



## Climate Change Adaptation: Mekong Civil Society Organizations Dialogue



23 - 24 September 2010  
Chiang Rai, Thailand



สถาบันสิ่งแวดล้อมไทย  
THAILAND ENVIRONMENT INSTITUTE





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# 1

## *Introduction*



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# Introduction

The “Mekong Civil Society Organizations (CSOs) Dialogue: Climate Change Adaptation and Good Environmental Governance” was organized to provide a platform for face-to-face learning and exchange on climate change adaptation (CCA) approaches and environmental governance.

The two-day meeting was held in Chiang Rai province in northern Thailand. Over the course of the Dialogue, Mekong-region civil society organization representatives from a wide range of fields explored the key concepts of adaptation and vulnerability, risk mitigation, coping capacity, and exposure and sensitivity in the different socio-ecological contexts in the Mekong region. The Dialogue’s mix of policy, climate change science and local implementation experience underscored the need for understanding the complexity of human-nature interactions and interdependencies under the uncertainty of climate change scenarios. Key to this consideration is the linkage between adaptation and the regimes of governance in place to manage processes of change and innovation.

The workshop saw a rich variety of presentations and discussions in plenary sessions and small group sessions. The presentations were grouped into two main themes. The first set of presentations addressed ‘Climate Change and Adaptation Efforts’, and consisted of three context-setting talks addressing key concepts, policy development and information from a regional-national perspective. In this session, the Dialogue heard of new concepts and paradigms as well as the state of knowledge reviews, research and knowledge gaps. The second set of talks included five talks presenting CSO experience in implementing adaptation from the local-national perspective. These presentations introduced innovations and initiatives for climate change adaptation under way at the most local levels.

The 49 participants from Cambodia, China, Lao PDR and Thailand demonstrated the impressive development of CSOs in the Mekong Region. The rich bodies of experience and valuable bodies of knowledge accumulated within the diverse non-governmental actors of the region represent one of the strongest opportunities to increase the region’s capacity to deal with climate change. Exchange among these actors is key to strengthening this level of governance. After a full and productive day of presentations and debate, a one-day field trip to the Mae Chan headwaters, Doi Mae Salong, Chiang Rai province provided a closer view of some of the people, ecosystems and issues being discussed. Thus, through a combination of meeting-room discussions and field-based exchange the dialogue contributed to strengthening the network of CSOs in the Mekong subregion, raising further awareness about climate change issues, and enhancing knowledge on practical approaches to adaptation.

This synthesis report comprises six sections, including this introduction. Part 2 summarizes the key messages from the meeting in an Executive Summary. Synthesis of the messages and the related discussions during the Dialogue is done in Part 2 to Part 5, covering key concepts, actors, and mechanisms. The final section, Part 6, introduces recommendations articulated during the Dialogue, including agendas for research, advocacy and policy. The annexes provide the dialogue agenda, the participant list and photos from the event.

# 2

## *Executive Summary*





# Executive Summary

Emerging from the discussions was a sense that, as the most pressing global environmental issue facing society today, responses to threats from climate change must no doubt incorporate the state-of-the-art in scientific understanding and analysis. However, this gathering further stressed the need for institutions, both formal and informal, to enable a solid grounding of the global climate debate and the day-to-day challenges of livelihood resilience and environmental integrity that face vulnerable communities. The participants in the Dialogue agreed that improvements in governance should focus on the processes of interaction between science, policy and practice, a set of linkages that requires special attention to issues such as participation, access to information, constituency-building and on-going assessment of priorities from multiple perspectives.

The Dialogue produced a number of policy-relevant recommendations. These are presented here grouped according to the policy audience.

## Macro-level perspectives

At the regional level, the main conclusion was importance of creating linkages that enable resources, knowledge and political will to be shared among not only national-level actors, but also the full range of research, advocacy and implementation expertise working at the policy-practice interface.

- By definition, *adaptation is understood as efforts to reduce existing or future vulnerability*. Vulnerability can be reduced in many ways: by reducing risk, increasing coping capacity, or reducing exposure and sensitivity.
- Adaptation can address all of these above factors depending on the socio-ecological context. So there is no one solution of adaptation that can fit all scenarios. For systems to be resilient, *people may need to rely on many adaptation options*.
- Adaptation is not a “stand-alone” issue. For adaptation efforts to be successful, they need to be *integrated into development plans* at various levels.
- Local communities are already using their local knowledge to cope with different challenges, such as droughts and floods. This *local knowledge and adaptive efforts need to be supported at the policy level* especially by focusing, not only on cash income and market demand but also on people’s well-being and “livelihood assets”.
- Generation and sharing of new knowledge on climate change adaptation by, for instance *knowledge platforms*, can promote better understanding and guide the farming and implementation of adaptation plans and policies.

### Local efforts at coping with climate change challenges

The key message coming out of the experience from local CSOs is that empowerment is a critical factor, for communities, households and certain sectors of society. Empowerment in the climate adaptation context is best conceptualized as encompassing general citizens' rights, decentralized resource management, livelihood diversification and capacity to negotiate with market and government. More specifically:

- In Yunnan province, China, upland communities are institutionalizing and scaling-up local participation. However, the challenge is that *effective decentralization needs more meaningful transfer of power and control to local areas* over decision-making on resources management.
- Vietnam's *civil society is working with state officials* undertaking the "Capacity Building on Climate Change for Social Organizations" to ensure the effectiveness of the Vietnamese government's National Target Program to Respond to Climate Change (NTPCC).
- Cambodia's local groups are finding how to *mainstream disaster risk reduction (DRR)* as a key strategy in dealing with climate change issues, particularly for vulnerable groups.
- *Gender* is a key focus; local projects in Cambodia are *mainstreaming gender issues* in innovative projects to empower women and girls.
- Thailand's farmers are *focusing on the micro-level farms* to work together with state officials and other stakeholders as a strategy to deal with the ecological challenges of river basin management since the large river basin scale comprises numerous sub-basins and streams with varying ecological conditions.

