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Climate Mitigation Effort Sharing in Mekong

In Pursuit of Greenhouse Gas Reductions in Vietnam and Thailand

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Introduction

Climate change is real! In autumn 2013 alone, the world witnessed a polar vortex in America, super typhoon Haiyan/Yolanda in the Philippines, several incidents of month-long flooding in the UK and an unusually short winter in southern parts of the Nordic countries. Global temperatures are increasing. Sea levels are rising. Extreme weather conditions are becoming more intense and more frequent. Climate change is affecting not only the poorest nations, but also the wealthiest ones.

These manifestations of climate change are not merely a meteorological problem, but also carry serious biodiversity, energy, economic, health, social, cultural and political implications. Intensifying floods and droughts are hindering economic growth and the Millennium Development Goals (MDGs) of the Mekong countries. In North America, the direct effects of climate change including increased heat and water stress as well as altered crop phenology are resulting in reduced crop yields creating food insecurity. It has also been contended that the Syrian civil war, which began in 2011 and is still ongoing today, was ignited by the 5-year drought, another manifestation of climate change in peace and security.

On 14 April 2014, the third and most recent report entitled "Climate Change 2014: Mitigation of Climate Change," which makes up the IPCC's fifth Assessment Report on climate change to be finalized by the end of 2014, was published. Produced by 235 authors from 58 countries analyzing close to 1,200 climate scenarios, the report warns that the world's temperature would hit a staggering 4.8 degrees Celsius by the end of the century with potentially disastrous consequences for economic development, ecosystems and humanity, if the world continues to emit greenhouse gases (GHG) at current rates.

In the Mekong region, the biggest emitters of GHG are the biggest economies namely Thailand and Vietnam. But Laos and Cambodia are also seeing their emissions increase as a result of Land Use, Land-Use Change and Forestry (LULUCF). Realizing the disastrous consequences of GHG emissions, the governments of Vietnam and Thailand have officially adopted climate mitigation as part of their national agendas. The Vietnam Green Growth Strategy (VGGS) was approved in 2012 pledging a 10-20% reduction in GHG by 2020. Thailand targets a 7-22% reduction in emissions by 2020 under the draft National Master Plan on Climate Change.

These commitments are indeed noble. But fighting climate change requires more than just fancy statements. Ambitious and genuine actions are needed. It is baffling to see that, even after the official inclusion of climate mitigation in national agendas, the economic structures of both Vietnam and Thailand continue to be resource-intensive with development sought through unsustainable mega projects. Government-issued economic land concessions (ELC) are replacing forests, regarded as 'carbon sinks,' by large-scale plantations and factories. More fossil fuel power plants continue to be built, though the IPCC's latest report on climate mitigation strongly calls for fossil fuels to be left in the earth's crust if we are to save the planet.[1]

The various solutions employed by governments in the name of climate mitigation and adaptation are highly controversial. Over a hundred more dams have been proposed for the Mekong region, many of which are claimed supposedly to prevent flooding and drought. But dams are the number one anthropogenic source of methane, a greenhouse gas with 21 times more Global Warming Potential (GWP) than carbon dioxide and the Mekong river is already experiencing receding aquaculture outputs — a 20% drop in Cambodia and 40% in the Southern delta of Vietnam.[2] Even if it is true that dams can somehow prevent floods and drought, the destruction of carbon sinks, the enormous levels of methane and the serious impact on food security that they would bring do not really fit into the climate mitigation/adaptation paradigm as we know it.

Likewise, the Clean Development Mechanism (CDM) and related concepts such as carbon offsets and REDD have received heavy criticism since their inception. Environmentalists such as George Monbiot asserted that the trade in carbon offsets is a way of carrying out business as usual, a way for the

1 *IPCC. (2014)*

2 *Regional Public Forum on "The Don Sahong Dam in Lao PDR: Perspectives from Cambodia, Thailand and Vietnam." Maha Chulalongkorn Building Chulalongkorn University, Bangkok. 19 February 2014.*

guilty to buy their way out rather than changing their behavior. Trading carbon credits are, in essence, trading indulgences.[3] The genuine solution must be here and now.

