learning among provinces was also limited; and only one province actively enjoyed policy learning, HCMC has shown some signs of expanding their policy network internationally and nationally. For example, HCMC sent officers to Da Nang and Can Tho cities to learn from their experiences in developing climate action plans. Indeed, Da Nang and Can Tho received technical support from international organisations, and were considered to be the best examples for other provinces to learn from (N5). This can be seen as the strong evidence of cross-provincial learning during climate action planning in Vietnam.

The policy learning, in the case of HCMC, can be termed imitation or policy learning, by copying strategies for action, as Toens and Landwehr (2009) mention in their study. In this regard, experiences from Da Nang city in developing their climate action plan were transferred to HCMC through a study tour conducted by the CCB, in which officers in charge were sent to learn experiences in climate action plan making and to view the structure of Da Nang city's climate action plan as one of the key reference sources.

It appears, from information on institutional capacity and policy coordination of the three studied provinces during the climate action planning process, that we can argue that provinces in Vietnam are struggling in mobilising necessary resources for implementation of the action plans that they have developed, due to a lack of the coordination capacity that is needed to call on participation from actors outside the government system, such as the private sector, NGOs, and individuals who can mobilise their own resources and extended networks in implementation of climate adaptation.

#### **7.4 Local capacity and resources**

Local capacity, including knowledge, information and finances, has been considered one of the key factors influencing climate action plan development (Aall, 2012; Amundsen et al., 2010; Bauer & Steurer, 2014; Bhave et al., 2014; Larsen et al., 2012; Stevens & Senbel, 2012). Local capacity may vary from place to place. Climate action planning processes at provincial level in Vietnam appear to be similar to that discussed by Spratt (2009) in his research report on healthcare policy development. However, in each stage, variations were observed across the three provinces. These variations were mainly driven by the different capacities of the three provinces. As presented in Chapter 2 (Section 2.4.4), the local capacity consists of technical and financial aspects. Regarding technical capacity, the institutional capacity or ability of an institution to deliver its mandate is considered important. This is related to institutional setting, which has been discussed in Section 7.3 above; however, in this section, technical capacity will focus on preparedness and awareness of

provincial officials in developing their climate action plan, which includes the availability of supporting documents (for example, climate change impact assessment, and vulnerability to climate change reports) and independence of the assigned institution for climate change.

HCMC has established its Climate Change Bureau (CCB) as the coordination office to support the SCCC in developing the climate action plan of the city. The development of the action plan was carried out by the CCB in cooperation with relevant departments and agencies of the city. Technical support from international actors in the first climate action plan was neglected. However, most of the staff who worked at the CCB had an environmental science background or in related research areas, and had been working in the field of environmental management. Having had previous related projects implemented may have brought experience and knowledge to staff, and in the climate action planning process: these staff were able to facilitate or to conduct studies to provide supporting documents/information for the planning process. Their contacts in the previous projects' implementation were also used to seek contributions from the actors who had cooperated with the CCB before. Many staff in the CCB used English as a second working language, which allowed them to work directly and effectively with international stakeholders, particularly stakeholders from Japan (e.g. government officers, private companies' representatives) and Netherlands (government officers, project officers, consultants and representatives from private companies). The confidence and ability to work with international stakeholders improved the capacity of the CCB in the climate action planning process (Section 6.2.2). However, due to the decision-making system and procedure, the contribution of CCB staff to the climate action plan was neglected. For example, the role of the CCB was supporting and coordinating the plan-making process, but was not to conduct studies for development of the action plan. Innovative ideas or rational approaches in dealing with climate change were not highly considered, particularly in the context of the orientation of the top-down policy-making approach in Vietnam.

The investment to respond to climate change is still not prioritised, as most public investments are given for economic development. Climate change has been considered an urgent issue that the city should be well prepared to cope with; yet the resources allocated to deal with climate change impacts are still limited (one billion VND or 50,000 USD received from National Targeted Program to Respond to Climate Change-NTP-RCC), except for HCMC and Quang Nam and Ben Tre provinces, which received 1.7 billion VND or 85,000 USD. The amount of budget received by the studied provinces from the national government (for example, NTP-RCC) is the same as for the local municipals in the south of Queensland in Australia to develop their climate adaptation plans (Baker et al., 2012). However, the

population size of the three studied provinces in Vietnam is much bigger than those studied municipalities in Australia. In addition, the complexity of natural conditions is also different. This indicates that, even in a developed country such as Australia, local governments, who may have better capacity and resources than those in developing countries, also need support from their national or federal government in developing their climate action plans.

Uittenbroek et al. (2014) point out that a new institutional set up could provide an opportunity to learn how existing structures and routines need to be modified, based on explorative learning rather than exploitative learning. Climate change is an emerging issue; hence, the institutions in the three studied provinces were newly established, and the inheritance from existing institutions minimal; and this has led to ineffectiveness in the operations of the Climate Change Bureau (CCB) in HCMC and SOCC in Quang Nam province. Lao Cai province did not in fact set up a SOCC during the development of their climate action plan. Indeed, other barriers or challenges to climate adaptation may arise if the new structures are not continued into the next political term and no integration or links established with other policy domains. At national level, the dedicated approach was observed in Vietnam during the period 2008-2011, when the NTP-RCC and NSCC was first introduced; then a more integrated approach has been undertaken at both national and sub-national levels (MPI et al., 2015). This can be considered as one of the positive movement in responding to climate change in the context of limited resources, particularly in Vietnam at provincial level.

Limited capacity of local officers has been a challenge for effective climate action planning (Juhola et al., 2012). One of these challenges is local officers' time constraint (Baker et al., 2012; Nam et al., 2015). In fact, times for local officers to work on climate action planning work is limited as they had to deal with other tasks coming from the province's administration system, and also tasks coming from the state or central governments. The present study also reveals that there were not many local officers have had training on climate change or urban planning; yet they have to take a leading role in developing climate adaptation plans for the municipal or cities. Interviews with policy makers in the three provinces all indicated that limited time has been considered the main concern, as they have had too many reports to prepare and submit, not only to the city authority but also to national ministries upon receiving their requests. The same finding has been found by Ayers (2011) in her case study in Bangladesh, Dannevig et al. (2012) in their study on Norway, and Baker et al. (2012) in South Queensland, Australia. Indeed, if local policy makers in the three studied provinces have not enough time for climate change issues, particularly during the planning stage, it would be a challenge to ensure that all resources are mobilised and best options proposed. For example, the capacity of Quang Nam province to cope with climate change in general,

and participate in the climate action planning process in particular, is limited. However, thanks to the project, “*Supporting the implementation of National Targeted Program to Respond to Climate Change (NTP-RCC) in Quang Nam*”, which was funded by Danish Development Agency (DANIDA) in 2009, the province was able to outsource the preparation of supporting documents, such as sea-level rise scenario for the province, and climate change impact assessment reports (Section 6.2.3). The province has set up the SOCC to support their SCCC in developing the climate action plan. It took the province more than three years to formulate the action plan, due not only to the capacity of local officers but also to the complexity of climate change issues in the province (Section 6.2.3). In addition, a new mechanism in the spending budget from the DANIDA project, which has been merged into the state budget system, slowed down the process of signing contracts with the consulting company, to conduct studies. Identifying financial sources for implementation of the action plan was also challenging during the planning process. Guidelines to use the funded budget from the DANIDA project, which had been merged into the state budget, were not clear at that time; which can be considered as one of main factors slowing down the process of climate action planning as well as other climate-related capacity building activities in the province (Section 6.2.3).

In Lao Cai province, the capacity is even more limited than those in HCMC and Quang Nam province. The climate action planning process in Lao Cai province was fully outsourced to a research centre that is located in another province. The outsourcing started from drafting the proposal for formulation of the action plan, to the planning activities. Provincial officials were only involved in supporting the research team to conduct related studies, and in organising workshops for the provincial officers (from relevant provincial departments and agencies). There was no Standing Office for Climate Change (SOCC) in Lao Cai province at the time of the action plan development, and the taskforce or working group was in charge of coordinating the planning process (Section 6.2.4). Technically, the plan was formulated by a research centre through contractual work. The main role of the working group was to assist the research team to collect the information and data that were needed for developing the climate action plan. The technical capacity of Lao Cai province in regard to climate change was limited, and awareness of the relevant officers about climate change at that time was also low. Lao Cai is located in the Northern Mountainous Region of Vietnam, and the knowledge of climate change impact on the mountainous areas at that time was minimal. Most information and knowledge of climate change at that date was almost solely about the sea-level rise and flooding in the delta region. Impacts of changes in rainfall patterns and droughts, as well as intensity of weather events on the upland, were not considered as consequences of climate change. Due to a lack of experience, or not having opportunities to

work with internationally funded projects related to climate change or environmental management, led to a limited capacity of the local officials in developing their climate action plan.

The role of international stakeholders (through technical support such as in HCMC, or through a funded project as in Quang Nam) in capacity building is clearly observed. In order to strengthen the capacity of provinces in developing and delivering their climate action plans, mobilising available resources at national level, particularly technical capacity, is needed, through deployment of technical experts to the provinces most in need, or through preparation of guidelines for provinces located in the same ecological regions (N1, N2 and N3). For example, national and international technical experts can be deployed to the provinces that have limited capacity in development-related climate change policies and intervention options, or that have no experience in working with internationally funded projects. Financial support can also be provided to provinces where the nature of climate change is more complex than that of other provinces (for example, Quang Nam province has coastal, low land and mountainous areas that will need more resources to conduct primary studies on impact assessment or vulnerability to climate change, than have the provinces located in the delta region).

Uittenbroek et al. (2014) highlight that, if the budget is available, then knowledge development and investment in the action plan will be implemented. In contrast, when there is no budget, the implementation will not be able to be undertaken. In this regard, the climate action plans of HCMC and Quang Nam and Lao Cai provinces have been struggling to be implemented as they intended. The role of knowledge in the policy-making process is a critically important factor (Radaelli, 1995). In this regard, knowledge on climate change of policy makers in the three studied locations indicates the mode of “acceptance rather than exploratory”. Due to the fact that the knowledge was utilised partly, as most available knowledge is created at global, regional and national levels, which is not comprehensively reflected locally in terms of the characteristics of climate change impacts. In the three studied locations, only HCMC proposed a specific programme for research on climate change. The other two provinces did not include any scientific research activity in their climate action plan to create new knowledge that could reflect the local climate change context. However, it is understandable that Quang Nam and Lao Cai provinces did not propose a research program in their climate action plans, as climate change is a complex issue, and with their current capacity they could not conduct research activities using their own staff. It is, therefore, necessary to have national and international support in directing research on climate vulnerability and climate change impacts in general for all provinces

without such capacity, to provide more updated and reliable information for future climate action planning. Therefore, it appears that the role of expertise in climate action planning in three provinces was highly relevant. The provincial governments based their planning on expert knowledge in various ways. In HCMC, there was collaboration with international partners and universities in consultation seminars, where expertise was utilised as comments and feedback on the action plan documents. Meanwhile, Quang Nam and Lao Cai provinces relied on the consultants to prepare supporting documents for development of the action plan. In the three case studies, policy transfer was mainly undertaken from national level to provinces; only HCMC expanded the learning process to other provinces, for example, using lessons learnt from Da Nang and Can Tho cities.

Neil Adger et al. (2005 p.85) conclude that climate adaptation “may be triggered through extreme events that raise the consciousness of climate change within policy-making and hence giving legitimacy to governmental action”. It is worth mentioning that the extreme events related to climate change such as floods and storms occur more often in HCMC and Quang Nam provinces than in Lao Cai province. Neil Adger et al. (2005) also argue that the elements of effectiveness, efficiency, equity and legitimacy determine the success of climate adaptation, but that such adaptation critically depends on capacity to adapt and the distribution of that capacity in dealing with climate adaptation. In Vietnam, capacity of adaptation at national and sub-national levels is still limited, and the distribution of that limited capacity cannot be spread to all 63 provinces and central cities sufficiently. It is understandable that all provinces requested that 50% of the proposed budget should come from the state or national budgets, as they have no or limited available resources of their own to fund prioritised projects. Therefore, Boswell et al. (2012) highlight that identifying local resources and selecting most relevant responding options is critically important to ensure that the proposed activities will be implemented. The absence of resources secured for implementation of the provincial action plans can be seen as a significant gap in effectively responding to climate change.

From the analyses of 40 provincial climate action plans and the climate action planning processes in three locations, it appears that technical knowledge on local climate change is still limited; institutional capacity must also be improved to promote a more proactive planning approaches such as mainstreaming; working with more relevant stakeholders in designing a more meaningful climate action plan and in implementing the action plan more effectively. Financing is also a major issue, especially how to mobilise financial resources in the context of limited budgets. Therefore financial capacity should be strengthened not only from the state budget but also from private sectors and international investors.



## 7.5 Participation and networking

A number of studies have been conducted to look at participation in climate policy making (Huitema et al., 2011; Measham et al., 2011; Serrao-Neumann et al., 2014). The limitation of public participation in the policy-making process may come from time constraint (for example, to develop a policy in a short time) or technical constraint (the policy issue is complex, and most of the public could not provide valued comments and contributions). However, public participation in policy-making can be considered as an important factor in increasing awareness and understanding of what the government at different levels is doing to confront the issue (Lund et al., 2012). Participation of target groups is also important in designing more comprehensive and feasible activities, as these groups can provide the knowledge and information they have, to promote the dynamic of discussion in the policy formulation process. In HCMC, where the private sector is active and has available resources, the top-up mechanism (organise consultation workshops, seminars or discussion with related stakeholders) was the most common practice, as it is easy to set up and to announce the formulation of a new policy; but it also has limits on continuous participation from the same target groups with the same level of understanding of the process of policy formulation and of a policy's primary objectives.

The level of public participation in climate adaptation planning in the three studied provinces was very low, due to the nature of the climate change issue and the policy-making culture at provincial level, as discussed in Section 7.3 above. Climate change is still considered a scientific matter, and developing policies to respond to its impacts a task of government. This is understandable, and the same finding as for Sweden's local municipalities, where climate change is considered more a technical issue than a social matter, and hence the participation of wider stakeholder is limited (Nilsson et al., 2012). In addition, the opportunity for NGOs and ordinary people to participate in the planning process was very limited in the three provinces. This can be seen as common in policy making in Vietnam, as Ohno (2009) reveals in his study on the formulation of industrial development strategies, that policy development in Vietnam normally takes place within the government agencies.