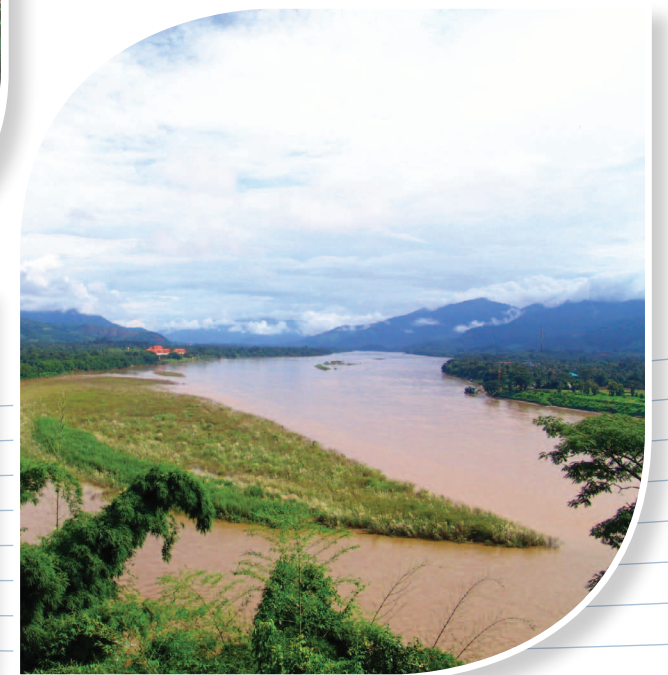
It can also be concluded that the Dialogue demonstrated that CSOs in the Mekong Region are rapidly developing capacity to play important roles in governance. Further dialogue events, institutionalized and ad-hoc, must continue to provide space for CSOs to provide important perspectives, information and analysis into decision making processes that affect the regions people and ecosystems.

The following sections present a synthesis of the experiences presented during the Dialogue, upon which the above conclusions were drawn.



# 3

## Concepts: Climate change terminology and governance



# Concepts: Climate change terminology and governance

Climate change entails a complex set of questions involving multi-level interactions across society and nature. Concern for possible impacts from climate change have come to dominate the global environment and development discourse, but some of the concepts and terminology have become confused in the process. Bringing the dialogue down to the local level highlights the need for re-clarifying some of these key concepts. In the first session of the Dialogue, Dr. Anond Snidvongs (The Southeast Asia START Regional Center) provided some analytical views on the use of the basic terminology in which climate change is couched.

First and foremost, it is crucial to maintain a distinction between the idea of ‘impacts’, which are measurable changes that have occurred, and the concept of ‘risks’, which point to possible but still unseen changes that may occur and may have adverse implications for society and or the natural environment. Impacts can only be discussed when the nature, magnitude and scale of change is understood. The critical point in this distinction is the pervasive uncertainty that continues to color the climate debate.

Unpacking the concept of **risk** can provide important analytical nuance to our basic understanding of what uncertainty might mean for local communities and ecosystems. Risk involves primarily two factors, **exposure** and **sensitivity**. Exposure is how the system or sector will be influenced by external factors; in this case, exposure is the current or future climate. Sensitivity is more related to the internal capacity or internal factors of a system and sector. For example, if the exposure factor was rainfall but it happens that your system and sector have nothing to do with rainfall at all, it means that the system and sector may not be that sensitive to changes to rainfall patterns in the future. However, in certain systems and sectors like agriculture, rain is a source of water for crops. So even a small change in the amount of rainfall could magnify their future risk. So the sensitivity factor is a little bit more difficult than exposure because it depends on future developments such as policy, internal-external constraints and opportunities. Looking at risk in this way brings out how the biophysical and other ‘natural’ aspects of climate change are mediated by the social, economic and political settings of each local situation.

### Highlights: Key concepts and their interpretation

1. The main challenge of climate change lies in the knowledge needed to understand both the changes and the risks.
2. Given a large number of uncertainties involved, attempts to attain the knowledge to assess the magnitude and the scale of the changes are important.
3. Understanding concepts such as vulnerability, resilience, exposure and sensitivity are crucial for adaptation. Vulnerability can be reduced in many ways: by reducing risk, increasing coping capacity, or reducing exposure and sensitivity.
4. Much depends on the socio-ecological context, which means that there is no one kind of adaptation blueprint that can fit all scenarios.

There is a third factor in this equation called of **vulnerability**. This factor is a function of risk and its relation to coping capacity. In mathematical terms, vulnerability could be conceived as risk divided by coping capacity. Thus if we have more coping capacity, or the coping capacity is higher than the risk, then that means vulnerability can be quite low. However, if the risk is very big but the coping capacity is relatively small, then vulnerability can be quite large.

Again, coping capacity is quite dependent on many other factors, be they economic, political or social. As is well known, assessment of risk is an important part of any climate-related work. And we can see from a review of these basic definitions, risk assessment becomes even more complex since we are talking about the future, and coping capacity is much more difficult to estimate or to guess than sensitivity.

One important reason for assessing risk is to examine the options for necessary and feasible adaptations. **Adaptation** is understood as efforts to reduce existing or future vulnerabilities. There are two fundamental approaches to this: we can reduce risk (exposure and sensitivity) or increase coping capacity. Thus, adaptation can address all of these factors wherever appropriate. It does not have to be just one kind of adaptation. In fact, for the system and sector to be resilient, we need to rely on more than one kind of adaptation option.