Climate change is a pressing global issue but the confusion and lack of clarity surrounding it is hindering inclusive dialogues and effective solutions. This is especially the case for national climate mitigation policies which are often poorly coordinated and scattered across different governmental agencies. Different actors have different sets of information and mitigation directions — which are sometimes in conflict. The confusion and lack of clarity have also made the sophisticated issue of climate mitigation even more sophisticated and inaccessible to the general public as well as the civil society. Fruitful public engagement towards sound and inclusive solutions is being hampered as a result.

In response to the need for more clarity of the climate mitigation process, Kepa Mekong commissioned two Effort Sharing projects (later relabeled 'Mitigation Surveys') in the Mekong region in 2013 — one in Vietnam and the other in Thailand. The Surveys sought to contribute to greater understanding of climate mitigation policies and actions in the region by reviewing legal documents and literature concerning the climate mitigation process in the country, examining the strategies and actions of different actors, and interviewing government officials and experts to verify the findings as well as to enhance the analysis.

The results are two comprehensive assessment reports with evidence-based recommendations. The two Surveys are slightly different in structure. As the mitigation action in Vietnam is largely government-led, the Vietnamese Survey largely investigated national policies and the emissions reduction process as set forth by the government and did so by examining them at their different stages: target setting, implementation, and monitoring and evaluation. Actors in Thailand, on the other hand, are more diverse with the private sector and civil society sector (or 'public sector' in the survey) playing increasing roles. The investigation and assessment were modeled according to these varying national contexts.

In addition to the resulting reports of the Surveys, Kepa Mekong has produced this synthesis as a supplement in the hope of making the survey results more accessible. This synthesis outlines the key findings of the two Surveys, discusses the main common ground and differences and concisely presents conclusions and recommendations. As a disclaimer, this synthesis report is not comprehensive in any way. Readers are highly recommended to consult the original surveys for detailed explanations and reference sources.

Kepa is an NGO platform and an expert on global development. It represents more than 300 Finnish non-governmental organisations out of which over 30 operate in the Mekong region. Kepa operates in four countries and one region, namely in Finland, Nicaragua, Tanzania, Mozambique and in the Mekong region. Kepa works globally covering three major themes: climate justice, global economic policies (corporate accountability, tax justice, and trade and investment), and the improvement of development cooperation.

Kepa climate justice work is part of a global action to stop climate change and is coordinated by a task group consisting of members from all four local offices and the Helsinki headquarters. The task group commissioned the Mekong office to carry out the Effort Sharing work in 2012. The Survey in Vietnam was carried out in partnership with Green Innovation and Development (Green ID), which is also Kepa's local partner, and Healthy Public Policy Foundation (HPPF), Kepa's policy consultant in Thailand. The Surveys were completed in March 2014. The studies were initially called ''Effort Sharing' but later changed to 'Mitigation Survey' because the initial name does not ring a bell in the Mekong region.

3 *Monbiot, George. (2006, October).*

Synthesis

The following is the synthesis written based on the two Surveys: 'The Survey and Assessment of The Appropriate Share of Climate Change Mitigation Actions in Developing Countries: The Case of Thailand' (abbreviated as 'Thai Survey') by Healthy Public Policy Foundation (HPPF) & 'The Assessment of policies on GHG mitigation in Vietnam' (abbreviated as 'Vietnamese Survey') by Green Innovation and Development (Green ID).

GHG Emission and Climate Process in Vietnam

Vietnam ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1994 and the Kyoto Protocol in 2002. It then approved the National Target Program to Respond to Climate Change (NTP-RCC) in 2008. The Government of Vietnam has designated the Ministry of Natural Resources and Environment (MONRE) as the national Focal Point for coordination of implementation of the UNFCCC and Kyoto Protocol, whereas MONRE is the designated agency for implementation of the NTP-RCC.