However, many studies have pointed out that the more the involvement of the wider public, the better the action plan is likely to be perceived by local communities. As mentioned in Chapter 2, Section 2.4.5, Serrao-Neumann et al. (2014) recognise three critical factors that can influence the level of public participation in climate adaptation actions: (1) a technocratic approach to decision-making; (2) absence of high order government support; and (3) lack of evaluation mechanisms for public participation. In the three studied provinces, factor (1) and factor (3) occurred in each. Firstly, the provinces were still considering climate change as a

technical issue, and thus only technical knowledge and information were required and discussed during the climate action planning process. Secondly, there was no evaluation mechanism for public participation; or in other words, there was no platform to encourage public participation in the plan-making process. However, the high order government support, at least the technical guidelines and policy directions or political commitments that all provinces received from the national government, was clearly recognised. For example, the government of Vietnam (GoV) requested that all provinces, by the end of 2011, should have developed and approved their climate action plans, and provided an average of 1 billion VND (or 50,000 USD) to assist provinces in developing their climate action plans (GoV, 2008). In addition, a technical guideline was also provided to provinces by Ministry of Natural Resources and Environment (MONRE, 2009).

In the three studied provinces, actors were only limited to representatives from provincial government departments and agencies. Wider participation, for example, from NGOs, research central and community groups, was rarely observed. The best opportunity for these actors to be involved in the planning process was consultation workshops to comment on the content and structure of the action plan before the plan was finalised to submit the Provincial People Committee (PPC). This was too late, in most cases, to incorporate comments and suggestions from the concerned parties, particularly from NGOs and community groups, into the final action plan paper, due to limited time and that it would cause major changes in scope and structure of the action plan (N3, N6).

Nilsson et al. (2012) stress that the wider public participation is, the better position a climate action plan will be in on the political priority agenda. In this regard, stakeholder participation in the climate action planning in HCMC and Quang Nam and Lao Cai provinces varied significantly. The stakeholder participation in HCMC was limited to key stakeholders who represented city departments and agencies. The participation of academia and private sector, as well as NGOs, was rarely observed. The academics or researchers from universities and research institutions participated in the very late stage of the planning process, when the structure and content of the city climate action plan had been completely constructed (Sections 6.2.2 and 6.3.3). The contribution of this group, then, was limited to the structure or verification of information or terms used in the action plans, and not for the content (objectives, deliverables, proposed activities and implementing agencies) of the action plan.

The absence of the private sector and NGOs during the climate action planning process may have resulted in less effective implementation of the action plan, as stakeholders from private sectors do not know what business areas that they can invest in or the opportunities

for financing the intervention activities that have been proposed in the action plan (N6). For example, the private sector in HCMC has interests in providing renewable energy, smart energy-saving systems, or environmentally friendly building materials; but during the climate action planning process, private enterprises did not have many opportunities to bring these advantages and business strengths into the climate action plan. The city government cannot cover all the areas, and the resources needed are massive; thus, the contribution and mobilisation from other stakeholders are needed (H6). In this case, NGOs can contribute to the consultation process with local citizens in recognising the impacts of climate change that are happening in their areas, and responding with options that may more feasible than those proposed without the consultation of the local communities. However, HCMC appeared not take advantage of the knowledge that the private sector and NGOs can bring in, or there was the lack of a mechanism that could promote the participation of the private sector and NGOs during the planning process. The situation in Quang Nam and Lao Cai was even less optimistic, as the participation from stakeholders was only limited to the departments and agencies of the provinces and the consulting companies. There is no evidence of participation from the private sector and NGOs before or during the climate action planning. In Quang Nam, however, due to the operation of the project funded by Danish Development Agency (DANIDA), the participation of independent consultants was observed. It is not clear whether the participation of external consultants brought benefit to the action plan; but it can be concluded that the planning process was more open than that in Lao Cai province, where the only participation of provincial departments and the consulting company involved in development of the climate action plan. As mentioned in Chapter 2 (Section 2.4.5), creating a forum for proactive deliberation that allows citizens to engage early and meaningfully in the process is critically important in the climate change adaptation process, as it provides stakeholders with an opportunity to discuss and advocate alternative options.

In the studied provinces, the variety of stakeholders involved in the climate action planning appeared to be decided by the coordination office or supporting unit, as well as by the existing policy networks that the province has. The more intensive the policy networking is, the wider is stakeholder participation. The quality of information related to the climate change issue in the province is also important for wider participation. NCCARF (2012) highlights that improving the quality of information will help to address local governments' liability concerns and support effective decision-making, particularly in terms of identifying the best management options for climate change. Perhaps this should be the starting point for any mandated public participation process. In Vietnam, particularly at provincial level, climate change information is still quite broad, which mainly focuses on general impacts of climate change at global, regional and national levels; while information on climate change

impacts and vulnerabilities at local level, which are more relevant to provincial climate action plans, is still limited (Section 6.2). Provinces encountered difficulties in obtaining reliable information on local climatic conditions and trends; and as a result, twenty-seven of the forty provinces considered to "*assess level of climate change impacts on sectors and localities*" as being the main objective of their climate action plan (Section 5.2.1).

As discussed in Chapter 2, Section 2.4.5, the ability of sub-national governments to deal with climate change may be strengthened by the governance structure in which they are embedded, particularly through informal and formal networks. Action plan implementation effectiveness could be enhanced by creating a network of support with other sub-national governments, NGOs and the private sector. This can be done by improving the capacity of government mobilization with other non-governmental local actors to implement voluntary actions. The chain and scale of causes and consequences of climate change are interlinked at all levels (global, regional, national, and local). Successful actions to deal with those global problems can be implemented by articulating with other sub-national governments, or with governments and governance structures at other levels (Bulkeley & Betsill, 2003).

Policy networking can be established through the participation of the policy actors participating in similar or shared common interests. In this regard, the policy network in HCMC is more intensive than those in Quang Nam and Lao Cai provinces. HCMC has long cooperated with international development agencies in delivery of related climate change projects such as flood control, solid waste collection and treatment. In the implementation of these projects, a network with international organisations such as the World Bank (WB), Asia Development Bank (ADB) and Japan International Cooperation Agency (JICA) has been established (Section 6.2.2). In addition, affiliated researchers and consultants have also contributed to the establishment of a network not only with domestic actors but also international stakeholders, in developing its climate action plan. The city-to-city cooperation with Osaka city in Japan and Rotterdam city of Netherlands are examples of extending policy networks in dealing with climate change (H1 and H3). However, in order to maintain and expand the network, this requires a city to have qualified staff or capacity, particularly the ability for joint knowledge exchange activities and foreign languages (for example, English and Japanese).

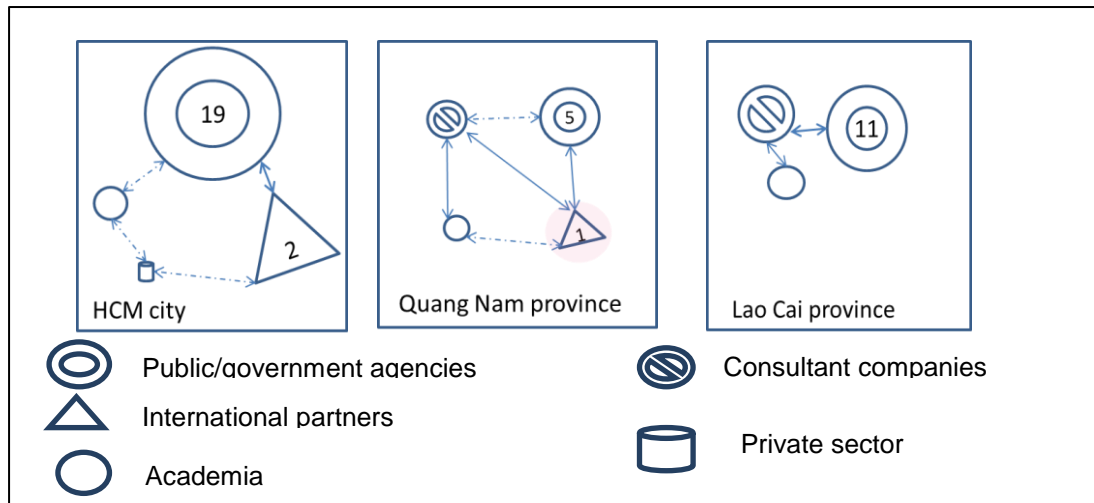
Lao Cai is located in the mountainous area, where at the time of formulation of the climate action plan not many organisations and agencies were working in the province for climate-related projects. No international funded project being in the province at the time the climate action plan was developed has limited the contribution from independent consultants and donor agencies. The chance to establish or expand policy networks with relevant

stakeholders was also lower than in HCMC and Quang Nam province (Chapter 6, section 6.3.3). In this case, it is essential for Lao Cai province to receive support from government in mobilising resources, particularly international and national technical experts to assist the province in formulating its climate action plan or in conducting studies on climate vulnerability, and to strengthen the policy networks of the province for future policy development. Such support from central government is not necessarily in direct finances (as the state budget is limited and not available to support the formulation and implementation of all climate action plans), but in the mobilisation of technical experts who can work with the province to identify other potential sources of budget in delivering the climate action plan in a more participated and collaborative way. In addition, the policy networks at provincial level can be strengthened through better mobilisation of available resources (particularly human or technical resources) at national level, when strong policy networks on climate change or related area have been established. Some provinces may need more support from central government in development of their climate action plans, other provinces may need more supports in establishing their policy networks. The role of national government and international development agencies in this regard is particularly important (N1, N2).

Information obtained from interviewing with relevant stakeholders in HCMC and Quang Nam and Lao Cai provinces (Sections 6.2 and 6.3) reveals that only networks with weak cohesion and weak interconnectedness were observed. Given its location and better capacity in fostering networks, perhaps unsurprisingly HCMC has relatively more intensive and well-developed networks (see Figure 7.1) in climate action planning, including the participation of international partners from Japan and the Netherlands. On the other hand, networks in climate action planning in Lao Cai province were hardly evidenced, due to its more remote location and lower networking capacity. In Quang Nam province, the network has been promoted by national governments and an existing partner, the Danish Development Agency (DANIDA), which has been working with the province on previous projects. It can be concluded from the present study that network strength in climate action planning at the sub-national level in Vietnam is likely to be critical as a precursor to plan implementation; yet at present, little attention has been overtly given to this and, furthermore, institutional capacity is generally low and certainly insufficient to enable provincial scale 'independent' resourcing and implementation (N1 and N2).

As an emerging policy issue, very few existing network actors have experience in climate action planning at provincial level. In the case examples of this study, the policy networks differ in terms of intensity and connectivity. HCMC, for example, appears to have a higher intensity of active networks involving international experts from Netherlands and Japan, as

well as the participation of private sector participants. As suggested by Boswell et al. (2012), climate action planning should include public participation, since many aspects of climate action plan implementation require community members to voluntarily change behaviours and to actively monitor the effectiveness of the proposed activities. This indicates that public participation plays an important role in climate action planning, but in Vietnam, public participation in climate action planning at local level is still neglected (H6 and L6).



**Figure 7.1: Stakeholders involved directly in the climate action planning in three provinces**

Participation and policy networking in climate action plan making at local level have not been considered seriously (Kousky & Schneider, 2003; Tompkins & Amundsen, 2008). These two factors are interlinked. The better is the policy networkings, the wider participation can be expected during the plan-making process. In the present study, the findings reveal that HCMC has a more intensified climate policy network and wider participation, particularly the participation of international stakeholders. In contrast, Lao Cai province has very loose climate policy networks, which has led to no participation of international stakeholders (Figure 7.1). However, policy networks should be established through the process of cooperation and direct interaction. The challenge that provincial governments encounter in establishment of a policy network is to understand and use expertise from the network (N1). Policy networks in HCMC for climate action planning are considered more comprehensive than those in Quang Nam and Lao Cai provinces; but it is still far from the need to include all related stakeholders in contributing to the development of a comprehensive climate action plan for the city. Lack of participation from the private sector and NGOs during the formulation of a climate action plan is one of indications of ineffectiveness in using policy networks to enhance the participation of related stakeholders. Indeed, the more the involvement of the wider public, the better the action plan is likely to be perceived by local communities (Serrao-Neumann et al., 2014). There is a need to study approaches and

options to enhance the participation of a wider range of stakeholders in climate action plan development (from formulation to implementation and evaluation).

As mentioned by McAllister et al. (2014) in their study in Australia, local government cooperates as a closed group to share a common policy agenda and plays an advocacy role to spread the agenda. On other hand, consultant organisations in this study demonstrated fewer links to other network actors than to the government agencies. The authors also note that the formal governance structures of checks and balances can be designed and implemented, but the policy networks can only be managed. This means that we can promote the effectiveness of the networks to facilitate collaboration and interaction among the participating actors. In the three studied provinces, interaction among stakeholders was rare; yet there is no clear evidence that the government agencies were in a position to encourage interaction or to promote the participation of stakeholders outside the government system. In addition, many consultation workshops were organised for a limited number of stakeholders: most were from government departments, and some researchers from universities and research institutions; but not from the business sector or community groups. Uittenbroek et al. (2014) highlight the role of institutional entrepreneurs, to use their networking and resources to implement climate adaptation in the Netherlands. Lack of wider participation can be seen as a weak point in designing a robust climate action plan, particularly in the context that resources for implementation of the action plan should be mobilised not only from the state budget but also from other sources.

It is difficult for Quang Nam and Lao Cai provinces to attract the private sector in responding to climate change, as in these two provinces the number of private business is limited and small; but in HCMC the private sector can participate in delivering measures to respond to climate change effectively. One of the interviewees (H6) mentioned a solution that a private company could offer in improving water absorption of pavements, that can reduce surface water flow and eventually reduce flooding in inner city areas during the rainy season; which can be a response measure that the climate action plan may include and the private sector can participate in the implementation of. It can be seen that mobilisation of resources (technologies, financial, networks and human resources) from the private sector is essential in responding to climate change in urban cities (Phi et al., 2015). Indeed, increased local capacity, including better resource mobilisation for climate adaptation, is becoming an important factor in climate action planning at provincial level in Vietnam.

## **7.6. Knowledge and information exchange**

Many authors have pointed out many barriers or challenges in the formulation and implementation of climate action plans that local municipalities have encountered (Aall, 2012; Amundsen et al., 2010; Bauer & Steurer, 2014; Bhave et al., 2014; Larsen et al., 2012; Stevens & Senbel, 2012). Among these scholars, Amundsen et al. (2010) identify four key challenges or barriers: (1) unfamiliarity with existing data on climate change; (2) lack of concrete data; (3) lack of local expertise for dealing with effects of climate change; and (4) an unclear role for local governments when working with adaptation policies and measures.

Knowledge or expertise is considered an important factor in any climate action planning process. Knowledge is not only limited to climate change but also the method of formulating the action plan and the participation of relevant stakeholders during the formulation and implementation processes. Knowledge in public policy-making has been long been considered as an important factor (Sections 2.2.2 and Section 2.2.3). Climate action planning is not only a process of creating new knowledge (impact assessment, vulnerability assessment) but also a process of using existing knowledge (public policy-making procedure, networks, coordination) that have been reviewed in Chapter 2 (Section 2.3).