In terms of adaptation, we can reduce exposure to flooding events, for example, through migration and relocation. In other words, if you are not located in a high-risk area, you will not be exposed to the threat. Or we can try isolation, that is, isolate your system and sector and your community to reduce exposure, but the social, financial and political costs of these options may be prohibitively high. But adaptation is not only to reduce exposure, but also to reduce sensitivity in many ways, for example, by changing livelihoods and changing lifestyles. Furthermore, better forecasting systems and strategic diversification can help reduce risks. Community or system immunity can be raised by using collective adaptation, sharing in many ways to increase capacity that can act as a buffer to climate change and climate vulnerability. As a last resort, coping capacity can be increased through evacuation, restoration, rehabilitation, and compensation by insurance.

A final conceptual issue of high relevance is the question of **scale**—both temporal and spatial – in dealing with climate impacts. Some impacts have temporal scale of daily or weekly events while some have a scale of centuries.

So generally we are dealing with an area that has a different spatial scale, a point that becomes even more clearly evident when considering the various interests, concerns and priorities that are manifested across society. If we are dealing with a very small spatial scale, then your interest may correspond to a shorter time scale. But if we are looking at a very large area, then you can deal on the much longer term. For example, if a household wants to wash clothes today, it just wants to know whether it will rain today or not, and not care what will happen 100 years from now or whether there is more or less rain. But if one is a Prime Minister or world leader, then they need to address a very large area, viz. less in the rainfall today or even this year or next year but more concern about the larger scale so that you can plan for investing resources to manage water in the future.

Discussion of these concepts generated a strong sense among the Dialogue group that the common approaches, often characterized by mathematical and other modelling tools, are insufficient because they are not able to take into account the concepts that are introduced here. These concepts form part of the core of the focus on governance as an approach to the climate challenge. The factors introduced here – particularly vulnerability – signal the need for attention to capacities, including technical, political and economic capacities.



# 4

## Actors: CSO experiences with local governance and climate adaptation



## Actors: CSO experiences with local governance and climate adaptation

The participants in the Dialogue represent a rich and valuable body of knowledge and experience from around the Mekong region with grassroots practices and innovations in climate change adaptation (CCA). The presentations emphasised the need for working closely with farmers and local communities as well as with state agencies, increasing decentralization and local participation in decision making on projects, and ensuring local voices were heard and integrated in project implementation.

The key issues from presentations in the Second Section of the Dialogue process are summarized here:

1. Local efforts at coping with climate change challenges in the different geographical settings in the Mekong region depend for their success not only on the grassroots communities but also on many institutional and decision-making factors as well as the ability to working with state agencies.
2. Decentralisation is crucial for enhancing the ability of communities in successful adaptation. For example, upland communities in Yunnan province of China are showing that effective decentralisation, including decision-making on resource management, is crucial for institutionalizing and scaling up local participation.
3. Close coordination with state agencies is necessary as in the case of Vietnam's civil society, which is working with state officials for "Capacity Building on Climate Change for Social Organizations" to ensure the effectiveness of the Vietnam government's National Target Program to Respond to Climate Change (NTPCC).

4. Mainstreaming disaster risk reduction is a key strategy as demonstrated by Cambodia's local groups, particularly vulnerable groups, in dealing with climate change issues.
5. A better understanding of gender (and also ethnicity) in program management can ensure more success in implementation. For instance, local projects in Cambodia are mainstreaming gender issues in projects to empower women and girls.
6. Ecological diversity requires that specific community responses are tailored to specific ecological challenges. By focusing on the micro-level farms, Thailand's farmers are working together with state officials and other stakeholders to respond to the various ecological challenges of river basin management posed by the sub-basins and streams with differing conditions.

The five presentations on CSO experiences provided valuable insights into on-the-ground challenges. Importantly, these presentations highlighted local initiatives and their relevance for governance options with regards to increasing local capacity to adapt to uncertain futures. The main storyline of each presentation is introduced below.

### *Livelihood diversification and land reform as coping capacity*

Roi-Et province in Northeast Thailand has one of the harshest ecosystems for farming – the region comprises sandy soils, much lower rainfall than other parts of the country, and a lack of proper irrigation facilities. This means they are highly sensitive to fluctuation in seasonal rainfall patterns. But some rural families in Kasetwisai district are adapting to these conditions through innovative approaches to agriculture and water storage, as described by Dr. Yanyong Inmuong (KhonKaen University) in his presentation on coping with climate change.

The northeastern region of Thailand is said to be the poorest region in this country. In Thailand's population of around 65 million, 5.4 million are classified as poor, and of these, 3.7 million are located in the northeastern region. The poor have less income or education, hold land of less than 3.2 hectares mostly with poor soil, and suffer water scarcity. The poor family comprises aging members with a lot of children. So the poor households are very fragile and less resilient to climate change. They often experience extreme shocks from drought and flood, which can severely affect their health and livelihoods. But even in the poor sections of rural communities, some families also cope with extreme events by, for instance, by sending their children to work in industrial estates or in urban centers to diversify their income.

For years, many families in Kasetwisai have been growing commercial cash crops like sugarcane and cassava to respond to the market demands, with most of them in contracts with large agribusiness companies. But with falling or fluctuating commodity prices, they have faced debt and some are even bankrupt. Meanwhile their farming costs keep rising especially as cash crops such as sugarcane need irrigation; pumping water from the drying water canals raises their farming costs. Some of them tried "eco-farming" to reduce debts and build up integrated farming with livestock to increase their resilience especially in the drought years.

Recently, farmers inventoried their farmland and decided to divide their land of 20 *rai* (about 3 hectares) into six crops in which the key efforts are to replant forest and to raise fish in ponds. They also built water storage ponds to reduce their dependence on irrigation canals. They do not want to depend only on the big company but analyse the market demand to see what farming products meet the consumer needs. These families then produce a variety of plants and also livestock that brings them money without taking expensive inputs. The fishpond, the forest and their fields function as a productive unit.