Vietnam submitted its Initial National Communication to the UNFCCC Secretariat in 2003 which included an estimate of GHG emission inventory for 1994. The most recent inventory was made for the year 2000 by the Second National Communication to UNFCCC submitted to the Secretariat of UNFCCC in 2010.

Vietnam's total greenhouse gas (GHG) emissions in 2000 stood at 151 million tons of carbon dioxide equivalents (CO2eq) with the agriculture sector making up the largest share (43%), followed by the energy sector at 35%. Compared with 1994, emissions increased by an average of 6.4% per year. The Second National Communication (NC2) estimated three major GHG emissions sectors for the period of 2010-2030 including Energy, Agriculture and Land Use, Land-Use Change and Forestry (LULUCF). Accordingly, the energy sector is soon expected to become the biggest GHG emitter, with an annual growth rate during 2011-2030 of 7.4%. There is also an increase in GHG emissions from Agriculture but not at a significant rate and this is becoming saturated. Emissions from LULUCF are projected to pass their peak and turn negative, which is explained by increasing afforestation in the country resulting in increasing carbon sequestration. GHG emissions from these three sectors combined are estimated to increase at 5.7% per annum during 2010-2030.

GHG Emission and Climate Process in Thailand

Thailand ratified the United Nation Framework Convention on Climate Change (UNFCCC) in 1994 and the Kyoto Protocol in 2002. In 2008, the first National Strategy on Climate Change 2008-2012 was approved by the Cabinet as the policy framework for all ministries and government organizations. A long-term strategy was established in 2011 with the Climate Change Master Plan until 2011-2050. The Government of Thailand has designated the Office of Natural Resources and Environmental Policy and Planning (ONEP), the Ministry of Natural Resources and Environment as the national focal point under the UNFCCC. ONEP is also responsible for development and implementation of the Master Plan, which is now in the approval process.

Thailand submitted its Initial National Communication (INC) to the UNFCC in 2000 which included an estimate of the GHG emission inventory for 1994. The Second National Communication (SNC) described Thailand's inventory status for the year 2000 and estimated emission trends in selected years between 1994 and 2004.

The amount of total GHG emissions in Thailand in 1994 was 278.17 million tons carbon dioxide equivalents (CO2eq) and increased to 292.62 CO2eq in 2000. The largest GHG contributor in 2000 was the energy sector which accounted for 54% of total GHG emissions, followed by Land Use, Land-Use Change and Forestry (LULUCF) emitted at 19% and agriculture at 18%. The emission rate during 2000-2004 had an average increase of 3.9% per year while the increase during 1994-2004 was 2%. Like Vietnam, Thailand is seeing a continual increase in annual energy consumption and hence GHG emissions from the energy sector.

Role of Governments and Challenges

The surveys found that the governments of Vietnam and Thailand are well aware of climate change. They have acknowledged its impacts, elevated its priority level on national agendas and also produced numerous policies and action plans. These actions have been taken despite the fact that Vietnam and Thailand are non-Annex I countries and have no obligation under the Kyoto Protocol to cut greenhouse gas emissions.

The Vietnamese government's commitment was explicit in its 2nd National Communication to the United Nations Framework Convention on Climate Change (UNFCCC) in 2010 and a series of policies that followed. The Socio-Economic Development Strategy for 2011-2020 considers 'environmental protection' and 'green growth' to be integral to achieving sustainable development. In 2011 the Vietnam National Climate Change Strategy (VCCS) was approved. It detailed the country's climate adaptation strategies so as to ensure public health, social well-being and the security of natural resources. A year later, approval of the Vietnam Green Growth Strategy (VGGS) followed declaring a mitigation commitment to reduce total GHG emissions by 1.5-2% per year against Business As Usual (BAU) levels by 2030.