HCMC learned experiences from Da Nang and Can Tho city, to establish the Standing Office for Climate Change and review the structure of its climate action plan, in order to develop the climate action plan of HCMC (by the city officials). Knowledge sharing, therefore, became one of the first strategies the studied provinces took into consideration before developing their climate action plans. HCMC was shared knowledge by international partners, particularly by Japan.

Quang Nam province outsourced the action plan, developed by a consulting company, but the knowledge was shared by the donor-funded project (DANIDA). The aim of this project is to assist the province in implementing the National Targeted Program to Respond to Climate Change (NTP-RCC). The project contracted with international and national experts to conduct studies and provide related reports as a reference source for the province. In addition, the project also funded training and workshops to strengthen capacity and raise awareness for local officers and concerned parties in the city regarding climate change.

In Lao Cai province, the climate action planning process was strongly dependent on the consulting centre, and knowledge sharing was limited (Section 6.2.4). At the time the climate action plan was developing there were no other related projects being implemented in Lao Cai. Opportunities to create and to share knowledge on climate change issues in the province were limited, due to its location and the emergence of the climate change issue.



The consulting company had collected information from related departments and agencies in the province. The consulting firm also conducted field studies to collect more information. The information then was used to prepare background reports and to draft the climate action plan document. The knowledge sharing in the province during the action plan formulation was limited to a number of stakeholders, mainly between the consulting company and departments of the province. The participation of national and international stakeholders in sharing knowledge was not observed during the planning process. However, after the climate action plan was approved, one internationally funded project was granted to assist Lao Cai city (an administrative of Lao Cai province) to develop a climate action plan (Section 6.2.4). The formulation of the climate action plan for Lao Cai city involved both international and national experts, and the experience of development of the province's climate action plan was shared (L3) and wider participation was secured and promoted.

Compared with other two provinces, Quang Nam province received more support from the national government, particularly through the implementation of the DANIDA project. However, the project had its own objectives and implementation scheme (as it was designed before the development of the provincial climate action plan). Meanwhile, the province needs more support in development of its climate action plan. The mismatch of these two objectives thus led to limitations in creating and sharing knowledge for development of a robust climate action plan in Quang Nam province.

The present research also finds that the need for knowledge and information creation and exchange is clearly evidenced. Chapter 5, Section 5.2.1 highlights that climate change impact assessment is one of the most common objectives set out by provinces in their climate action plan. In order to carry out climate change impact assessment on local scales, knowledge on climate science, local socio-economic contexts and vulnerability is necessary. This starting point of having knowledge on local social and natural conditions is critically important in designing a comprehensive climate action plan.

As highlighted in Chapter 2, climate change policy is a new and emerging issue, and learning and exchange is a notable factor in likely policy effectiveness. Knowledge and information on climate science, climate change vulnerability, and effective responses to climate impacts, are important in any climate change policy. Exchange of knowledge and information on related climate change issues, and particularly on good practice in effective responding to climate impacts, plays a key role in climate action planning at international, national and sub-national levels.

HCMC was the first sub-national government to establish a Steering Committee for Climate Change (SCCC) in order to direct and to oversee climate action planning processes. Interview information in the present study reveals that the city's climate action plan formulation team had learned experiences from Da Nang city and Can Tho city in preparation of the primary studies to support the formulation of the action plan. Da Nang and Can Tho city were supported by the Rockefeller Foundation to prepare their climate action plan, which involved vulnerability and impact assessment based on international good practice; and these assessments were conducted by international and national experts. In addition, HCMC was also seeking information and experience from international counterparts from the Netherlands and Japan through its "city-to-city" cooperation. Learning and information exchanges have not only been applied to the action plan-making process but are considered as a continuous journey, particularly for the implementation of the proposed activities of the climate action plan (Section 6.2.3).

Learning experiences from other provinces such as Da Nang and Can Tho cities provided good examples of what a typical climate action plan is (content and structure). The knowledge that HCMC obtained from Da Nang and Can Tho cities on climate action plans allowed the working group (e.g. basically, staff of the CCB) to draft the structures of the climate action plan for the city (Section 6.3.2). Knowledge transfer in climate action plan making of HCMC appears to have been limited to lessons taken from Da Nang and Can Tho, the two national cities that received support from international agencies in developing their action plans. Methods for climate change impacts and climate vulnerability assessment appear to have received more attention than did experiences in the plan-making process itself, as the institutional structures of HCMC are not the same as those in Da Nang and Can Tho cities. Information exchange, therefore, was limited to reviewing the structure of the action plan and supporting documents in the development of the action plan, rather than in the whole process of the planning (Section 6.2.2).

Leadership is considered to be an important factor in contemporary policy-making, particularly at the political level. HCMC has shown strong leadership in dealing with the emerging issue of climate change. The chairman of HCMC has been the chairman of Steering Committee for Climate Change (SCCC) since it was first established. HCMC has also received more financial support from NTP-RCC (1.7 billion VND, compared to the 1.0 billion VND that other provinces received) to formulate the climate action plan. As a leader in economic development, HCMC is also considered as a pioneer in responding to climate change by engaging more outside stakeholders to deal with climate change-related issues, such as a partnership with Osaka city, Japan to promote private sector investment in solid

waste collection and treatment, and cooperation with Rotterdam city of the Netherlands in urban planning. These two city-to-city partnerships can be considered as a new movement in Vietnam, and HCMC indicates a leading position in this type of cooperation, where country-to-country cooperation has been dominating for decades. Within the first generation of climate action planning of the city, the role of city-to-city partnership was neglected, as this new type of the partnership had just formed and was in a beginning phase. However, in the second generation of climate action planning, the participation of the cooperating cities appears to be more active, and their roles are increasingly recognised.

In a workshop organised by the Bureau for Climate Change (CCB) on 25<sup>th</sup> September 2015, on formulating the climate action plan for the city for 2016-2020, representatives from Osaka and Rotterdam cities were also participating. Personal observations from the meeting (representatives from city's departments, agencies and district officers), and comments from experts of Osaka and Rotterdam cities were highly received. This can be seen as the first time climate action planning at provincial level from the beginning has witnessed the participation of foreign experts and district-level officers. This indicates that the provincial governments, particularly the policy makers, tend to attract participation from wider stakeholders, particularly potential actors that can contribute technical and financial resources.

Findings from interviews with stakeholders in Quang Nam province indicate that the learning experiences and information exchange during the climate action plan-making process did not receive special concern from departments and agencies, as the climate action plan was prepared by a consultant company, and officials were busy with other tasks (Section 6.2.3). The action plan formulation was partly supported by an international technical consultant, who worked with the province for three years under contract with the DANIDA project. Good practice and experiences were shared during the plan-making process, but these were not optimised or consistent. In addition, the province also engaged in training courses organised by MONRE and other organisations, particularly for the project funded by the Asian Development Bank (ADB) related to biodiversity conservation and climate change adaptation in Quang Nam, Thua Thien Hue and Quang Tri provinces (H1). However, in general, the learning process and information exchange of Quang Nam related to the formulation of its climate action plan were quite passive and lacking a proactive strategy (Section 6.2.3).

As discussed in Chapter 6 (Section 6.2.4), Lao Cai was originally considered to face less immediate and significant threats from climate change. Before the extreme weather events that brought storms and flooding in 2008-2009, climate change impacts in Vietnam were focused on sea-level rise and flooding in flat-land areas, and discussion on the impact of

climate change on upland areas was missing (L6). Indeed, experiences around the world also indicate that more investment and awareness-raising activities are put on for extreme weather events such as flooding and drought (Amundsen et al., 2010). Learning processes and information exchange on climate action planning were largely absent. Most information shared was related to natural disaster management, which had been practiced by local and international NGOs in implementing small projects and initiatives in the provinces (L4). Learning processes and information exchange on how to formulate an effective climate action plan did not take place in either formal or informal ways.

Leadership in the climate action plan-making process of Lao Cai province was limited, in that it was based on limited ownership and resources. There was no SOCC as there was in HCMC and Quang Nam province. The lack of specific focus on climate change indicates the lack of strong commitment and political leadership (Section 6.2.4).

To successfully adapt to climate change requires national governments to establish a comprehensive institutional setting and policy framework that operates over the long-term, to support local-scale knowledge generation, capacity building, and innovation (Jordan & Huitema, 2014). The Vietnam government has developed a comprehensive national climate policy framework (see more in Chapter 3, in particular Section 3.4); however, there is no clear roadmap for this policy framework to be implemented, particularly at the subnational level (N1 and N4). According to a study conducted by Nam et al. (2015), at the end of 2014, 62 provinces and cities had developed their climate action plans, following the national climate change policy agenda (e.g. NTP-RCC). However, provincial authorities were not purposely putting climate change on the local policy agenda, except Da Nang and Can Tho cities, which had received supports for C40 (forty cities program).

Development of climate action plans were based on the national policy agenda, which has brought some advantages to provincial authorities but has also created challenges in developing robust local climate action plans. One of the biggest challenges is limited capacity of the provincial officers at the time of the action plan development, and available resources for implementing the climate action plan. Most of the resources needed for implementation of climate action plans in provinces have to be mobilised from the national budget. This budget dependency means that the implementation of provincial climate action plans has encountered many difficulties; particularly when the state budget in Vietnam during 2011-2014 was in a difficult situation with a higher budget deficit and higher need for economic development investment (N2, N3). Indeed, Amundsen et al. (2010) point out that, even in Norway, local governments or municipalities lack funding to address shortcomings in climate adaptation. It is understandable that provinces in Vietnam encounter difficulties in

securing budgets for implementation of their action plans, particularly in the context of state budget deficit and new regulations on public investment (Nguyen-Hoang & Schroeder, 2010).

In HCMC, most departments were involved; whereas in Quang Nam the participation from provincial departments was limited to providing information and to working with service providers (for example, consulting companies or research centres); and Lao Cai solely relied on the consultation agency to develop their climate action plan. This indicates that provincial governments have limited capacities, technically and financially, to develop a robust climate action plan. One of the capacities that a coordination office needs, is to coordinate with wider stakeholders, in which entrepreneurs and communities can be involved in the planning process as well as implementing projects proposed in the climate action plan.

## **7.7 Chapter summary**

Climate change policy making, particularly climate action planning, as discussed in Chapter 2 (Section 2.3), is a new and an emerging area of public policy making in the world, and has been particularly focussed on in more developed countries. Identification of factors that influence the effectiveness of climate action plan making is challenging, and depends on social-political contexts as well as the awareness and capacity of policy makers. Interviews with relevant stakeholders in the three locations studied, HCMC and Quang Nam and Lao Cai provinces, indicate that there are differences in institutional setting, policy networks, and information exchange, in the climate action plan-making process. HCMC shows a more comprehensive and effective institutional setting and policy networks, and presents an active mode of learning and information exchange. Meanwhile, Lao Cai province showed a less comprehensive institutional setting, with no SOCC, and policy networks and information exchange were not as extensive and comprehensive as those of HCMC. Quang Nam province was found to sit somewhere between the level of HCMC and Lao Cai province, regarding the institutional capacity and policy networking. Learning process and information exchange in Quang Nam province indicated the commitment of the province, but there remain various challenges to be resolved in order to mobilise its potential resources and advantages.

The information analysis of the interviews also reveals that, even in the centralised policy-making system of Vietnam, sub-national governments can still have room for setting up institutions to support the reframing and local-specific implementation of national policy frameworks based on their local, natural and socio-economic contexts (see Section 6.2 in Chapter 6). For example, the provincial government can decide how a climate action plan

can be developed and whether the budget estimation is included or not. The objectives of national climate policies were transformed into local action plan documents (see, Section 5.2.1 in Chapter 5). However, how these objectives are executed with limited available resources is a question for future studies.

In other aspects, institutional setting, policy networks and information exchange are key determinants in supporting the formulation of climate action plans. The findings here support the work of Uittenbroek et al. (2014), that in climate action planning, particularly at the subnational level, political commitment is evident in plan formulation but less so in implementation (e.g. formulation of the SCCC; and that climate change was put on the policy agenda by the national government). The present research extends these findings by offering insights into why and how these limitations manifested across the three studied provinces. As activity shifts to a mainstreaming oriented approach, there is a lack of technical knowledge and weak coordination capacity among departments, and these may hinder effective plan making and plan implementation. In addition, Tang et al. (2010) highlight, in their study, that a higher adaptive capacity has been related to higher quality of climate change action planning.

Uittenbroek et al. (2014) point out that, when a political commitment approach prevails, then agenda setting, framing policy directions, and allocating resources are key steps in plan making. In Vietnam, climate action planning is derived from a national policy agenda; and policy directions were also framed at national level for local governments to follow, while resources were only partly allocated to formulate the action plan. Resources for plan implementation were not allocated, despite the fact that the budgets of provincial governments are mainly derived from the national budget. Hence, provincial governments cannot secure resources, whether financial or technical, to implement their climate action plans without resource allocation from the national government. This finding is in contrast with the recommendations made by the OECD (2012) on securing resources for implementation of a plan. The situation of budget dependence has created a burden for a limited national budget, as all 63 provinces inevitably request resources to be allocated from the national government once their plans are developed. A mainstreaming approach requires that climate change issues and opportunities are understood sufficiently so that they can be integrated alongside other priority issues such as economic development and infrastructure needs. This offers the prospect of a more appropriate approach, assuming that all departments of provincial and national governments can share their responsibilities and cooperate with other departments to deal with climate change issues. The reality is that such

an outcome presupposes strong leadership and highly developed institutional structures, with well-developed and widely-dispersed knowledge of climate change.

Phi et al. (2015) also highlight that the complexity of urban planning and implementation in HCMC leads to the conclusion that specific skills of stakeholders in working across jurisdictions and disciplines are keys to successful implementation. This results in a range of insights, approaches and tools, appropriate for various stages of a classic planning cycle. In plan implementation, more can be done to ensure that implementation actors are sufficiently equipped for the implementation tasks; for instance, by securing the financial resources necessary for plan implementation (OECD, 2012), and by ensuring that climate change management agencies are supported by the legislation and mandates needed for their tasks. However, the climate action planning in HCMC and Quang Nam and Lao Cai provinces indicates that implementation actors have not provided enough resources to carry out their proposed activities. In particular, HCMC and Quang Nam province did not even include a budget estimation for implementation. Lao Cai province did propose a budget, but it could not secure that budget for implementation (Section 6.2).

Low level of wider participation (e.g. only governmental agencies) results in a closed-cycle plan-making process. This indicates that the climate action plan was developed solely by the provincial government and is implemented by the government. Lack of wider participation of non-governmental actors resulted in limited contributions from other stakeholders, particularly private companies and NGOs who could encourage their networks to be involved in implementation of the action plan. Uittenbroek et al. (2014) point out that institutional entrepreneurs can use their networks and resources for climate adaptation. In this regard, the climate action planning in the three studied provinces did not show any sign of institution entrepreneurs or expanding networks through the non-governmental actors' channel.