In sum, these farmers have gone back to using their local farming knowledge for adaptation to the external changes including severe drought. The focus is not only on money but an attempt to define well-being in non-monetary terms. Thus, "livelihood asset" is a better concept to capture these changes and innovative efforts. This point is highly relevant for policy, and raises the suggestion that government should revise its farm policies to support these kinds of local initiatives.

#### *Forest decentralization and local adaptation in China*

This presentation, given by Mr. Yang Hai (ICRAF China), highlighted the relationship between the institutional setting that enables or constrains local communities and the capacity to innovate with regards to environmental management. The substance of this presentation derives from the important linkages between forest cover, forest management and climate change; as such, it brings to the forefront forest communities' decision-making and adaptive capacity.

The upland areas of Yunnan province, in the upstream reaches of the Mekong River, are critical, but vulnerable ecosystems of importance to the whole basin. The micro-ecosystems are closely related to environmental conditions in other parts of China, such as the extreme droughts of 2009-2010 in southern China and the concurrent flash floods of eastern China. For these reasons, policy of the central and provincial Chinese governments has sought to improve management of these upland ecosystems.



These efforts have been closely linked to broad-ranging changes in the grass-roots governance, particularly the introduction of decentralization and subsequent initiation of village elections. The widening of local peoples' political rights should be viewed as an important part of the framework through which those people manage their forest resources. In addition to these rights, economic incentives have provided the necessary conditions for people to make innovative investments in planting different types of forest, with technical assistance from the World Agroforestry Center.

The changes brought about in communities' forest management practices have shown how receptive local communities can be to changes in the basic institutional setting and access to a range of technical options. In fact, it was the combination of the two that activated the adaptive capacity of these communities.



### *CSO roles in implementing national climate policy in Vietnam*

With a 3,444 km long coastline, Vietnam has a number of pressing concerns associated with possible impacts from climate change. Prof. Le Thac Can (Vietnam Environment and Sustainable Development Institute) provided insights from his organization's experience in dealing with the predicted changes in coastal ecosystems and delta water regimes. The central government's response to this uncertainty includes a National Target Program to Respond to Climate Change (NTPCC), which works to strengthen the institutional and policy framework, raise awareness and capacity, develop strategies and options and integrate climate concerns into enhanced collaboration among relevant government agencies and international donors.

A notable element of the implementation of the NTPCC is the many actors involved. Vietnamese CSOs involved in the Program are in themselves diverse, ranging from large socio-political organisations (such as the Vietnam Front of People, Women's Union and Youth Union) to medium-sized socio-professional organisations (VUSTA, VACNE) and many smaller NGOs (such as SRD and VESDI) that are actively participating in implementation of NTPCC. It is also interesting to note that a network of CSOs participating in NTPCC implementation has been organised, called the Climate Change Working Group (CCWG). Moreover, the "Capacity Building on Climate Change for Social Organisations of CCWG" project is actively assisting the NTPCC in various activities.

Examples of CSO participation in the NTPCC stress the outreach roles of raising awareness and understanding, in addition to strengthening the capacity of other actors:

- Training Courses in Climate Change for Experts of NGOs (June 2010, Hanoi)
- Training Courses in Climate Change and Impact Adaptation and Mitigation for NGOs experts (July 2010, Hanoi & Hue City)
- Training Courses in Awareness Raising on Climate Change Adaptation for Mekong Delta Provinces
- Online Forum on Climate Change in Vietnam by SRD & Radio Voice of Vietnam
- Seminar on Climate Change by VUSTA (June 2010)
- Publication of the book “Need to Know about Climate Change” by VACNE (in 2009).

CSOs have also participated in monitoring, survey, and research on climate change adaptation and mitigation activities in selected provinces and cities. Plans and strategies are set by VESDI, which mostly participates in activities with the objective of channelling ideas and information about climate change into assessments. VESDI believes that more international cooperation is necessary for the implementation of NTPCC. This presentation demonstrates how CSOs can establish importance niches for themselves in raising access to information among the general public through the production of locally appropriate materials, as well as helping to inject information and analysis from the local level into assessment and other policy implementation activities.

### *Adaptation and social protection in Cambodia*

Cambodia, a downstream country in the Mekong Basin dominated by low-lying, flat agricultural and rapidly developing urban areas, is prone to extreme weather events – such as floods, drought and typhoons – that may be exacerbated by climate-induced changes. Lor Bunnath (Lutheran World Federation Cambodia) presented information on how a social protection perspective is turned into local activities through a rights-based approach to local development. Interventions are based not only on the threat of natural disasters, but also on an assessment of local socio-economic development needs.

The objective in these interventions is to empower communities to conserve and manage natural resources in sustainable ways and to manage and mitigate the disaster risks, and strengthen their capacity, including in climate change adaptation. The two key activities are Climate Change Adaptation and Disaster Risk Reduction (DRR) through rights-based and gender perspectives. Climate Change Adaptation through resilient agriculture techniques is the overall goal that can empower communities to better adapt to climate risks and reduce their vulnerability to drought. For communities, the focus is on increasing their capacity for sustainable water management and for implementing drought-resistant farming methods.

Thus, a central component of these efforts focuses on building the capacity of local communities to increase short-term disaster preparedness and develop longer-term climate adaptations to their livelihoods. At this level of work, it is crucial that local government and communities work together to develop and implement strategies that are appropriate and feasible. For example, the integration of technical expertise provision and locally accessible funding mechanisms through local government agencies is a priority activity. In terms of work directly with farmers, a number of agricultural innovations are believed to support livelihood resilience and profitability while at the same time decreasing vulnerability to fluctuations in weather patterns.