Likewise, Thailand has several policies and plans for climate change. The 11th National Economic and Social Development Plan 2012-2016 states that the nation's development direction shall aim towards a low-carbon society. The Country Strategy adopted in 2012 has included climate mitigation under one of its four core strategies entitled 'green growth.' The Strategy has been used since 2013 as the common working direction for all ministries as well as for 2014 fiscal planning. The draft National Climate Change Master Plan 2013-2050, the country's most comprehensive plan of its kind, has also already been finalized, awaiting only official approval. As for more specific plans, the Thai government has developed the Alternative Energy Development Plan (AEDP) 2012-2021 and the 20-Year Energy Efficiency Development Plan (EEDP) 2011-2030 which altogether target GHG emission by 125 million tons per year.

The surveys also, however, revealed several problems with the above process which are common to both Thailand and Vietnam. The first issue is poor coordination. The various legal documents governing reduction of GHG emissions in Vietnam are noticeably differing in terms of their reduction targets and implementation periods. While the Business As Usual (BAU) path developed by the VGGS used 2010 as the base year and set the target until 2050, the final year of the target in the Study on Greenhouse Gas Reduction in Agriculture and Rural Area is 2020. Meanwhile the Study on Management of Greenhouse Gas Emissions, Management of Carbon Credits took a different approach and did not develop any BAU path. It appears that coordination among different government units has been rather poor, resulting in divergent targets and timelines despite the fact that these policies were approved by the same prime minister.

The process in Thailand may appear more coordinated having established the National Climate Change Policy Board, an overarching body on climate change chaired by the prime minister since 2007. As part of the coordination and reporting mechanism, Climate Change Coordinators have also been appointed in all ministries and the main government agencies. The coordination infrastructure in Thailand is indeed more concrete. However, in practical terms, the National Board has not been able to function very effectively. Meetings are irregular and in certain years convene only once. In the case of the draft National Climate Change Master Plan, although the draft has been finalized since the end of July 2013, approval of the National Climate Change Policy Board has not been possible because the cabinet was dissolved in December 2013. At present, Thailand has no functioning government to carry on this work.

The second drawback of the climate mitigation process in Vietnam and Thailand is the lack of concrete action plans and monitoring and evaluation mechanisms. While legal documents in Vietnam have outlined numerous implementation actions, e.g. awareness raising and mitigation strategies in key sectors, these actions are very general and vague — more accurately regarded as orientations. The Study on Management of Greenhouse Gas Emissions, Management of Carbon Credits, for instance, merely listed noble concepts such as promotion of energy efficiency, energy conservation and renewable energy. But it failed entirely to substantiate how goals would be achieved and what concrete actions they would entail. Coincidentally, there is neither monitoring nor an evaluation mechanism in place as yet. Accounting and accountability protocols are non-existent.

The same set of issues can be found in Thailand's 11th National Economic and Social Development Plan (NESDP). The Plan states that a low carbon society is the country's development direction, but no concrete actions and implementation measures have yet been laid out. At present, the country's development direction remains fossil fuel-oriented and resource-intensive; and increasingly so. This has much wider implications than one would expect because climate science is highly sophisticated. Vietnam and Thailand as they are now do not have all the necessary resources and capacities to carry out sound and effective mitigation actions. Much more research, much more technology and much more finance are needed. The lack of concrete action plans could perpetuate the vicious cycle of inadequacy, lack of readiness and inaction — keeping the countries marooned in this trap while the climate bomb is ticking.

Role of Non-State Actors and Unorthodox Alliances

An interesting feature of the Thai Survey is the growing role of the private sector and civil society in the climate process. Although Thailand is a non-Annex I country, more and more businesses anticipate that Thailand will eventually have to participate in the effort sharing. A few have already developed strategies in preparation. Large industries, for instance, have focused more attention on energy efficiency and energy saving, adopting new technology and fine-tuning the production process. Siam Cement Public Company (SCG), a Thai business conglomerate, conducted a GHG emission inventory study in 2006 and subsequently set a 10% annual reduction target for 2020 using 2007 as the base year. At present, SCG has already achieved the reduction of 4-5%. Similarly, Thai Public Broadcasting (TPBS) initiated a Green Office Policy in 2012 with an aim to reduce energy consumption. A working group was set up to work out the action plans. In 2013, the policy has been moderately successful in bringing down the monthly electricity bill by 100,000 baht. In the second phase, the scheme will expand to include water, paper and food consumption. From these two examples, it should be noticeable that GHG reduction actions not only reduce emissions but can also cut production costs and improve the public image of the businesses involved. The incentives are not only environmental but also economic and social.