Lack of capacity and knowledge are considered common challenges for local governments in responding to climate change. For example, lack of concrete data on climate change and lack of local expertise are two of four challenges that Amundsen et al. (2010) identify in their study. Indeed, these challenges were mentioned in the present study by interviewees in the three studied locations. Besides this, lack of strong motivation, less dynamic interaction of actors (or ineffective institutional operation), limited policy networks, and limited local capacity as well as knowledge, were key factors that strongly influenced the climate action plan making in the three studied provinces (Section 6.3.6).

## **CHAPTER 8: CONCLUSIONS**

### **8.1 Introduction**

The overarching research question of this PhD study is “How might the processes of climate change policy-making and implementation in Vietnam at different levels be understood and improved? In order to address this overarching question, three specific questions were asked:

1. How does content of the provincial action plans for responding to climate change vary, and what might explain this variation?
2. How are these action plans prepared, and how are they being implemented?
3. What factors influence the interpretation and implementation of the national policies at the provincial level?

These questions were derived from primary research objectives of this study, which sought to analyse the content of provincial climate action plans, and to understand climate action plan-making processes in selected provinces. In turn, it is expected that this will reveal ways of improving the prospects for national-level climate change policies and strategies through the development and implementation of local climate action plans.

### **8.2 Summary of findings**

#### ***8.2.1 The content of 40 provincial action plans***

This research was designed in two phases. In the first phase, climate action plans of 40 provinces and cities were collected; then, the content of these action plans were summarised by six elements: (1) objectives; (2) timeline for implementation; (3) proposed budget; (4) intervention areas; (5) institutional arrangement for implementation; and (6) evaluation and monitoring framework. The contents of the 40 climate action plans were then analysed and compared by (i) the time of approval (2011, 2012 and 2013), and (ii) location (1- Red River Delta; 2- North Midlands and Mountains; 3- North Coastal and Coastal Central; 4- Central Highlands; 5- South East, and 6- Mekong Delta region).

The results show that similarities were observed in the objectives (Section 5.2.1), institutional implementation arrangements (Section 5.2.5), and evaluation and monitoring frameworks of the climate action plans across the 40 action plans (Section 5.2.6). However, there were significant variations in budgets proposed for implementation by year of approval and by the location of provinces. In general, higher budgets were proposed in Mekong River



Delta and North Coastal and Coastal Central regions, and for the climate action plans that were approved in 2013 (Section 5.2.2). Many provinces did not indicate a budget proposal (for example, HCMC, Ninh Binh and Quang Nam provinces), in which HCMC and Quang Nam province were included in this study.

Significant differences in terms of timeline and source of proposed budget for implementation of the climate action plans (Section 5.2.2 and Section 5.2.3) were revealed in the content analysis of forty provincial climate action plans. It appears that provinces have taken their specific local contexts into account in proposing timelines and estimating budgets for implementation. The variation, however, particularly in timeline for implementation, is not clearly linked to the location of province but rather to the duration of national policies that were approved in that year (e.g. National Strategy for Climate Change, National Strategy for Green Growth). The variation in total requested budget for implementation is mainly due to different emphases in approach. For example, provinces in Mekong River Delta and North Coastal-Coastal Central regions proposed infrastructure projects ('hard' intervention measures) such as building sea dikes, riverbank enrichments and irrigation systems; as a result, their estimated budgets are much higher than budgets proposed by provinces in other regions (Section 5.2.2). There were also differences in designing intervention options, for example, HCMC grouped intervention options into adaptation, mitigation and cross-cutting areas of intervention. Meanwhile, many other provinces grouped intervention options in sectoral state management such as agriculture, forestry, transportation, and water and land management. This variation can be explained by the approaches in developing action plans or the influences of consulting companies that decided the intervention areas that were grouped, which have been discussed in Chapter 6 (Section 6.2).

There were also a number of general weaknesses of the analysed climate action plans that can be pointed out. In particular, twenty-seven of forty provinces proposed to '*assess the impact of climate to localities and sectors of the province*' as one of the key objectives in their climate action plans. This indicates that the action plans of forty provinces and cities were developed based on a lack of solid information and knowledge of climate change impacts and vulnerabilities to climate change, which are critically important in proposing and selecting any responding option (Boswell et al., 2012). The forty analysed climate action plans were structured in generic forms that need other detailed action plans to deliver the proposed activities and projects. This is not unique, as similar findings (e.g. Ellen Bassett & Shandas, 2010) reveal that many climate action plans in the USA are also mainly motivational documents rather than detailed action plans. Having a climate action plan developed and approved can be seen as an effort of the provincial governments in

responding to climate change in the context of limited resources. There are still limitations on the structures and contents of the climate action plans; but the governments in the forty provinces should be recognised for their commitment in developing and approving the climate action plans under the national climate change policy framework and requirements. It is understandable that the provincial governments in Vietnam could not develop a detail climate action plan, as the local governments in developed countries could do, due to of lack of solid knowledge on local climate change issues and necessary resources. A recent study by Robinson and Gore (2015) reveals that the term of the 'action' has several meanings, for example: in the first instance, 'action plan' translates into emissions reduction (or into action); and in the second instance, means that the existence of an action plan could exist with no action taking place other than the creation of the plan to take action. This indicates that the current approved climate action plans lack specific work-plans that can transform them into action.

Most of 40 studied provinces proposed capacity building and awareness-raising activities in their climate action plans. However, it is hard to find evidence of what kind of capacity should be strengthened and how awareness raising can be achieved. There was a lack of indicators to monitor or to evaluate how and when capacity would be strengthened and awareness raised. Generic objective setting may also create challenges for implementation; for example, Lao Cai province set out four specific objectives, in which the third objective is, "*to raise awareness, responsibility and capacity to cope with climate change for departments and communities and to potentially develop science and technology and increase the quality of human resources*". This specific objective should be divided into three separate areas for better intervention. The first objective is about the awareness of officers and citizens of climate change; the second objective is about increasing the responsibility and capacity of provincial departments and communities to cope with climate change; and the third objective is about developing technologies to deal with climate change. Due to the over-generalisation in setting up the objectives of the climate action plans, the measures or activities proposed to achieve those objectives were also too broad, which cannot transform them into actions effectively.

### **8.2.2 Explaining the process of climate action planning**

In the second phase, three provinces were chosen for an intensive qualitative analysis of the climate action planning process in order to explain the factors that affected the variations across these three provinces during the formulation and implementation of their climate action plans. Twenty individual interviews were undertaken in three locations based on key guiding questions (see Appendix 1) for the five-stage policy-making cycle (1- Agenda setting,

2- Formulation, 3- Decision making, 4- Implementation, and 5- Evaluation). These were adapted from research by Howlett and Giest (2013).

The findings indicate that all three provinces established a new formal institutional setting to respond to climate change, including the development of the climate action plan. However, the comprehensiveness of the new institutions varied among the three locations. HCMC appears to be the most advanced, as they formulated an independent unit, the Climate Change Bureau (CCB). Quang Nam province did establish a Standing Office for Climate Change (SOCC), but the office lacks independent statute, as exists in HCMC. Lao Cai province is less comprehensive, and formed only the SOCC, which is simply a symbol of political commitment but with no coordination office, as exists in HCMC and Quang Nam province (see Section 6.3.2). The climate action plan-making process of the three provinces also varied. In HCMC, the climate action plan was developed by the city's officials, particularly the staff of the CCB. Meanwhile, the development of climate action plans of Quang Nam and Lao Cai provinces were outsourced to consulting companies (see Section 6.2). Interestingly, HCMC and Quang Nam province did not include budget estimations for implementation in their climate action plans.

The duration for development of the climate action plans in the three provinces also varied. For example, Quang Nam and HCMC took three and four years, respectively, to have their climate action plans officially approved. Meanwhile, Lao Cai province developed their climate action plan in less than two years. Internal processes and their timing are a function of how climate change is structured and shaped as a priority. This is aligned with the findings of Measham et al. (2011), that climate change is viewed differently by different stakeholders or departments even within a municipal context. In order to understand how the national climate change policy framework is being transformed into provincial climate action plans, eight national experts were interviewed (see Table 4.8). The information obtained from these eight interviews was used to verify and explain the challenges that provincial governments often encounter in developing a robust climate action plan, as well as the ways to improve policy formulation and implementation at subnational levels. The interviewees suggested that more resources for capacity building should be allocated to provinces, or better, to regions that have the similar ecological condition, in the context of limited available resources (N1, N2, N3 and N6).

However, mainstreaming climate change requires capacity and willingness of various agencies in reallocating resources. Evaluation and monitoring were mentioned broadly in the action plan documents, but in reality, these activities have not been undertaken in any comprehensive way. For example, information presented in annual reports on the

implementation of the action plan, or in the assessment report on the implementation of the first generation of its action plan (used as the background document for formulation of the city's 2nd climate action plan 2016-2020), in the case of HCMC is superficial and does not provide any evidence of how many proposed activities were undertaken, or how much budget was allocated for implementing the action plan. This means that there was no comprehensive evaluation work took place regarding the implementation of their first climate action plan, for the duration of 2013-2015.

Many activities and prioritised projects that were proposed in the climate action plans of the three studied provinces have not been implemented. In most cases, there was no budget or resources allocated for implementation prior to the approval of their climate action plans. However, the problem extends beyond budget. Among the three provinces, only Lao Cai province proposed a budget for implementation; but in fact, none of the prioritised projects had been implemented in the province since the approval of the action plan in 2011 (only some training workshops were organised). Presentation of a budget on the action plan document did not seem important, but a secured budget for implementation should be more critical, as without a budget allocation, the proposed activities cannot be implemented; and in addition, the objective of an action plan may be overstated, as there is no linkage between the objective and the resources needed to achieve it. Therefore, resources for implementation of the action plan should be identified before official approval; or at least the roadmap for resource mobilisation and allocation should be prepared as part of the action plan document package for decision making. Without resources mobilised and allocated, it is challenging to achieve objectives proposed in any action plan (Boswell et al., 2012; Regmi et al., 2014; Uittenbroek et al., 2014). In order to overcome the above-mentioned challenges, it is necessary to improve planning capacity for provincial policy makers who can network with wider stakeholders and coordinate the planning process with the national government agencies (vertically) and other departments within the province (horizontally). Ellen Bassett and Shandas (2010) recommend that it is important to encourage the participation of professional planners and experts in climate action planning.

Reviewing Vietnam's national climate change policy framework (see Section 3.2.4), it can be concluded that climate change policy-making at national level in Vietnam is quite dynamic and more proactive than are other public policy areas of the country. The formulation of climate change strategies, policies and the resolutions at national level have been undertaken comprehensively (Section 3.2). For example, the National Targeted Program to Respond to Climate Change (NTP-RCC) was developed by the government of Vietnam (GoV) and approved by the National Assembly in 2008. Three years later, in 2011, the

National Strategy for Climate Change (NSCC) was formulated by the GoV; and one year later, in 2012, the National Strategy for Green Growth (NSGG) was approved. In order to implement NSCC and NSGG, GoV developed action plans to implement these two strategies. Not only did the GoV actively develop a policy framework to respond to climate change, the Communist Party of Vietnam (CPV) also prepared Resolution No. 24-NQ/TW to actively respond to climate change, and enhance resource management and environmental protection. The national climate change policy framework can be seen as comprehensive, including the highest political directions of the CPV, national strategies, and national action plans of the GoV. It is interesting to mention that normally the CPV prepares and provides general directions or political commitment to deal with a particular issue, then the GoV develops strategies and policies to address the issue (Section 3.2.4). In this respect, climate change has been treated with a more 'bottom-up' approach. For instance, the GoV developed and approved NTP-RCC in 2008, and NSCC in 2011; and the CPV has prepared a Resolution to actively respond to climate change, in 2013. The policy-making process at national level indicates both approaches: political commitment at the early stage; then moving forward to a more mainstreaming approach recently. For example, the NSCC developed in 2011 stresses the requirement to mainstream climate change into socio-economic development plans. The Ministry of Natural Resources and Environment (MONRE) also released a technical guideline for mainstreaming into sectorial and socio-economic development plans at national and provincial levels (Thuc et al., 2012). The dynamic and proactive nature of climate policy making as discussed above can be an ideal opportunity to bring-in innovative approaches and options in designing policies or measures to effectively respond to climate change for the country- where the conventional or top down approach in policy making is still predominant. More proactive climate action planning is now expected due to the strong commitment of Vietnamese government in implementing the Paris Agreement which the country signed in 2015 and a plan to undertake the Agreement has been developed by the government to respond to climate change (see section 3.2.4.6).

### **8.2.3 Issues and factors that arise from the process of plan making**

#### **8.2.3.1 Low motivation and incentives**

The government system in Vietnam basically provides two levels of administration (national and provincial), plus a neighbourhood or 'commune' level of government. The party and government system together bring direct political control from national to local government (Section 3.1 in Chapter 3). This has its challenges as well as advantages from the perspective of policy delivery. For example, through some trial and error, conventional policy areas such as poverty reduction, agriculture development and land use planning have been

applied in this system over the past three decades with some success, at least in terms of increased economic wealth, development and food security (Ohno, 2009).

There is a question as to how effective this approach is, however, when it comes to action responding to climate change. The complexity of climate change adaptation needs, and the conventional climate action policy-making process, have created barriers for provincial authorities in Vietnam to effectively design and implement their climate action plans. Low motivation and incentive in development of the climate action plans appears to be an issue of being reactive rather than being proactive of local governments.

#### *8.2.3.2 Lack of comprehensive institutional arrangement and strong coordination*

As noted in Section 7.3 (in Chapter 7) the formal institutions were officially established in three studied provinces, but operations these institutions to engage the wider participation of various stakeholders were limited. This can be explained by the exercises of power of local governments and limited capacity to undertake the order from the national government. The formulation of a climate action plan was solely relied on key departments of the province, and the assigned key department (e.g. DONRE) was ordered to work with other departments and consultants during planning process. For example, HCMC can be considered to have the most comprehensive institutional arrangement for development of the action plan. The Climate Change Bureau (CCB) was in charge of coordinating all the activities related to climate change in the city. However, CCB was struggling to provide a strong coordination to other departments of the city as CCB is still under the management of DONRE but not directly under PPC's office.

#### *8.2.3.3 Lack of capacity and limited resources*

At provincial level, due to limited resources (both technical and financial), the climate action planning has still inherited the traditional plan-making process, in which the participation of civil societies and the private sector can be seen to be neglected, and supporting knowledge not provided sufficiently prior to the plan-making process. In addition, lack of staff time and local capacity have created challenges to the transformation of the plan-making process, from a political commitment-oriented to a mainstreaming approach. Mainstreaming has approved to be more effective, due to the nature of climate change and limited resources (Uittenbroek et al., 2014). It is therefore recommended that climate change should be mainstreamed into socio-economic development planning, in order to effectively use and mobilise resources (N1). However, mainstreaming climate change requires capacity and willingness of various agencies in reallocating resources. Limited local capacity was a key factor that strongly influenced the climate action plan making in the three studied provinces.