Strengthening local communities through a comprehensive vision of livelihood security, based on technical, financial and empowerment mechanisms, underscores the strategy of diversification in the face of uncertainty. This approach also provides many areas of convergence between local communities and local governments, thereby increasing confidence while at the same time advocating for increased rights for local people. Networking strategies have been particularly important, such as:

- Strengthening linkages with relevant stakeholders, including government institutions at all levels
- Actively participating in the meetings of the Disaster Risk Reduction Forum, and other local initiatives
- Strengthening vertical and horizontal community advocacy networks to help them claim their rights
- Networking with HR NGOs to get legal support for community advocacy
- Network with international and regional groups to advocate with policy makers

This case demonstrates how human rights, livelihood security and disaster preparedness can form the core of a strategy to strengthen local social systems in the face of climate uncertainty.







The preceding discussion has mentioned several times the need to examine carefully the dynamics of exposure, risk and capacity when considering climate change adaptation. The presentation by Akhteruzzaman Sano (Save the Earth Cambodia) illustrated the benefits of local empowerment through mainstreaming gender and increasing access to funds for investment in livelihoods.

The approach is to increase livelihood resilience through diversification of income sources, based on provision and management of funds through a Savings Group. Through this work, awareness of climate threats is integrated into micro-level livelihood planning activities. Moreover, recognizing the particularly important role women play local livelihood strategies and resource management, gender mainstream is prioritized as a key aspect of community empowerment.

In addition to strengthening linkages with the local government and increasing coordination among other NGOS, activities to strengthen the cultural foundations of a community are also important. The savings group also works to support the upkeep of the local Buddhist temple are another way in which women, often elderly women, can be integrated into local activities. In this case, poverty reduction, gender mainstreaming and livelihood diversification have been the three pillars of strengthening community capacity for adaptation.

# 5

## Mechanisms: Scaling up and scaling down to the appropriate level



## Mechanisms: Scaling up and scaling down to the appropriate level

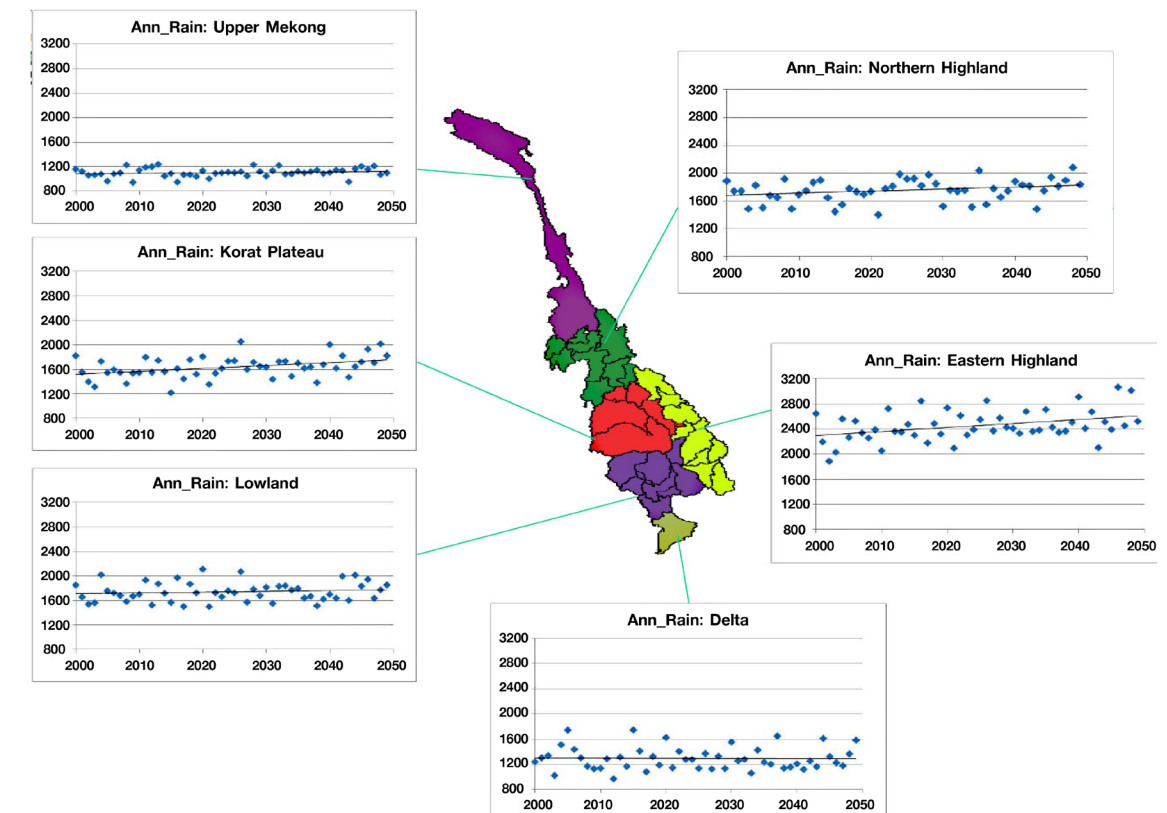
The Dialogue also heard presentations about larger-scale mechanisms that can be useful in strengthening governance with regards to climate change policy and adaptation. One challenge within any governance framework is the ability to scale-up and scale-down, to successfully link successes at one level to opportunities and challenges at another directly relevant level of decision making. This section introduces three mechanisms presented at the Dialogue.

### *Climate models and scenarios of uncertainty*

While Dr. Snidvongs warned against over-reliance on modelling, approaches to predicting what types of change might be experienced in certain areas can still be a useful component of climate adaptation. One important question then, with regards to governance, is who calibrates the models and who participates in the analysis. Furthermore, it is important to consider who the end users are and how the information and analysis is channelled into the policy process. In short, whose decision making does this technology strengthen? These are important questions, and should be considered throughout the implementation of a modelling exercise and built into long-term monitoring and predicting efforts.