Nonetheless, there are still many obstacles. While it is environmentally sound and financially attractive for big businesses to invest in mitigation actions, the story for small and medium enterprises (SMEs) can be quite different. SMEs generally do not see themselves participating in the effort sharing. Their relatively small carbon footprint is a common justification. But it is also because of the lack of sound economic incentives. Green technology is often expensive. SMEs' access to capital is much more limited and their payback period is much longer. The PR and CSR reasons are also less relevant to them.

In addition to movement in the private sector, community-based initiatives are emerging in many parts of the country. Many communities are adopting climate-friendly practices such as organic agriculture, renewable energy and local food production. Some have also set up a community weather forecast center to support climate adaptation efforts. Promising models presented in the Thai Survey are: Muang Klang Municipality in Rayong Province with its renewable energy, waste management, public transportation and food mile reduction projects; Mae Tha Subdistrict in Chiang Mai province with its community economy development, forest conservation and afforestation, fertilizer reduction and renewable energy projects; and a nationwide network of organic agriculture communities led by the Agri-nature Foundation. The biggest incentives here, the Survey noted, are not so much the 'save the planet' mindset, but more the economic incentives — securing livelihood, reducing household expenses and sourcing additional income. But they certainly do have climate mitigation values.

This bottom-up movement is scaling up to the national level. In 2008, about 10 non-governmental organizations (NGOs) formed a national coalition, the Thai Working Group for Climate Justice (TCJ), to consolidate their bargaining power in national policy planning and to scale up their advocacy for public awareness and public participation. In 2011, the coalition led a march to Government House demanding cancellation of the draft National Climate Change Master Plan, which was deemed to be exclusive of public participation and spurious. The coalition called for a new, inclusive drafting process. The Prime Minister consequently conceded and discarded the draft. In the new process, a number of public hearings were held including six major hearings in all regions of Thailand.

In Defining Fair Effort Sharing

The interview processes conducted by the two Surveys illustrated an inherent difficulty in reaching a firm agreement concerning climate mitigation targets and fair effort sharing at a national level. In Vietnam, mitigation targets exist in many policy documents but they do not quite correspond to one another. They differ in terms of both targets and of the basis on which they were developed. In the interview, the target set in the Vietnam Green Growth Strategy (VGGS) is deemed the most realistic, seemingly because it is the most modest of all. The documents endorsed by the Ministry of Natural Resources and Environment (MONRE) with more ambitious targets are criticized for being unfeasible and should be treated as reduction potential as opposed to reduction goals. The documents developed by the Ministry of Agriculture and Rural Development (MARD) with the most ambitious goals are rejected by many of the interviewees as impractical and more like 'wishful thinking.'

The Thai Survey carried out the interview guided by three effort sharing proposals: (1) equal shares, (2) convergence and (3) multifactorial determination. The equal shares of the mitigation efforts are regarded as being the most straightforward and can potentially keep the time-consuming negotiation process to a minimum. Unfortunately, the same simplicity also makes the approach inherently unfeasible as it is very unlikely that all the world's countries would agree on a single figure. Reaching an agreement under the convergence approach (i.e. moving from different shares towards a common share) is already very difficult, though more plausible according to interviewees.

The multifactorial determination approach, according to the Surveys in Vietnam and Thailand, is the most favorable among all the options of effort sharing, taking into consideration the complexity of climate science and the sluggish nature of climate negotiations. With this approach, a decent set of factors such as historic GHG emissions, potential reduction of GHG emissions and the development threshold of the country shall be taken into account when determining emissions reduction targets. Both Surveys suggested further that effort sharing discourse shall be localized, that is, taking it down to the sectoral level, community level and household level. These localized initiatives can be undertaken even without the national target having been in place. After all, the real solutions to climate change, the Thai Survey asserted, would have to involve all stakeholders and all actors in society. Localizing the effort sharing discourse has great potential for moving the climate process forward not only at local but also global level. For this reason, this approach should be explored further.