Ziervogel et al., (2016) also stress that there are limited examples of opportunities for effectively mainstreaming climate adaptation into policy and practice in local government.

This PhD research also reveals that internal capacity is critically important in using external support. If external support can transform into strategies to strengthen the capacity of local officers in designing and implementing more robust action plans, the provinces can also be able to implement climate action plans without the supporting projects. For example, interview information from Quang Nam province shows that the province benefited from the implementation of the DANIDA project, '*Supporting implementation the national targeted program to respond to climate change (NTP-RCC) in Quang Nam province*'. The project supported financially the formulation of the climate action plan, and provided training courses for provincial officers, particularly the officers working with the project. However, due to the international supporting project finishing after five years, the implementation of the action plan has been heavily based on the budget allocation from the national government. The province was not able to transform support from the project into long-term planning to support the implementation of their climate action plan, which runs till to 2025. This means that getting short-term external support is important, but that it is more critical to transform that support into long-term benefits and investments by strengthening capacity for relevant stakeholders, and by developing robust strategies to overcome limited available resources and other challenges that the province may encounter in implementation of their climate action plans.

#### *8.2.3.4 Low level of wider participation and networking*

The CCB of HCMC, for example, has demonstrated important roles in promoting and enhancing cooperation between the city and international partners, particularly through implementation of joint projects. However, low level of wider participation (e.g. only governmental agencies) results in a closed-cycle plan-making process. This indicates that the climate action plan was developed by the provincial government or in partnership with a consulting company but is solely implemented by the local government. Lack of wider participation of non-governmental actors resulted in limited contributions from other stakeholders, particularly private companies and NGOs who could encourage their networks to be involved in implementation of the action plan. Uittenbroek et al. (2014) point out that institution entrepreneurs can use their networks and resources for climate adaptation. In this regard, the climate action planning in the three studied provinces did not show any sign of institution entrepreneurs or expanding networks through the non-governmental actors' channel.

#### *8.2.3.5 Lack of relevant knowledge and information*

Dealing with climate change issues, most of the countries are more or less at the same level of knowledge, and understanding of the problem was limited (N4). It is important to increase the knowledge of climate change, and identify the best appropriate options that suit the local context to effectively respond to climate change. Regardless of the social-political and economic system, it is important to encourage the wider participation of all parties and stakeholders, to contribute efforts to deal with climate change impacts. In this regard, provincial governments in the three case studies showed some limitations in engaging the participation of stakeholders, particularly participants from the private sector and NGOs. Climate change has been viewed as a technical issue, and this may have led to limitation in the participation from communities and private sector. Therefore, climate change should not be seen as a technical issue alone, but should be treated as a technical and socio-economical matter. For example, under the global environment facility adaptation fund, adaptation activities have been grouped into nine categories: capacity building; management and planning; practice and behaviour; policy; information; physical infrastructure; warning or observing system; green infrastructure financing; and technology (Biagini et al., 2014).

### **8.3 Contribution to knowledge**

New knowledge that can be drawn from the present research reveals the dynamics of sub-national authorities in a centralised policy-making country regarding climate change action planning. The significance of policy networks and institutional settings in shaping the formulation and implementation of climate action plans is demonstrated across the three provinces studied, HCMC, Quang Nam and Lao Cai. In particular, participation and learning processes in climate policy making are critical factors in determining the efficacy of the plans produced.

As a 'wicked' issue, climate action planning necessitates innovative, capacity-building processes, and established knowledge-based resources, to formulate and implement policies and measures that effectively respond to the impacts of climate change (NCCARF, 2012). Vietnam has a centralisation-oriented policy-making system and a prevailing top-down approach (Nguyen Ha et al., 2010; Ohno, 2009; Wit et al., 2012), which has implications for plan-making processes. Decentralised capabilities and resources are important for provinces and cities to prioritise and implement locally critical projects. Instead, the dominant approach to date has been to produce a 'wish-list' of projects but without any budget allocation.

The research reveals that provincial governance is contingent at present, and therefore lacks



capacity and power in addressing national policy frameworks in ways that reflect the local context. Despite these shortcomings, decentralised processes are observable through reframed and locally interpreted national policy. HCMC, for example, formulated the climate action plan locally using municipal officers, while Quang Nam and Lao Cai provinces outsourced this to consulting firms to support the formulation process. The institutional arrangements for formulation and implementation also varied. HCMC exhibited more comprehensive and effective institutional arrangements than did Quang Nam and Lao Cai provinces. The establishment of an independent or executive office for climate change in HCMC demonstrates the ability to better allocate resources to carry out necessary activities in supporting the formulation and implementation of the climate action plan. Furthermore, the CCB shows capacities to coordinate with other stakeholders or agencies, as their staff had more time to undertake the assignment than dual-job staff had, for example in Quang Nam and Lao Cai provinces.

None of the plans analysed demonstrably met Huitema's (2011) criteria for policy evaluation, including goal attainment and effectiveness, cost-effectiveness, efficiency, fairness, legitimacy, co-ordination and legal acceptability. However, the present study also indicates that climate action plan making was not on the prioritised policy agenda of the provinces at that time, but rather came from the national policy-making agenda that required all provinces to develop their climate action plan regardless of urgency and level of impact on the province, as well as regardless of the capacity of local policy makers in dealing with climate change. This problem has been identified elsewhere by Uittenbroek et al., (2014). However, the present research on the Vietnam context builds upon Uittenbroek et al., (2014) by revealing how the disconnect between national policy making and provincial policy making manifests in the one-party system in Vietnam.

The dedicated and mainstreaming approaches mentioned by Uittenbroek et al., (2014) can be in part recognised in the case of Vietnam and provincial climate action planning, but there are also departures from this framework. In Vietnam, the research for this thesis supports the view that *elements* of dedicated and mainstreaming approaches are present, and the way in which policy is framed and empowered (or not) across multiple levels of governance is critical in determining plan efficacy.

The present research also highlights the importance of collaboration among policy makers, scientists, educators, media and citizens. This collaboration is part of the process of plan making, and is manifest during the formulation and implementation of the action plan. Evidence collected from HCMC and Quang Nam province indicates that networking with international development agencies contributed to improving the capacity of local policy

makers. However, networking with local stakeholders, particularly the private sector and NGOs, was missing. Social learning and cross-provincial information exchange were also missing, and this further contributes to the weakness of existing processes.

Social learning and related formal and informal processes of policy learning have changed the policy effectiveness in climate action planning in Europe (Lund et al., (2012). Creating new knowledge of climate change is important, but it requires significant resources and time; and learning and sharing available resources thus appear to be the best options for local governments in developing countries to develop sound climate action plans that are based on evidence and information relevant to their local contexts. Informal and formal social learning and knowledge transfer can occur within and across jurisdictions and stakeholders. This finding points to a significant agenda for international donors and governments of the Global South, to recognise and purposively resource and encourage social learning processes in policy and planning for climate change.

There is variability in leadership in terms of the willingness and commitment of the local government in responding to climate change, as well as in the openness to engaging others in proactive approaches to tackle the issue. For example, in HCMC, efforts to set up new institutional networks indicate a proactive approach in responding to climate change. This is not an original finding in general, but there are important differences between leadership practices in different cultures and political contexts. In the context of the cultural and political setting in Vietnam (Section 3.1), the active involvement of provincial leaders in climate action planning processes is likely to be one of the most important motivational factors in formulation and delivery of action plans on climate change at sub-national level.

A 'mainstreaming' approach with indirect political commitment in climate policy-making is happening in Vietnam, particularly with the support from international development agencies such as the World Bank (WB) and United Nations Development Program (UNDP). However, as yet, there is little evidence of an integrated approach to climate action planning, since there are few links drawn between climate action plans and related action plans such as the green growth action plan, natural disaster risk reduction and prevention, and the national program on energy saving and efficiency (MPI et al., 2015). At the provincial level, local capacity and resources are limited, and integration is a potential starting point for binding climate action into broader economic and sustainability plans and actions.

The research also found that the provincial authorities lack resources (financial, staff, expertise, institutions and networking) to develop and deliver proactive climate action plans. Coordination among key agencies is limited due to lack of resources and job motivation, as

well as ineffective institutional arrangements. In addition, this research also reveals that the current institutional settings for climate change adaptation planning tend to concentrate decision making and the power that enables it. Moreover, they have the effect of restricting informal and formal mechanisms for innovation and experimentation in working with different stakeholders, especially with national and international interested parties in mobilising technical and financial resources. The lack of capacity and autonomy of local governments have restricted multi-level governance to the deficit of plan-making processes at the provincial level. As Ayers (2010) highlights, while climate change is global, vulnerability is necessarily experienced locally. Building upon this observation, the research for this thesis in Vietnam has revealed that this local-level, lived experience of climate vulnerability is an essential ingredient in policy and plan processes.

## **8.4 Research implications**

### ***8.4.1 Theoretical implication***

Multi-level governance is decision-making that is handled not only by the public but also by private and other stakeholders, and as a process that happens across multiple geographic scale levels and sectors (Hooghe & Marks, 2003). The ability of sub-national governments to deal with climate change may be strengthened by the governance structure in which they are embedded. The effectiveness of an action plan may be enhanced by creating networks of support with other sub-national governments, NGOs and the private sector.

This study suggests that, in order to improve the effectiveness of a new policy in general and climate action plan making in particular, it is essential to have an appropriate institutional setting that can hold an effective position to mobilise human and financial resources to support the formulation and implementation of a new policy. This study also recommends that leadership and autonomy on the climate change issue should be strengthened at local level, as these are important in proposing activities to respond to local climate change impacts effectively. The mainstreaming approach in climate action planning should also be promoted, as the political-commitment approach is not effectively applicable, as it requires clear allocated resources that, in the context of Vietnam's limited resources, are not able to be allocated in full amount for climate change activities at local level. Planning should also take into account the available resources, before prioritising measures; and an evaluation and monitoring framework should be included in climate action planning. In addition, a policy network should be established as soon as the policy issue is raised and initially put on an agenda in order to leverage contributions of technical and financial support, particularly for climate change adaptation. Social learning and knowledge sharing should also be promoted

among provinces, particularly those provinces having similar ecological context and facing the similar threats from climate change.

#### **8.4.2 Practical implication**

While this thesis focussed upon the past processes of production and implementation of climate action plans, it is also possible to briefly speculate upon the practical implications of these findings for future practice. Identifying the impacts of climate change will allow clear responding actions to be proposed to reduce or adapt to the negative impacts. However, the current plan-making process does not fully meet requirements for proactive planning that stress the importance of public consultation and supporting knowledge. Mobilising local resources, particularly the resources from the private sector, in dealing with climate change, holds the potential to promote innovation and business ideas for implementation. The national climate change policy framework can provide a direction for reframing the action plan at provincial level, but the local context and local capacity should be thoroughly taken into account in developing future generations of climate action plans. This study, therefore, recommends background information and supporting documents on climate change impacts on the province should be provided prior to proposing any objective and activity of the climate action plan. Impacts of climate change to sectors should also be studied, particularly the impacts of various climatic elements on sectors or locations; for example, higher temperature impacts on roads and energy sectors; or impacts of lower rainfall on agriculture production. In addition, it is recommended that local governments should be more active in diversifying budget sources to undertake their climate activities. Furthermore, in order to ensure that mainstreaming is genuine and does not risk becoming a box-ticking exercise, it is important that adaptive co-management approaches are encouraged and adopted, ensuring local knowledge, design, agency and ownership of local climate responses are promoted.

Speculating on the future, at the time of writing, the Government of Vietnam plans to implement the Paris Agreement on climate change. Future prospects for climate change adaptation are driven by the commitment of the government of Vietnam and the technical support from international development agencies, at least at national level. It seems likely that this will continue and the effectiveness of climate responses on the ground will be determined by the extent to which local capacity is engendered in plan making and implementation processes.

#### **8.5 Limitations of the research**

This research took only Vietnam as a single case study, to examine the multi-level policy

making for the complicated and locally specified issue of climate change. It may need to have more than one country as case study to better reflect the dynamics of sub-national level in formulation and implementation of climate action plans. Multi-level policy-making for climate change is a research topic that emerges from urban climate change studies. The present study managed to collect 40 climate action plans out of 63 localities, due to their availability. If all the provinces were taken into the analysis, the content analysis would be more reliable and better reflect the whole landscape of provincial climate action plans in Vietnam. In addition, the research also investigated only three examples of climate action planning in a centralisation-oriented policy-making system, which may not represent the whole picture of approaches that other provincial authorities may have applied.

Narratives on policy-making also depend heavily on the memories of interviewees, which sometimes cannot reveal all aspects of the process, particularly when the participants not only participated in developing one policy arena but also engaged in other policy-making agendas; therefore, sometimes the information on one policy-making agenda may have been mixed up with that in another relevant policy arena. Validating interview information was also challenging, as sometime stages in the climate action planning process were not always open to the participation of all relevant stakeholders but rather were in a closed cycle where only some policy makers participated. In addition, some people could not participate in the whole of the plan-making process from the plan agenda setting to evaluation stage; thus, the information they provided may not have completely presented the whole process of climate action planning. Due to the lack of staff in the plan-making process, the person who represented agencies and departments in consultation meetings may not be the same. This creates shortcomings in promoting common understanding on the climate issue, and in having consensus on objectives and activities proposed for the action plan. In addition, having an open interview with the provincial officials sometimes was not easy, and audio recording was not always accepted. The limitation on making appointments with policy makers and recording the interviews has been recently mentioned by Phung (2016) in his study on climate change adaptation planning under uncertainty in HCMC.

English language information on public policy analysis in Vietnam, particularly in academic journals, was limited at the time this research started. Most information related to Vietnam's policy-making practices, and analyses were only available in Vietnamese. In addition, interview information in the present study was noted in Vietnamese, which the researcher had to translate into English; thus, the language translation was time consuming and sometimes could not fully represent the actual meaning of what was claimed by respondents. This limitation was eliminated by the researcher by sharing interview

interpretation with key national interviewees (e.g. experts in climate change and public policy). Translations of policy documents from Vietnamese into English may have led to less reliability, when interpreting the content analysis of the climate action plans.

## **8.6 Future research**

Future studies should be made to examine the dynamic of multi-level climate action plan making in other policy-making systems and in the other socio-economical contexts, such as in a developed country, in order to better identify and reflect critical and common factors influencing not only the formulation of a climate action plan but also the implementation of that action plan. Future studies also should focus on the evolution of climate change policy-making within a country in relation to the international climate change policy agenda, as well as to the capacity of local governments in dealing with the emerging issue of climate change. Climate change is a cross-cutting and emerging issue that requires a holistic approach in designing and implementing response measures. An aim should be to improve the adaptive capacity of localities; therefore, research on how to identify and improve adaptive capacity of provinces should become a priority in future. In addition, social learning and policy networking across provinces should be investigated in order to pinpoint the factors that influence learning processes in climate policy making.