As an example of how modelling works, the presentation tracked changes and trends in a 50-year period from 2000 to 2050. It is also important to consider how much of these observed changes are actual trends from the output of the climate model to identify the general patterns of the changes that are occurring.

Figure 1: Changes in Annual Rainfall by Sub-basins



Source: The Southeast Asia START Regional Center

In Figure 1, we can see that generally the annual rainfall does not change much, particularly in the upper part and the tail of the Mekong Basin. The two areas where the rainfall tends to increase a little bit are on the eastern highland, mostly around the mountain ranges, which is a part of Laos. Although the changes in project rainfall are unevenly distributed among the different areas of the region, we can see that extreme or maximum rainfall is likely to occur in the future, signalling the importance of looking closely at trends of change in specific localities.



The same climate scenario was provided to the Mekong River Commission (MRC) to see how the maximum monthly flow of the Mekong River undergoes changes. The purpose was to explore how dam construction might affect downstream areas in the Basin. For example, one model shows insignificant change in the dry season flow in the lower basin, and the small changes observed may be due to the melting of ice in summer. Flows in late winter and summer will be a little bit higher, so the mean low flows will be a little bit high as well. These impacts are not observed in the lower part of the basin because this event will be diluted by other factors.

This presentation talked only about hydropower development in combination with climate change trends. But many other developments in the pipeline for the Mekong region are expected to have strong impacts on water. These developments must be incorporated into the models as well, as there other issues especially relevant to the lower part of the Mekong delta. For instance, the salinity intrusion will be minimized in the future climate, as there will be slightly higher flows in the dry season especially if there are more dams. Yet there is still a lot of uncertainty to incorporate, and the social, political and economic complexity of the interlinked issues at this level stresses the importance of dialog to discuss the results of modelling and the possible applications of information and analysis generated.

#### *Regional climate change adaptation knowledge platform*

Much of the preceding discussion stressed the importance of understanding the local context in which people experience changes in the climate regime. Needless to say, the scope of the climate change challenge is global, and there are many issues that must be addressed at the interface between the regional and national levels. Ms. Dusita Krawanchid (Stockholm Environment Institute) presented information about an effort to establish a regional knowledge platform for sharing knowledge about climate change adaptation.

The platform's goal is to facilitate climate change adaptation in Asia at all levels from local to national to the regional level as well as to strengthen adaptive capacity. The key purpose is to establish a regionally and nationally owned information exchange mechanism. If in some country, they already have a sharing mechanism, the platform does not try to duplicate but

only supports the mechanism. The partners also try to facilitate the integration of climate change adaptation into national and regional economic and development policies, processes and plans. In Thailand, for example, the platform's focus is on sustainable development by integrating adaptation into the development agenda.

The platform has three output components designed to contribute directly to the formation of mechanisms to strengthen climate change governance:

- *Regional knowledge sharing system* - to promote dialogue, improve exchange of knowledge, information and methods;
- *Generation of new knowledge* - to facilitate the generation of new climate change adaptation knowledge to promote understanding and provide guidance relevant to development and implementation of national and regional climate change policy, plans and processes focusing on climate change adaptation;
- *Application of existing and new knowledge* - synthesis of existing and new climate change adaptation knowledge to facilitate its application in sustainable development practices at the local, national and regional levels.

The immediate beneficiaries of the Platform are civil servants, researchers and development workers, who will be equipped with the knowledge, tools and opportunities to promote climate adaptation strategies in their work, as well as a limited number of local communities with whom research and pilot activities are undertaken. Eventually, the beneficiary pool will be very wide as climate knowledge is applied for the public good in diverse areas of work.

The platform already comprises the Swedish Environment Secretariat for Asia (SENSA) United Nations Environment Programme (UNEP) and UNEP Regional Resource Centre for Asia and the Pacific (RRC.AP), with funding from SIDA. There are a number of Civil Society Organizations (CSOs) especially from the Mekong region. The secretariat is the UNEP RRC.AP based in Asian Institute of Technology (AIT) in Thailand. The geographical scope of the Platform has expanded rapidly and now covers 13 Asian countries, shown in Figure 2 below.

Figure 2: Geographic scope of the knowledge platform



Concurrently to the networking and dialog function, the Platform undertakes a range of national-level activities including:

- *Country knowledge mapping exercise*
- *Linking and supporting existing or emerging national platforms*
- *Identification of research priorities*
- *Platform to support the development of adaptive capacity for each country*

The Regional Platform is an example of how the national-regional interface can be strengthened with a combination of information generation and sharing activities. It is essential that such an initiative involve not only regional networking but also national level implementation, as the creation of new information and highlighting of diverse perspectives must be an on-going process that feeds the dialog function.

### *Planning through government-village partnership*

Mr. Somkhith Singsong (Huai Sam Mo Working Group) and Mr. Sansonthi Boonyothayan (National Water Dialogue Working Group) presented on the efforts of the Huai Sam Mo Working Group, a local area-based mechanism to facilitate dialogue on water resources planning. The HSM working group was organized in 2005 as a pilot project of the Chi River Basin under the Department of Water Resources. It is one of 30 pilot sub-basins of the country that were managed under the Integrated Water Resource Management Approach (IWRM). In 2006, the Basin Development Plan (BDP) of the Mekong River Commission (MRC) supported the participatory sub-basin planning process as a pilot project of the 5T area.

The vision of HSM is a “basin organization to manage water resource sustainably, rehabilitate natural resources and the environment by communities and the government.” To this end five development strategies were developed for the HSM working group:

1. Community water resources development
2. Promotion of organic agriculture and income generating activities
3. Institutional development and environment rehabilitation
4. Development of local curriculums, local knowledge study and community rules
5. Promotion of the role of women and youths.