Conclusion

While the question of fair effort sharing remains unsettled, it is unanimously agreed that climate change is a problem and does indeed need to be addressed. The governments of Vietnam and Thailand have ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1994 and the Kyoto Protocol in 2002, have included climate mitigation in their national agendas and have produced a number of legal documents.

As for non-state actors, Thailand is seeing growing roles for the private sector and civil society in national climate change conversation. Thai businesses are becoming more attracted to the economic incentives that green schemes can offer. As a matter of fact, some are already capitalizing on energy savings and an improved corporate image, so are now scaling up the schemes. At the same time, NGOs and academics are demanding more ambitious and genuine national mitigation targets and are advocating mitigation instruments such as carbon tax. Community-based and small-scale initiatives are emerging in many parts of the country. Alliances of unorthodox actors are coming forth into the effort sharing arena.

In Vietnam, the roles of non-state actors are minimal due to the political nature of the country. The climate mitigation process in Vietnam is largely led by the government. Some selective groups of non-state actors can engage in the process but mostly to assist the government. One of the Vietnamese interviewees, for example, works for a private consulting company, but the work is done for the purpose of supporting the Ministry of Industry and Trade (MOIT) to develop a green growth energy and emissions scenario.

Challenges

Climate mitigation efforts are facing many challenges. Below are the key challenges as presented in the Surveys. These challenges revolve around issues of consistency, coordination, measurement, capacity and inclusion.

National policies appear to be fragmented and almost conflicting. The development towards a 'low carbon society' is set forth in Thailand's National Economics and Social Development Plan (NESDP), but the existing production structure of the country is still largely energy- and resources-intensive and development is defined in the form of megaprojects with high potential for environmental destruction. In Vietnam, the Socio-economic Development Strategy 2011-2020 has set the country's development orientation towards modernization and urbanization with industrialization as the driver. This has raised concerns over increasing energy consumption and GHG emissions levels.

Thailand and Vietnam have ratified key international conventions on climate change and produced a good number of national policies accordingly, but coordination among the various instruments at various levels is rather poor resulting in ineffective implementation and, in many cases, inaction. There are also currently no effective assessment and accountability protocols in place to monitor, assess and fine-tune implementation. Little progress has been made as a result.

The lack of capacity and resources is a common hindrance for both Vietnam and Thailand to participate effectively in the effort sharing. This ranges from awareness to technology and financing. People are disinterested. Climate science is sophisticated. Local expertise is lacking. Green technology is expensive. The GHG database is underdeveloped. Financing mitigation actions is facing many constraints. The list goes on.

In Vietnam, the mitigation effort is largely led by the government. The targets are governed by the Prime Minister's decisions which have high enforceability. But the emissions reduction directions in different legal documents vary causing confusion among practitioners about which one to follow.

In Thailand, the 'programming' approach (i.e. policy setting, planning and implementation) largely dominates the climate mitigation process and it has turned GHG emissions reduction into an end in itself. This has seriously hindered potential participants in seeing the various co-benefits that the process offers. Businesses do not see a sound return on their investment. Communities would rather focus on other obvious priorities. Local authorities cannot make it appealing to their constituency. Emissions reductions have been perceived as being an additional, unnecessary burden.

Guideline for actions

To make climate mitigation work and be effective, the aforementioned challenges must be addressed. The two Surveys provided a guideline in this regard as below.

I) Fundamental Principles

The Surveys call for a comprehensive national study and systemic policy tools. The National Communications (NC1 & NC2) as have been done in Vietnam are insufficient. The study has to go beyond a traditional framework of climate change and assess technology, social and economic dimensions as well. Policies associated with contentious ideologies such as consumerism and populism have to be reviewed in relation to climate mitigation. Policy directions need to be clarified and consistent. Systemic policy tools and a mechanism need to be in place to ensure effective implementation.