There are many initiatives and activities that have been taken place with the support of NGOs projects in provinces not linked to the provincial climate action plan implementation agenda. This is understandable, as NGOs have their own priorities in supporting local communities in responding to climate change. Lack of consultation between NGOs and the provinces during development of climate action plans can result in channelling support and activities outside prioritised areas. This can also be a result of focus on strategic objectives instead of prioritising urgent threats that local communities in a particular area currently face, such as flash flooding. Therefore, future research should be conducted to identify the role of wider participation, particularly by NGOs and the private sector, in reframing national climate change policies at provincial level, in order to better mobilise resources in designing better policies.

Another direction for future research is to study the exercise of power in climate budget planning at provincial level, in order to identify opportunities to overcome the current pitfalls of having too much reliance on the state budget allocation mechanism and state budget sources.

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## Appendices:

### Appendix 1: Guiding questions for interviewing (English version)

Main stages/steps	Questions for interview	Targeted interviewee/s	Remarks
1. Agenda setting	<ol style="list-style-type: none"> <li>1. Did the province prepare and approve the action plan to respond to climate change on/by the request of the government or the province based on the urgency of the issue?</li> <li>2. What was the first step that the province carried out after it received the request/order from the government?</li> <li>3. Was the order/request from the government (e.g. MONRE) to formulate the action plan of the province made at the right time? If not, could you please explain why?</li> </ol>	Climate Change Bureau (CCB) or Standing Office for climate change (SOCC) at city/province. Chief of office or contact person of the office will be a key interviewee.	Q3 may be repeated at different interviews but Q1-2 will only be asked when interview with contact person of CCB or SOCC.
2. Formulation	<ol style="list-style-type: none"> <li>4. Did the province formulate the action plan by itself or did you hire/contract a consultant company?</li> <li>5. If you contracted, what were the expected advantages of contracting to carry out the formulation of the action plan? In this case what was the role of the provincial authorities in the formulation process?</li> <li>6. How long did it take to formulate the action plan to respond to climate change? Describe the key phases over this time.</li> <li>7. Who were the key stakeholders participating in the</li> </ol>	<ul style="list-style-type: none"> <li>- Task force group formulated by Provincial People Committee (PPC) will be key interviewees.</li> <li>- Relevant stakeholders (such as department of planning and investment;</li> </ul>	In case the climate action plan was prepared another organisation/institution, interviews will be redirected to that team.



Main stages/steps	Questions for interview	Targeted interviewee/s	Remarks
	<p>formulation process and what are the contributions of those stakeholders? Was there any stakeholder coming from NGOs, mass organization? If yes, what were their main contributions?</p> <p>8. What were the main challenges/difficulties? Timing? Budget? Resources? Representation/participants? Skills? Process?</p> <p>9. On reflection, how would you change the participants? And the process?</p> <p>10. What were the criteria for selection of prioritized projects/activities proposed in the action plan?</p> <p>11. Could you please provide information on how was budget for implementation of the action plan undertaken?</p>	<p>department of industry and trade, NGOs –if any,...)</p>	
<p>3. Decision-making</p>	<p>12. Describe the procedure/steps to get approval for the action plan from the PPC. How long did it take? What was the response?</p> <p>13. In your opinion, what was the main challenge/difficulty in getting approval from PPC?</p> <p>14. Compared to other action plans, what makes climate change action plans more or less challenging in the PPC process?</p>	<ul style="list-style-type: none"> <li>- Contact person of CCB or SOCC</li> <li>- Contact person at PPC's office (the official in charges of climate change issue at PPC).</li> </ul>	<p>Person in charge of climate change issue (in reality one official is assigned to oversee one sector and climate change issue is under the sector of natural resources and environment)</p>
	<p>15. What are the key actions/interventions in the plan?</p>	<ul style="list-style-type: none"> <li>- Task force group formulated by</li> </ul>	

Main stages/steps	Questions for interview	Targeted interviewee/s	Remarks
	<p>16. How did the actions in the plan get decided?</p> <p>17. What did/did not you include the following component in the action plan</p> <p>a. Strengthening capacity for officials and communities? what kind of capacity you intend to strengthen?</p> <p>b. Assessment of climate change impacts/vulnerability.</p> <p>c. Mainstreaming activities of the action plan into other development plans/strategies</p>	<p>Provincial People Committee (PPC) or formulation team will be key interviewees.</p> <p>- Relevant stakeholders</p>	
4. Implementation	<p>18. What is the institutional arrangement for implementation of the action plan in the province?</p> <p>19. What is the implementation status of the action plan in the province?</p> <p>20. Has the action plan been implementing as expected? If not, what proportion has been implemented compared to schedule?</p> <p>21. What has been the most challenge when implementing the action plan so far?</p> <p>22. What priorities were implemented effectively?</p> <p>23. What is the important experience/lesson gained during implementation of the action plan?</p> <p>24. What is the role of government/MONRE in implementation of the action plan?</p>	<p>- CCB or SOCC</p> <p>- Contact person of key sectors such as agriculture and rural development, transportation, industry and trade,..)</p>	

Main stages/steps	Questions for interview	Targeted interviewee/s	Remarks
	25. What is the role of other stakeholders (NGOs, research institutions, universities,...) in implementation of the provincial action plan to respond to climate change?		
5. Evaluation and monitoring	<p>26. Has the action plan included evaluation and monitoring? (If not, why not?)</p> <p>27. If there is an evaluation and monitoring plan please describe it, activities, participants, timeline, etc.</p> <p>28. What is the role of evaluation and how can it improve the effectiveness of the action plan and plan process?</p> <p>29. What evaluation and monitoring activities have been carried out to date?</p> <p>30. In your opinion, what needs to be done to improve the evaluation framework?</p>	<ul style="list-style-type: none"> <li>- CCB or SOCC</li> <li>- Contact person of key sectors such as agriculture and rural development, transportation, industry and trade,..)</li> </ul>	When reviewing and analysing the action plan of city/province, if there is not evaluation and monitoring framework, then the questions will be focused on why the province did not include the evaluation and monitoring framework/activities?

**Appendix 2: Guiding questions for interviewing (Vietnamese version)**

Các giai đoạn chính trong xây dựng kế hoạch	Các câu hỏi định hướng khi phỏng vấn	Đối tượng phỏng vấn	Ghi chú/nhận xét
1. Đưa vào chương trình xây dựng	<ol style="list-style-type: none"> <li>1. Địa phương/tỉnh đã xây dựng và phê duyệt kế hoạch hành động ứng phó với biến đổi khí hậu (KHHĐ) dựa trên yêu cầu của chính phủ/TW hay dựa vào tính cấp thiết của vấn đề?</li> <li>2. Bước đầu tiên mà địa phương thực hiện khi nhận được yêu cầu của Chính phủ về xây dựng KHHĐ là gì?</li> <li>3. Liệu công văn yêu cầu của Chính phủ (Cụ thể từ Bộ TNMT) về việc xây dựng KHHĐ có đúng thời điểm không? Nếu không thì Tại sao?</li> </ol>	<p>Văn phòng Ủy ban BĐKH của tỉnh</p> <p>Sở Tài nguyên và Môi trường (DONRE)</p> <p>Sở KHĐT</p> <p>Văn phòng UBND tỉnh</p>	
2. Xây dựng kế hoạch	<ol style="list-style-type: none"> <li>4. Tỉnh tự xây dựng KHHĐ hay thông qua các đơn vị tư vấn (ví dụ, Trường ĐH, Viện Nghiên cứu,...)?</li> <li>5. Nếu thuê các đơn vị thực hiện thì những thuận lợi là gì? Trong trường hợp thuê đơn vị bên ngoài xây dựng KHHĐ thì vai trò của tỉnh là gì trong suốt quá trình xây dựng?</li> <li>6. KHHĐ của tỉnh được xây dựng trong bao lâu? Anh/chị có thể miêu tả sơ qua về các giai đoạn trong thời gian này được không?</li> <li>7. Những bên tham gia chính trong quá trình xây dựng gồm có những đơn vị nào, vai trò của các đơn vị này như thế nào? Trong quá trình xây dựng có sự tham gia đóng góp ý kiến từ các tổ chức phi chính phủ (NGOs), các tổ chức quần chúng không? Nếu có thì những đóng góp chính của họ là gì?</li> <li>8. Cái gì là thách thức, khó khăn nhất trong quá trình xây dựng KHHĐ? Thời gian? Kinh phí? Nguồn lực? Sự tham gia của các bên liên quan? Kỹ năng hay quá trình?</li> <li>9. Tóm lại, làm thế nào để có thể thay đổi những bên liên quan tham gia trong quá trình xây dựng kế hoạch? Và quá trình như thế nào?</li> </ol>	<p>Văn phòng Ủy ban BĐKH của tỉnh</p> <p>Sở Tài nguyên và Môi trường (DONRE)</p> <p>Sở KHĐT</p> <p>Sở Tài chính</p> <p>Các sở ban ngành liên quan khác (Sở GTVT, sở NNPTNT,...)</p>	<p>Đối tượng phỏng vấn trong giai đoạn sẽ gồm Văn phòng UB về BĐKH của tỉnh (thông thường là cơ quan được gia điều phối các hoạt động liên quan tất các các chính sách, vấn đề về BĐKH của tỉnh), nhóm xây dựng KHHĐ (đôi khi là viện nghiên cứu, trường ĐH, công ty tư vấn nhưng các đơn vị này lại không có trụ sở ở tỉnh. Trong trường hợp này, việc phỏng vấn phải thực hiện tại địa điểm khác.</p>

	<p>10. Tiêu chí nào để lựa chọn những dự án, hoạt động ưu tiên được đề xuất trong KHHĐ?</p> <p>11. Kinh phí để thực hiện KHHĐ của tỉnh được dự toán trên cơ sở nào? Khả năng huy động như thế nào?</p>		
3. Phê duyệt kế hoạch	<p>12. Anh/chị có thể mô tả quy trình hay các bước nhằm thông qua KHHĐ/hay được thông qua bởi UBND tỉnh? Việc thông qua nay cần bao nhiêu thời gian? Phản hồi của UBND tỉnh về KHHĐ như thế nào?</p> <p>13. Điều gì là thách thức nhất/khó khăn nhận để UBND tỉnh thông qua/phê duyệt KHHĐ?</p> <p>14. So sánh với các KHHĐ khác, điều gì làm cho KHHĐ ứng phó với BĐKH khó khăn hoặc thuận lợi hơn trong quá trình UBND phê duyệt và thông qua?</p>	<p>Văn phòng Ủy ban BĐKH của tỉnh (cán bộ điều phối của UB)</p> <p>Cán bộ làm việc trong các lĩnh vực quan trọng như nông nghiệp và phát triển nông thôn, giao thông, công nghiệp và thương mại.</p>	
4. Thực hiện kế hoạch	<p>15. Hành động/giải pháp can thiệp chính trong kế hoạch hành động là gì?</p> <p>16. Các dự án/hành động trong kế hoạch được quyết định như thế nào?</p> <p>17. Những nội dung nào đã hoặc không được đưa vào các hợp phần sau đây?</p> <p>a. Tăng cường năng lực cho cán bộ và cộng đồng? Năng lực gì mà kế hoạch hướng đến để tăng cường?</p> <p>b. Đánh giá tác động của biến đổi khí hậu/tính dễ bị tổn thương</p> <p>c. Lồng ghép các hoạt động của kế hoạch hành động vào các kế hoạch, chiến lược phát triển khác.</p> <p>18. Việc phân công và tổ chức thực hiện kế hoạch hành động của tỉnh như thế nào?</p> <p>19. Tình hình thực hiện KHHĐ của tỉnh hiện nay như thế nào?</p> <p>20. KHHĐ có được thực hiện theo như mong đợi ban đầu không?</p>	<p>Văn phòng Ủy ban BĐKH của tỉnh (cán bộ chịu trách nhiệm điều phối các hoạt động liên quan đến việc xây dựng KHHĐ của UB)</p> <p>Cán bộ làm việc trong các lĩnh vực quan trọng như nông nghiệp và phát triển nông thôn, giao thông, công nghiệp và thương mại.</p>	<p>Một số cơ quan sẽ xác định dự vào tình hình thực hiện các hoạt động, dự án quan trọng được đề cập trong KHHĐ.</p>

	<p>Nếu không, thì thực hiện theo kế hoạch đề ra được bao nhiêu %?</p> <p>21. Cho đến thời điểm hiện nay, thách thức lớn nhất khi thực hiện KHHĐ là gì?</p> <p>22. Hoạt động, dự án ưu tiên nào được thực hiện một cách hiệu quả?</p> <p>23. Những kinh nghiệm, bài học quan trọng trong thu nhận được trong quá trình thực hiện KHHĐ của tỉnh là gì?</p> <p>24. Vai trò của Chính phủ/Bộ TNMT trong quá trình thực hiện KHHĐ của tỉnh như thế nào?</p> <p>25. Vai trò của các bên liên quan khác (ví dụ, các tổ chức phi chính phủ, các viện nghiên cứu, các trường ĐH,...) trong trong trình thực hiện KHHĐ ứng phó với BĐKH của tỉnh là gì?</p>		
<p>5. Đánh giá và giám sát kế hoạch</p>	<p>26. KHHĐ ứng phó với BĐKH của tỉnh có bao gồm chương trình đánh giá và giám sát không? Nếu không có thì tại sao không?</p> <p>27. Nếu có kế hoạch giám sát và đánh giá, anh/chị vui lòng mô tả sơ bộ về các hoạt động, các bên tham gia, khung thời gian,....</p> <p>28. Vai trò của việc đánh giá là gì và làm thế nào để cải thiện, nâng cao tính hiệu quả KHHĐ và quá trình xây dựng kế hoạch?</p> <p>29. Cho đến thời điểm hiện nay, các hoạt động giám sát và đánh giá đã được thực hiện là gì?</p> <p>30. Theo ý kiến của anh/chị, cần phải làm gì để cải thiện khung đánh giá KHHĐ?</p>	<ul style="list-style-type: none"> <li>- Văn phòng Biến đổi khí hậu</li> <li>- Cán bộ làm việc trong các lĩnh vực quan trọng như nông nghiệp và phát triển nông thôn, giao thông, công nghiệp và thương mại.</li> </ul>	<p>Khi rà soát và phân tích các KHHĐ của tỉnh được lựa chọn để khảo sát, nếu trong KHHĐ không có khung giám sát và đánh giá, thì câu hỏi sẽ tập trung vào tìm hiểu lý do tại sao trong quá trình xây dựng không đưa vào hoặc chuẩn bị khung đánh giá và giám sát?</p>

### Appendix 3: Second round interviews-Guiding question (English version)

Topics	Proposed questions	Remarks
Participation/Involvement/engagement in the plan making process	<p>How did the plan project come about? How was it instigated, who led it and how long did it take, who was involved?</p> <p>Who are main/key stakeholders? How they were involving? What were their main inputs?</p> <p>What do you think were the strengths of the process?</p> <p>What do you think are the outstanding strengths of the plan?, the key successful points?</p> <p>What do you think were the weaknesses of the process?</p> <p>What do you think are the weaknesses of the plan?</p>	
Consultation and communication	<p>How the consultation process was going on? Is there any NGOs/international consultant/organisation consulted?</p> <p>Can you list the stakeholders involved, and how they were involved, who decided/invited them? (prompt stakeholders; corporations/utilities/NGOs/donor agencies/community groups/government departments by name/others)</p> <p>What did each stakeholder add to the process and the outcome of the plan? Which ones were most important/influential, and why and how?</p> <p>How was the communication protocol taken place during the plan making process? Was there any innovation ways of communication such as email, social media,...</p>	
Knowledge, skill and capacity of policy makers/key stakeholders	<p>Were all the key stakeholders/policy makers knowledgeable on climate change issues? What were their levels of formal qualifications? Any international experiences?</p> <p>Had they got international, national, or cross-sectorial networks? Who were their key networks, what was their previous work experience? How strong are their networks – do they keep in touch regularly, do they share knowledge, do they advocate for each other?</p> <p>What were the insufficient knowledge, skills and capacity of the policy makers? Knowledge and information on climate change issues or the planning procedure?</p> <p>Who were the most “strong voice” or comprehensive knowledge during the planning process?</p> <p>Overall, on a scale of 1-10, what would you say was the level of (1) confidence, (2) experience, (3)</p>	

	resources, (4) cross-sectoral networks (NGOs, and international consultants as well as government) available to the plan making team?	
Implementation	Who are the key implementers? Is there any NGO participating in implementation? What are the main sources of budget so far for the implementation of the action plans? How are the resources mobilised?	
Monitoring and evaluation	How is the implementation of the action plan monitoring and evaluating? Who are responsible for monitoring and evaluation works?	