Livelihoods are central to both the local development agenda and the vision of sustainable water resources management. In the past, cattle were used to plough the paddle fields. Cattle were also used for transportation, for example, for pulling carts. But because animals had many limitations, machines came to replace agricultural activities. However, machines need fuel, which raises the costs for farmers. Some farmers suffered crop losses and debt and some lost their land to creditors. Some families faced broken homes due to mounting debts and bankruptcy leading to social problems and severe impacts on children in Thai society.



The HSM working group's response to this dilemma is, "return the buffalo to the paddy field, rehabilitate the environment, and implement sufficiency economy". Presently, buffaloes still exist in some rural areas. However, young buffaloes do not know how to pull the plough any more. It is a similar situation with young people who do not know how to plough the land using buffaloes; they know only gasoline-dependent tractors. Trucks can be seen on the main roads of the country, loaded with buffaloes heading to slaughter houses while trucks loaded with tractors head in the opposite direction. If the human and buffalo links are re-established, buffaloes will be brought back to paddy fields, and this can promote sufficiency economy.

From the HSM experience, the amount of water is sufficient, but what is lacking is effective water management. Basin management requires several approaches because the basin can be divided into sub-basin and streams that have different ecological characteristics. Therefore, it is important to focus on the micro-level such as farms. There is a need to know if a farm has sufficient water or not, and what the quality of water is, and this knowledge must be located at the appropriate scale the farm, the sub-basin and the larger river basin.

# 6

## *Recommendations*



# Recommendations

The Dialogue participants generated a number of recommendations for improving governance with regards to climate change adaptation. The recommendations are divided into three general areas.

## Improve the level of understanding of climate change adaptation among vulnerable communities

Vulnerable communities are not only potential victims, they are also important actors, and therefore partners, in the development and implementation of climate change adaptation strategies.

- Understand the history of the local community, their beliefs and knowledge systems, and their use and management of resources.
- Identify the reasons for vulnerability of local communities; maintain the balance between local capacity and addressing vulnerability.
- Evaluate local capacity before developing action plans.
- Foster cooperation among local governments, NGOs and the private sector.
- Give priority to local risks and needs in community action plans; the local community needs to be provided access to the required resources for developing and implementing their action plans.
- Communicate effectively on the use of the plan as well as networking, knowledge sharing, documenting, and dissemination of results.
- Support new generations of people in terms of knowledge and awareness building.

## Governments and academia should share their knowledge and understanding with civil society organizations and local communities

In order to advance the governance of climate issues, the playing ground must be levelled with regards to access to information, financial resources and decision making processes.

- Academics need to provide evidence-based research on topics such as sufficiency economy and local resource practices to support local capacity on climate change adaptation.
- Government actors need to ensure two-way information sharing and listen to feedback from the local level.
- Public consultation forums should be promoted as a good communication tool, especially if they are based on, and respectful of, local knowledge and resource practices.
- Local knowledge systems need financial and human resources support.
- New policies and mechanisms need to be initiated to formally encourage and support the sharing of knowledge and practices between communities and the government actors.

## Bring together knowledge and good practices on implementation of climate change adaptation by governmental officials, researchers and civil society

CSO's contribution to the national, regional and global understanding of climate change adaptation has begun to grow, but is in critical need of further support in terms of financial, technical and political support.

- Set up a network for governments, researchers, and CSOs to exchange information and insights. The network tools can include international seminars, dialogue events, and the Internet.
- CSOs and researchers need to initiate participatory research that can empower local communities, build local capacity, and incorporate local knowledge into research activities. Collaborative research activities can also provide useful avenues for local communities to share their perspectives on local issues with government officials.
- Simplify academic research and publish them in people-friendly languages since communities often find academic papers not easily understandable.
- CSOs should be encouraged to act as a linkage point between the government (authority), local communities (implementer) and academia (knowledge)

- The relationship between CSOs and academia needs to be further strengthened especially in evidence-based research that can help convince policy-makers.
- CSOs need to initiate and undertake their own in-depth research on community issues.

#### Future dialogue efforts

With the diverse range of actors working across different scales of social, ecological and political systems dialogue remains a critical aspect of improved governance, and a key area of capacity building and empowerment with regards to climate adaptation.

- The regional dialogue hosted by TEI for CSOs and community participants featured a bottom-up approach and strengthened the network of CSOs in the Mekong region. More such efforts at national level are needed in each country in the Mekong region
- Pilot activities are a necessary step for the success of future dialogue efforts. These could include 'no regret' adaptation activities, such as water management. The lessons learnt from these pilot activities can feed into future dialogue events.
- A wide range of stakeholders need to be involved once CSOs' dialogue efforts are successfully completed with readiness and consensus.

## Appendix 1

# Dialogue Agenda



# Agenda

## Mekong CSOs Dialogue on Climate Change Adaptation and Good Environmental Governance

23-24 September 2010  
At the Imperial Golden Triangle Resort, Chiang Rai province, Thailand



### Day 1: 23 September 2010

At the Imperial Golden Triangle Resort

08.30 - 09.00	Registration
09.00 - 09.20	Welcome remarks and meeting objectives By <b>Dr. Somrudee Nicro</b> <i>Thailand Environment Institute</i>
09.20 - 09.30	Photo session
09.30 - 11.30	<b>Climate change: Challenges and adaptation in the Mekong basin</b> Chair: <b>Dr. Somrudee Nicro</b> <i>Thailand Environment Institute (TEI)</i>  1) Climate change: Challenges and their impacts in the Mekong basin By <b>Dr. Anond Snidvongs</b> <i>The Southeast Asia START Regional Center</i>  2) Farmland reform and livelihood diversification practices in coping with the climate change: key messages for policy development By <b>Dr. Yanyong Inmuong</b> <i>Khon Kaen University, Thailand</i>  3) Regional climate change adaptation knowledge platform for Asia By <b>Ms. Dusita Krawanchid</b> <i>Stockholm Environment Institute (SEI), Thailand</i>  Discussion  <b>Roundtable discussion:</b> <b>CSOs' experiences on climate change adaptation</b> Chair: <b>Mr. Souvanhpheng Phommasane</b> <i>Netherlands Development Organization, Lao PDR</i>
11.30 - 12.00	<b>Forest decentralization and local adaptation to climate change: insights from Yunnan, Southwest China</b> By <b>Mr. Yang Hai</b> <i>ICRAF, China</i>