An as alternative to the programming approach which has proven to be increasingly ineffective, the Thai Survey endorses an 'emerging' approach. As opposed to prescribing, this approach argues that effective solutions should emerge out of the interests of the participants. In other words, solutions should be built up on multifaceted benefits relevant, specific and convincing to each of the actors (government, business, civil society, community, etc.) and sectors (agriculture, energy, manufacturing, transportation, etc.).

II) Economic approach

The power of economic incentives is one of the most interesting findings in both of the Surveys. It appears that people who are generally aware of the reality of the impact of climate change are disinterested in participating in climate mitigation action per se. The failing Low Carbon Municipality Project undertaken by the National Municipal League of Thailand (NMLT) with support from the European Union was a good lesson learned. Out of all the 2,000 invitations, only 100 municipalities agreed to participate. Participation only improved after financial incentives were introduced into the project at the second phase. Economic incentives — reduced expenses, cost reductions, increased income — appear to motivate mitigation actions better than the call of the environment.

As opposed to positioning GHG emissions reduction as an end in itself, this approach highlights the co-benefits — economic, social and environmental. This approach can make climate mitigation more relevant and convincing to participants. The economic co-benefit in particular is key to the continuity and expansion of the process.

III) Information Database

The Surveys underline that policy by itself is not enough. Concrete action plans, an implementation mechanism, assessment and accountability protocols are needed. They need to be well coordinated and consistent. Fragmented policy directions hinder not only climate mitigation efforts but also development goals in general. To this end, the Surveys have discussed several facilities that could perhaps be bound together to create 'a national database facility.' The Vietnamese Survey points to ongoing confusion in mitigation discourse in Vietnam and calls for well-defined organization of policies and legal documents so as to reflect their hierarchy and relations.

The Thai Survey emphasizes the importance of the 'co-benefit' dimension of mitigation actions and best practices emerging in the private sector. It suggests a compilation of these best practices and co-benefits, specific to the national context and to each of the sectors. The Vietnamese Survey specifically endorses a system known as Measuring, Reporting and Verification (MRV) which can be used to guide this national facility. MRV is a term used to describe all measures which states take to collect data on emissions, mitigation actions and support, to compile this information into reports and inventories, and to subject these to some form of international review or analysis. This national database will ensure clarity, consistency and transparency on the current level of emissions and the ambition of efforts. It will also facilitate the planning process as well as determine progress towards implementation.

IV) Localized Participants

The overall international climate process is slow and attempts to define national fair shares have been sluggish. But key sectors and local actors can take the initiative and determine their appropriate fair shares without waiting for national targets to have been set up first. At the sectoral or local scale, they can localize emissions factors and inventory and determine their own mitigation potential and actions. After all, the real solution to climate change, the Thai Survey asserts, would have to involve all stakeholders and all actors in society. Localizing the effort sharing discourse has significant potential in moving the currently sluggish global climate process forward. In fact, many bottom-up initiatives in the private sector, civil society, local communities and local governments have already proved to be fruitful.

To name a few examples, Siam Cement Public Company (SCG) has produced its own GHG inventory and set the GHG emissions reduction target at 10% by the year 2020. By the end of 2013, the reduction has already reached 4-5%, half way towards the target. The Institute on Environment and Industry (IEI) is developing a GHG inventory specific to the various industrial sub-sectors in the country. The inventory of raw materials and the product sub-sector has already been completed. IEI is also advocating the adoption of carbon footprint labels and energy audits among members. In contrast to the international climate process, these initiatives are much more timely and they have shown promising potential. They should be continued, empowered and scaled up.

V) Enabling Environment

The Thai Survey proposes that focal bodies, such as the Thailand Greenhouse Gas Management Organization (TGO) and The Office of Natural Resources and Environment Policy and Planning (ONEP) in Thailand, should develop mechanisms and incentives that would better engage all stakeholders to take climate mitigation actions. The various options discussed in the Surveys are: financial measures such as environmental taxes, public campaigns aiming to change the unsustainable production and consumption paradigm of society, and information exchange through regional platforms such as the Asia LEDS Partnership (ALP), a regional network comprised of individuals and organizations from the public, private, and non-governmental sectors active in designing, promoting, and/or implementing LEDS in Asia.