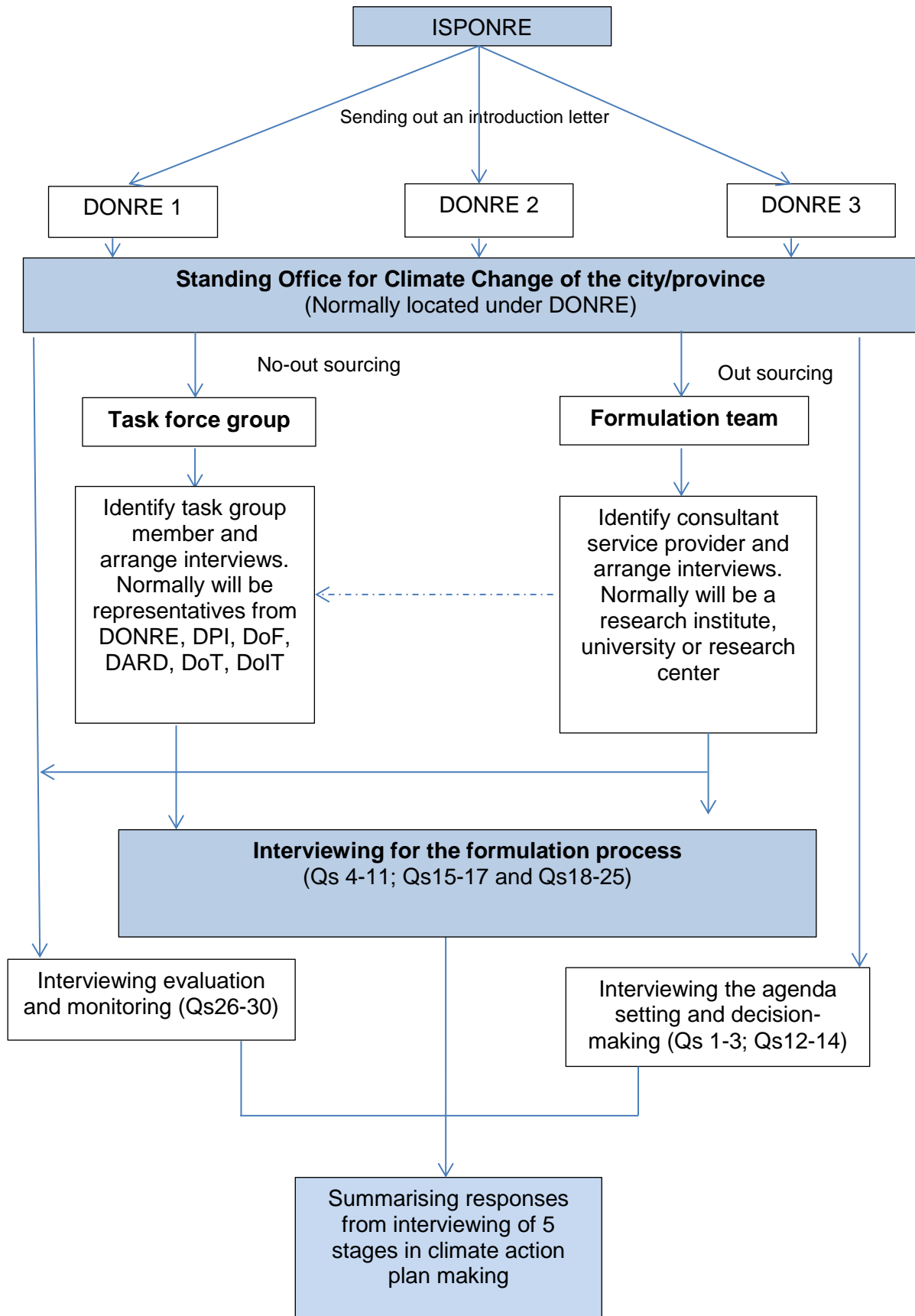


**Appendix 4: Second round interviews-Guiding question (Vietnamese version)**

Chủ đề trao đổi	Câu hỏi gợi ý	Lưu ý
<p>Sự tham gia vào quá trình xây dựng kế hoạch hành động</p> <p>Participation/Involvement/engagement in the plan making process</p>	<p>Dự án xây dựng kế hoạch hành động ứng phó với biến đổi khí hậu được xây dựng như thế nào? Nó được đề xướng ra sao? Ai là chịu trách nhiệm chính và được xây dựng trong bao lâu? Ai là người tham gia vào quá trình này?</p> <p>Những người tham gia chính là ai? Họ tham gia như thế nào? Đóng góp chính của họ là gì?</p> <p>Theo anh/chị điểm mạnh trong quá trình xây dựng là gì? Những điểm nổi bật của bản kế hoạch hành động là gì? Đây là mấu chốt của sự thành công đó?</p> <p>Theo anh/chị trong quá trình xây dựng kế hoạch hành động có những thiếu sót, hạn chế gì? Đây là những điểm chưa được của bản kế hoạch hành động?</p>	
<p>Tham vấn và truyền thông</p>	<p>Quá trình tham vấn đã diễn ra như thế nào? Có tổ chức phi chính phủ, các tổ chức hay chuyên gia quốc tế tham gia không?</p> <p>Anh/chị có thể liệt kê các bên tham gia và họ tham gia như thế nào, ai quyết định mời họ tham gia? (ví dụ các cá nhân, tập đoàn, tổ chức phi chính phủ, các cơ quan tài trợ, nhóm cộng đồng, các cơ quan đoàn thể thuộc nhà nước).</p> <p>Mỗi bên tham gia đã đóng góp gì vào quá trình xây dựng kế hoạch và bản kế hoạch cuối cùng? Bên tham gia nào là quan trọng nhất/có ảnh hưởng nhiều nhất, tại sao và ảnh hưởng đó như thế nào?</p>	
<p>Kiến thức, kỹ năng và năng lực của các nhà hoạch định chính sách/các bên tham gia chính</p>	<p>Các bên tham gia chính/các nhà hoạch định chính sách có kiến thức đầy đủ về các vấn đề biến đổi khí hậu không?</p> <p>Bằng cấp chính quy của họ là gì? Có kinh nghiệm quốc tế về vấn đề biến đổi khí hậu không?</p> <p>Họ có mạng lưới các mối quan hệ đa lĩnh vực, tầm quốc gia và quốc tế không? Mạng lưới chính của họ là ai, kinh nghiệm làm việc trước đây của họ là gì? Mức độ hoạt động trong mạng lưới của họ như thế nào? Họ có giữ mối liên hệ thường xuyên với mạng lưới không? Họ có chia sẻ kiến thức, kinh nghiệm và quảng bá, hỗ trợ cho nhau không?</p> <p>Những kiến thức, kỹ năng và năng lực còn thiếu của các nhà hoạch định chính sách là gì? Kiến thức và thông tin về các vấn đề biến đổi khí hậu hoặc quy trình xây dựng kế hoạch còn thiếu là gì?</p> <p>Ai là người có tiếng nói quan trọng hoặc có kiến thức tốt nhất trong quá trình xây dựng kế hoạch?</p> <p>Nhìn chung, dựa trên thang điểm 1-10, anh/chị có thể đánh giá cho các vấn đề (1) mức độ tin</p>	

	tưởng, (2) kinh nghiệm, (3) nguồn lực, (4) mạng lưới đa lĩnh vực (Tổ chức phi chính phủ, các chuyên gia quốc tế cũng như cơ quan chính phủ) đối với nhóm xây dựng kế hoạch hành động được không?	
Giai đoạn thực hiện	Ai là người thực hiện chính? Có tổ chức phi chính phủ nào tham gia vào quá trình thực hiện không? Những nguồn tài chính nào cho việc thực hiện kế hoạch hành động đến thời điểm hiện nay? Các nguồn lực được huy động như thế nào?	
Giám sát và đánh giá	Việc thực hiện kế hoạch hành động được giám sát và đánh giá như thế nào? Ai là người chịu trách nhiệm cho việc giám sát và đánh giá?	

**Appendix 5: Protocol for conducting interview with local stakeholders**



### Appendix 6: List of provinces and their climate action plans in the analysis

No.	Province/City	Approved in	Decision No.
1	Khanh Hoa	2011	1113/QĐ - UBND
2	Dong Nai	2011	3363/QĐ - UBND
3	Nghe An	2011	1395/QĐ - UBND
4	Ben Tre	2011	1224/QĐ - UBND
5	Soc Trang	2011	182/QĐ - UBND
6	Quang Binh	2011	3073/QĐ - UBND
7	Quang Ngai	2011	2068/QĐ - UBND
8	Ha Nam	2011	1662/QĐ-UBND
9	Can Tho	2011	05/QĐ - UBND
10	Gia Lai	2011	836/QĐ - UBND
11	Bac Giang	2011	253/QĐ - UBND
12	Ha Giang	2012	1890/QĐ-UBND
13	Quang Tri	2012	876/QĐ-UBND
14	Quang Ninh	2012	713/QĐ-UBND
15	Dien Bien	2012	1084/QĐ-UBND
16	Binh Duong	2012	3453/QĐ-UBND
17	Hoa Binh	2012	530/QĐ-UBND
18	Binh Thuan	2012	1175/QĐ-UBND
19	Bac Lieu	2012	2577/QĐ-UBND
20	Son La	2012	1001/QĐ-UBND
21	Binh Phuoc	2012	1485/QĐ-UBND
22	Bac Kan	2012	799/QĐ-UBND
23	Binh Dinh	2012	1700/QĐ-CTUBND
24	Lang Son	2012	03/QĐ-UBND
25	Hung Yen	2012	2098/QĐ-UBND
26	Tuyen Quang	2012	475/QĐ-UBND

27	Vinh Phuc	2012	171/QĐ-UBND
28	Ca Mau	2012	1350/QĐ-UBND
29	Dac Nong	2012	904/QĐ-UBND
30	Ninh Binh	2012	46/KH-UBND
31	Lao Cai	2012	2227/QĐ-UBND
<hr/>			
32	Long An	2013	1674/QĐ-UBND
33	Lam Dong	2013	1246/QĐ-UBND
34	Ba Ria-Vung Tau	2013	224/QĐ-UBND
35	Thua Thien Hue	2013	313/QĐ-UBND
36	An Giang	2013	2075/QĐ - UBND
37	Kien Giang	2013	1342/QĐ-UBND
38	Ho Chi Minh city	2013	2484/QĐ-UBND
39	Quang Nam	2013	1735/QĐ-UBND
40	Vinh Long	2013	171/QĐ-UBND
<hr/>			

**Appendix 7: Area, population, economic growth and GDP of the 40 provinces**

<b>Provinces/ cities</b>	<b>Area (sq. km)</b>	<b>Population (1000)</b>	<b>Economic growth (%)</b>	<b>GDP (USD/year)</b>
Khanh Hoa	5,217.7	1,183.0	11.55	1,900
Dong Nai	5,907.2	2,720.8	13.32	1,977
Nghe An	16,490.9	2,952.0	7.00	968
Ben Tre	2,357.7	1,258.5	6.61	1,134
Soc Trang	3,311.6	1,301.9	9.35	1,287
Quang Binh	8,065.3	857.9	7.10	986
Quang Ngai	5,153.0	1,227.9	6.30	1,726
Ha Nam	860.5	790.0	11.00	1,244
Can Tho	1,409.0	1,214.1	11.67	2,514
Gia Lai	15,536.9	1,342.7	13.14	1,252
Bac Giang	3,848.9	1,588.5	10.00	1,080
Ha Giang	7,914.9	758.0	10.78	689
Quang Tri	4,739.8	608.1	9.60	1,139
Quang Ninh	6,102.3	1,177.2	7.50	2,910
Dien Bien	9,562.9	519.3	9.64	977
Binh Duong	2,694.4	1,748.0	12.80	2,115
Hoa Binh	4,608.7	806.1	10.20	852
Binh Thuan	7,812.8	1,193.5	6.80	1,282
Bac Lieu	2,468.7	873.4	11.51	1,047
Son La	14,174.4	1,134.3	11.46	598
Binh Phuoc	6,871.5	912.7	10.85	1,803
Bac Kan	4,859.4	301.0	10.26	922
Binh Dinh	6,050.6	1,501.8	12.11	1,373
Lang Son	8,320.8	744.1	8.02	1,190
Hung Yen	926.0	1,145.6	11.58	1,162

Tuyen Quang	5,867.3	738.9	12.54	1,000
Vinh Phuc	1,236.5	1,020.6	7.89	2,520
Ca Mau	5,294.9	1,217.1	9.00	1,220
Dac Nong	6,515.6	543.2	12.20	1,303
Ninh Binh	1,376.7	915.9	10.15	1,196
<b>Lao Cai</b>	<b>6,383.9</b>	<b>656.9</b>	<b>14.40</b>	<b>1,265</b>
Long An	1,458.2	1,458.2	10.12	1,751
Lam Dong	9,773.5	1,234.6	13.40	1,531
Ba Ria-Vung Tau	1,989.5	1,039.2	13.50	6,060
Thua Thien Hue	5,033.2	1,114.5	11.60	1,490
<b>Quang Nam</b>	<b>10,438.4</b>	<b>1,450.1</b>	<b>11.60</b>	<b>1,650</b>
An Giang	3,536.7	2,153.7	8.30	1,572
Kien Giang	6,348.5	1,726.2	11.81	2,026
<b>Ho Chi Minh city</b>	<b>2,095.6</b>	<b>7,681.7</b>	<b>9.30</b>	<b>3,653</b>
Vinh Long	1,520.2	1,040.5	7.89	1,100

Source: Vietnam's General Statistical Office 2012 (General Statistics Office, 2013)

## Appendix 8: Participant information and Consent form

### PARTICIPANT INFORMATION AND CONSENT FORM (PICF)

**Participant information:** Name:

- Full name:
- Position/title:
- Agency/organisation:
- Address:

**Project Title:** “Responding to Climate Change in Vietnam: A study of climate action planning at provincial level”

**Investigators:**

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1.