12.00 - 13.30	Lunch
	<b>Roundtable discussion (cont.)</b> Chair: <b>Mr. Souvanhpheng Phommasane</b> <i>Netherlands Development Organization, Lao PDR</i>
13.30 - 14.00	<b>Vietnamese CSOs in implementation of national target program to respond to climate change</b> By <b>Prof. Le Thac Can</b> , <i>Viet Nam Environment &amp; Sustainable Development Institute</i>
14.00 - 14.30	<b>Climate change adaptation and social protection experience from LWF- Cambodia</b> By <b>Mr. Lor Bunnath</b> , <i>Lutheran World Federation Cambodia (LWF-C)</i>
14.30 - 14.45	Refreshment break
	<b>Roundtable discussion (cont.)</b> Chair: <b>Ms. Vu Thi Bich Hop</b> <i>Center for Sustainable Rural Development (SRD), Viet Nam</i>
14.45 - 15.15	<b>Enhancing climate resilient sustainable livelihood development through micro insurance mechanism and mainstreaming gender issues</b> By <b>Mr. Akhteruzzaman Sano</b> <i>Save the Earth Cambodia</i>
15.15 - 15.45	<b>Thailand: An officials-villagers partnership model – case of Huai Sam Mo</b> By <b>Mr. Somkhit Singsong</b> <i>Huai Sam Mo Working Group, Upper Chi River Basin, Chaiyaphum province and</i> <b>Mr. Sansonthi Boonyothayan</b> <i>National Water Dialogue Working Group, IUCN, Sakon Nakhon province</i>
15.45 - 16.30	<b>Warm-up questions</b> <i>Three parallel discussion groups:</i>  Identify the obstacles to climate change adaptation: CSOs' and communities' perspectives.
16.30 - 16.45	Plenary report
18.00	Welcome dinner for all participants

Day 2: 24 September 2010 (Field Trip)

At The Hill Area and Community Development Foundation, Doi Mae Salong, Chiang Rai

07.00	Depart from the Imperial Golden Triangle Resort						
08.30 - 11.00	<b>Field Trip:</b> Mae Chan headwaters, Doi Mae Salong, Chiang Rai province Led by The Hill Area and Community Development Foundation						
11.00 - 12.00	<b>Discussion:</b> Reflection on the field visit Chair: <b>Ms.Tuenjai Deetes</b> <i>Former Senator and Founder of the Hill Areas Development Foundation</i>						
12.00 - 13.00	Lunch						
13.00 - 14.30	<b>Making knowledge on CC adaptation understandable and accessible to the grassroots</b> Three parallel discussion groups to discuss: <table><tr><td>Breakout Group 1</td><td>How can we improve the level of understanding on climate change adaptation among vulnerable communities?</td></tr><tr><td>Breakout Group 2</td><td>What are better mechanisms for government/academia to share the knowledge/ understanding with civil society and communities?</td></tr><tr><td>Breakout Group 3</td><td>How can we bring together the knowledge and good practices on implementation of CC adaptation among governmental officials, researchers and civil society?</td></tr></table>	Breakout Group 1	How can we improve the level of understanding on climate change adaptation among vulnerable communities?	Breakout Group 2	What are better mechanisms for government/academia to share the knowledge/ understanding with civil society and communities?	Breakout Group 3	How can we bring together the knowledge and good practices on implementation of CC adaptation among governmental officials, researchers and civil society?
Breakout Group 1	How can we improve the level of understanding on climate change adaptation among vulnerable communities?						
Breakout Group 2	What are better mechanisms for government/academia to share the knowledge/ understanding with civil society and communities?						
Breakout Group 3	How can we bring together the knowledge and good practices on implementation of CC adaptation among governmental officials, researchers and civil society?						
14.30 - 14.45	<b>Plenary report and discussion</b>						
14.45 - 15.00	<b>Wrap-up and closing remarks</b> By <b>Dr. Somrudee Nicro</b> <i>Senior Director, Thailand Environment Institute</i>						
15.00	Depart Doi Mae Salong						
16.30	Arrive the Imperial Golden Triangle Resort						

Appendix 2

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**Appendix 3**  
**Photos**



Climate change: Challenges and adaptation in the Mekong River basin



CSOs' experiences on climate change adaptation





## Roundtable discussions



## Field trip to the Hill Area and Community Development Foundation, Doi Mae Salong, Chiang Rai





Making knowledge on climate change adaptation both understandable and accessible to grassroots









## Thailand Environment Institute (TEI)

The Thailand Environment Institute (TEI) is a non-profit, non-governmental organization that has been active in tackling environmental problems and conserving natural resources at the grass-roots, national, regional, and international levels. TEI works in partnership with multi-stakeholders to create policy impacts as well as changes on the ground in several areas, including environmental governance, urbanization, environmental education, eco-labelling, energy conservation, climate change, clean technology, forest conservation and cultural environments.

TEI has initiated the Regional Environmental Forum, a regional civil society network, the objective of which is to advance sustainable development in mainland Southeast Asia. In recent years, TEI has implemented The Access Initiative (TAI) in order to promote public access to information, decision-making and justice. TEI serves as the TAI Core Team for Southeast Asia.

[www.tei.or.th](http://www.tei.or.th)

[www.accessinitiative.org](http://www.accessinitiative.org)



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