2.

3.

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Dear .....

You are invited to participate in a research project being conducted by RMIT University. Please read this sheet carefully and be confident that you understand its contents before deciding whether to participate. If you have any questions about the project, please ask one of the investigators.

**Who is involved in this research project? Why is it being conducted?**

- This research is being conducted as part of a PhD program at RMIT University, Australia with the supervision of Professor Ralph Horne. The research project is “*Responding to Climate Change in Vietnam: A study of multi-level policy making*”. The researcher, Linh Nguyen Sy, will be the person you meet.
- The researcher’s role is to conduct in-depth interviews with key stakeholders of selected provinces and cities in Vietnam regarding action plan to respond to climate change.
- The fieldwork is crucial to provide reliable information on how the action plan to respond to climate change (climate action plan) of the province or city was formulated and being implemented. The opinions and feedbacks from related stakeholders, particularly policy makers at the provincial level are invaluable in improving the quality of climate change policy in Vietnam and the completion of this research.



- This research has been approved by the RMIT Human Research Ethics Committee with official permission to conduct this fieldwork on the grounds that it poses no harm or risk to participants. However, participants have full rights to refuse to answer or give no answers without any dependency or pressures from investigators or others.

***Why have you been approached?***

We invite you to provide information and opinions for this research because you are people influenced on and/or by the formulation and implementation of the climate action plan. As key stakeholders, you have deep understanding of the formulation process and implementation status of the climate action plan of the province/city. Your responses will be crucial for improving the effectiveness of climate change policies in future.

***What is the project about? What are the questions being addressed?***

- The goal of this research is to develop and apply an evaluation framework to identify ways of improving the prospects for national level climate change policies and strategies through the development and implementation of local or provincial action plans in Vietnam.

***If I agree to participate, what will I be required to do?***

If you agree to participate, you will be invited to answer the questions about your views and perception of the policy formulation process in order to identify the relationships between the policy making process and quality of the plans. You will be also asked about possible solutions for improvement of climate action plans at local level in Vietnam.

***What are the possible risks or disadvantages?***

- There are no risks or disadvantages to you or to your daily life.
- However, if you are unduly concerned about your responses to any of the given questions or if you find participation in interview distressing, you can ask for your participation to cease immediately. If you wish, Mr. Linh Nguyen Sy is available to discuss your concerns confidentially and suggest appropriate follow-up, if appropriate.

***What are the benefits associated with participation?***

There is no direct benefit to you as a result of your participation except for a small amount of money paid to compensate for transportation fee if occurred.

***What will happen to the information I provide?***

- The information you provide will be anonymously safeguarded by this research. The information given by you is not identified in any stage of this study. Data will be

aggregated for analysis and the researcher plans to use pseudonyms instead of real names.

- The results of this study will be disseminated in the form of journal articles and conference papers. The research data will be kept securely at RMIT for 5 years after publication, before being destroyed.

***What are my rights as a participant?***

- The right to withdraw from participation at any time
- The right to request that any recording cease
- The right to have any unprocessed data withdrawn and destroyed, provided it can be reliably identified, and provided that so doing does not increase the risk for the participant.
- The right to have any questions answered at any time.

***Whom should I contact if I have any questions?***

If necessary, you may contact the researcher through the following address:

***What other issues should I be aware of before deciding whether to participate?***

- Please consider these issues before participation:

Your responses will be used for further studies or publications in similar disciplines to this study.

Yours sincerely,

## Appendix 9: Thư mời tham gia phỏng vấn trong đề tài nghiên cứu

### Thông tin về người tham gia

Tên đề tài: “Ứng phó với Biến đổi khí hậu ở Việt Nam: Nghiên cứu hoạch định chính sách ở các cấp”

Các cán bộ nghiên cứu:

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Kính gửi .....,

Anh/chị được mời tham gia vào đề tài nghiên cứu do Đại học RMIT thực hiện. Vui lòng đọc kỹ và hiểu rõ các nội dung trước khi quyết định tham gia. Nếu anh/chị có bất kỳ câu hỏi nào về đề tài nghiên cứu, vui lòng trao đổi với một trong 3 cán bộ nghiên cứu.

### **Ai là người tham gia vào đề tài nghiên cứu này? Tại sao đề tài được thực hiện?**

- Đề tài nghiên cứu này được thực hiện như một nội dung trong Chương trình đào tạo tiến sỹ tại Trường đại học RMIT, Úc dưới sự hướng dẫn của giáo sư Ralph Horne. Đề tài nghiên cứu là “*Ứng phó với Biến đổi khí hậu ở Việt Nam: Nghiên cứu hoạch định chính sách ở các cấp*”. Nghiên cứu sinh Nguyễn Sỹ Linh sẽ là người ông/bà sẽ gặp.
- Vai trò của nghiên cứu sinh là thực hiện phỏng vấn chuyên sâu với các bên liên quan tại một số tỉnh/thành phố được lựa chọn, về vấn đề xây dựng và thực hiện kế hoạch hành động ứng phó với biến đổi khí hậu (BĐKH) của địa phương.
- Phỏng vấn, nghiên cứu thực tế là nội dung cốt yếu nhằm tìm hiểu các thông tin đáng tin cậy về việc kế hoạch hành động (KHHĐ) ứng phó với BĐKH của địa phương đã được xây dựng và đang được triển khai như thế nào. Quan điểm và các ý kiến phản hồi của các bên liên quan, cụ thể là các nhà hoạch định chính sách ở cấp tỉnh rất quan trọng trong việc nâng cao chất lượng các chính sách về BĐKH ở Việt Nam cũng như việc hoàn thiện đề tài nghiên cứu này.
- Đề tài nghiên cứu này đã được Hội đồng đạo đức nghiên cứu của Trường đại học RMIT thông qua, cho phép chính thực tiến hành khảo sát thực tế mà không tạo ra những tổn hại hoặc rủi ro cho người tham gia. Tuy nhiên, những người tham gia có quyền từ chối trả lời hoặc không đưa ra câu trả lời mà không chịu sự phụ thuộc hoặc áp lực nào từ cán bộ nghiên cứu hoặc những người khác.

### **Tại sao anh/chị được mời tham gia phỏng vấn?**

Chúng tôi mời anh/chị tham gia cung cấp thông tin và chia sẻ quan điểm cho đề tài nghiên cứu này bởi vì anh/chị là những người có ảnh hưởng/tham gia vào quá trình xây dựng và thực hiện kế hoạch hành động ứng phó với BĐKH của tỉnh/thành phố. Là những bên tham gia chính, anh/chị có những hiểu biết đầy đủ về quá trình xây dựng và thực trạng triển khai KHHĐ của địa phương. Những ý kiến chia sẻ của anh/chị sẽ rất quan trọng trong việc nâng cao tính hiệu quả của các chính sách về BĐKH trong tương lai.

### **Đề tài nghiên cứu về cái gì? Những câu hỏi nào sẽ được giải quyết?**

- Mục đích của nghiên cứu này là thiết lập và áp dụng khung đánh giá nhằm xác định cách thức cải thiện các mục tiêu của chính sách quốc gia về BĐKH thông qua việc xây dựng và thực hiện kế hoạch hành động ở cấp địa phương.

### **Nếu tôi đồng ý tham gia, tôi sẽ phải làm gì?**

Nếu anh/chị đồng ý tham gia, anh/chị sẽ trả lời các câu hỏi về quan điểm và cách hiểu của mình về quá trình xây dựng chính sách nhằm xác định mối liên hệ giữa quá trình xây dựng kế hoạch và chất lượng kế hoạch hành động. Anh/chị cũng sẽ được hỏi về các giải pháp có thể có nhằm cải thiện KHHĐ ứng phó với BĐKH cấp địa phương ở Việt Nam.

### **Các rủi ro hoặc bất lợi có thể có là gì?**

- Sẽ không có các rủi ro hoặc bất lợi đối với anh/chị hoặc đối với cuộc sống hàng ngày của anh/chị.
- Tuy nhiên, nếu anh/chị thấy rằng mình bận rộn, lo lắng về câu trả lời của mình đối với bất kỳ câu hỏi nào hoặc anh/chị thấy việc tham gia phỏng vấn là phiền hà, anh/chị có thể yêu cầu ngừng việc tham gia ngay lập tức. Nếu anh/chị muốn, nghiên cứu sinh Nguyễn Sỹ Linh sẽ trao đổi riêng và gợi ý những bước tiếp theo, nếu phù hợp.

### **Những lợi gì sẽ được nhận khi tham gia phỏng vấn/với sự tham gia của mình?**

Sẽ không có những lợi ích trực tiếp cho anh/chị, tuy nhiên trong một số trường hợp cần thiết khoản tiền nhỏ sẽ được hỗ trợ cho chi phí đi lại nếu có.

### **Điều gì sẽ xảy ra đối với các thông tin mà tôi cung cấp?**

- Thông tin mà anh/chị cung cấp sẽ được bảo vệ một cách khuyết danh trong nghiên cứu này. Thông tin được cung cấp bởi anh/chị là không nhận diện được trong bất kỳ giai đoạn nào của nghiên cứu này. Thông tin sẽ được gộp chung lại để phân tích và nghiên cứu viên sẽ sử dụng ký hiệu thay cho tên thật.
- Kết quả của nghiên cứu này sẽ được phổ biến ở dạng các bài báo đăng trên tạp chí hoặc kỷ yếu hội thảo. Dữ liệu nghiên cứu sẽ được cất giữ một cách an toàn tại

Trường Đại học RMIT trong vòng 5 năm kể từ ngày xuất bản và sẽ được hủy bỏ sau đó.

**Là người tham gia trong người cứu, tôi có quyền lợi gì?**

- Quyền từ bỏ việc tham gia trong nghiên cứu tại bất kỳ thời điểm nào.
- Quyền được yêu cầu dừng việc thu âm, ghi chép.
- Quyền yêu cầu lấy lại và hủy bỏ các số liệu chưa xử lý miễn là nó có thể nhận diện và trong trường hợp đó không làm gia tăng rủi ro cho người tham gia.
- Quyền được hỏi ở bất kỳ thời điểm nào.

**Ai là người tôi sẽ liên hệ nếu tôi muốn hỏi?**

Nếu cần thiết, anh/chị có thể liên hệ với nghiên cứu sinh theo địa chỉ sau:

**Các vấn đề khác tôi cần biết trước khi quyết định có tham gia phỏng vấn hay không?**

Vui lòng suy xét kỹ các vấn đề sau trước khi anh/chị tham gia:

Những thông tin, ý kiến của anh/chị sẽ được sử dụng cho các nghiên cứu chuyên sâu hơn hoặc xuất bản ấn phẩm trong các lĩnh vực có liên quan đến nghiên cứu này.

Trân trọng cảm ơn,

**Nguyễn Sỹ Linh**

## Appendix 10: CONSENT FORM

1. I have had the project explained to me, and I have read the information sheet
2. I agree to participate in the research project as described
3. I agree:

*The following provide some common examples, but should be modified to suit:*

- to undertake the tests or procedures outlined
- to be interviewed and/or complete a questionnaire
- that my voice will be audio recorded
- that my image will be taken (*Note: If you are using photographic images, further points need to be covered in the consent form, see next page*)

4. I acknowledge that:

- (a) I understand that my participation is voluntary and that I am free to withdraw from the project at any time and to withdraw any unprocessed data previously supplied (unless follow-up is needed for safety).
- (b) The project is for the purpose of research. It may not be of direct benefit to me.
- (c) The privacy of the personal information I provide will be safeguarded and only disclosed where I have consented to the disclosure or as required by law.
- (d) The security of the research data will be protected during and after completion of the study. The data collected during the study may be published, and a report of the project outcomes will be provided to ..... (researcher to specify). Any information which will identify me will not be used.

### *Participant's Consent*

Participant:

Date:

\_\_\_\_\_  
(Signature)

## Appendix 11: Notice of Ethics Approval



Design and Social Context College Human Ethics Advisory Network (CHEAN)  
Sub-committee of the RMIT Human Research Ethics Committee (HREC)

### Notice of Approval

Date: 11 July 2014

Project number: CHEAN B 0000018755-06/14

Project title: Responding to Climate Change in Vietnam: A study of multi-level policy making

Risk classification: Low Risk

Investigator:

Approved: From: 11 July 2014 To: 01 March 2017

I am pleased to advise that your application has been granted ethics approval by the Design and Social Context College Human Ethics Advisory Network as a sub-committee of the RMIT Human Research Ethics Committee (HREC).

#### Terms of approval:

1. **Responsibilities of investigator**  
It is the responsibility of the above investigator/s to ensure that all other investigators and staff on a project are aware of the terms of approval and to ensure that the project is conducted as approved by the CHEAN. Approval is only valid whilst the investigator/s holds a position at RMIT University.
2. **Amendments**  
Approval must be sought from the CHEAN to amend any aspect of a project including approved documents. To apply for an amendment please use the 'Request for Amendment Form' that is available on the RMIT website. Amendments must not be implemented without first gaining approval from CHEAN.
3. **Adverse events**  
You should notify HREC immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.
4. **Participant Information and Consent Form (PICF)**  
The PICF and any other material used to recruit and inform participants of the project must include the RMIT university logo. The PICF must contain a complaints clause including the project number.
5. **Annual reports**  
Continued approval of this project is dependent on the submission of an annual report. This form can be located online on the human research ethics web page on the RMIT website.
6. **Final report**  
A final report must be provided at the conclusion of the project. CHEAN must be notified if the project is discontinued before the expected date of completion.
7. **Monitoring**  
Projects may be subject to an audit or any other form of monitoring by HREC at any time.
8. **Retention and storage of data**  
The investigator is responsible for the storage and retention of original data pertaining to a project for a minimum period of five years.

In any future correspondence please quote the project number and project title.

On behalf of the DSC College Human Ethics Advisory Network I wish you well in your research.