The private sector and civil society sector also have their shares, in partnership with the government. All actors must support and inspire one another, as opposed to jeopardizing. Every actor must be aware of the dynamism of the mitigation process and realize the power of synergy that they could produce together. With an optimal enabling environment, the appropriate share of the country can significantly increase, along with the feasibility, effectiveness and overall benefits.

VI) Financing & capacity building

The Vietnamese Survey suggests that GHG commitments should be made strategically to draw the attention of international communities and to take advantage of mechanisms governed by international instruments such as the Kyoto Protocol. They should also be strategic so as to attract investment into the areas relevant to climate mitigation such as renewable energy development and energy efficiency improvement. This change in the process would lessen the stress on the national budget towards other development agendas.

The lack of knowledge and understanding especially of the complexity of and tools for climate mitigation, as found in the Thai Survey, should be addressed. Attention should be paid to capacity building particularly in terms of the central government units leading the mitigation process; and this should progressively filter down to local levels. In an ideal environment, central government can effectively direct and coordinate the process; the local authorities are able to mainstream the effort sharing agenda in the general development (economic, social and environment) of the province.

Annex

Recommendation by Green Innovation and Development (Green ID)

- With development orientations towards modernization and urbanization as specified by the socio-economic development strategy 2011-2020, priority will be given to industrialization, selection of high technologies, energy efficiency and development of new and renewable energy sources to meet this development strategy. In this regard, selection of technology should receive significant attention, in particular in terms of energy consumption and therefore GHG emission levels. At present, energy efficiency is low due to backward technologies and poor energy management
- The commitment of GHG reduction would encourage investment in the related areas (renewable energy development, for example), thus lessening the burden on the national budget. From this perspective, policies to support this kind of investment and to ensure healthy levels of investment capital should be in place.
- The prioritized investment in industrial development and energy would bring about a reduction in the amount of harmful solid waste and waste water discharge. This together with financial measures (e.g., environment taxes or fees) and awareness raising programs, will gradually change the consumption habits of communities and industries contributing to establishment of a sustainable society.
- Another necessary activity is to enhance capacity for central government organizations in planning and designing programs; capacity building also badly needs to be addressed in provincial departments and agencies for identifying prioritized areas for GHG emission reduction in order to set targets and to mainstream targets in socio-economic development of the province.
- Information and experience exchanges in GHG emission efforts (both achievements and failures) between ministries, provinces in particular with CSOs should be created to save resources and to share and foster bottom-up initiatives and good practices.

Recommendation by Healthy Public Policy Foundation (HPPF)

- Academics and all other stakeholders, who are supporting more mitigation actions in Thailand, should develop the analysis and database of the co-benefits of mitigation actions in the Thai context for each sector, such as energy efficiency, agriculture, transportation, waste management, and urban development, and communicate to the stakeholders and to the public.
- The key stakeholders, especially government, private, and civil society sector, should support companies, organizations, and networks, who are proactive and whose projects or activities have resulted in inspiring a reduction in GHG emissions, both in terms of capacity building and resources, in order to expand or scale up their projects or activities.
- The government sector, led by relevant ministries in cooperation with ONEP and TGO, should develop mechanisms and incentives that enable mitigation actions by various stakeholders. Key examples are decentralization of the Energy Conservation Fund to the provincial level and the Standard Offer Program for energy efficiency.
- The private sector, particularly the Federation of Thai Industries, should create more best practices on mitigation actions in different business sectors, levels, and sizes and communicate to Small and Medium Enterprises (SMEs), as well as to the public.
- Local government and civil society, such as the Thai Climate Justice Network, the Low-carbon Municipality project and Agri-nature network, should initiate and facilitate more mitigation actions that are appropriate to each organization, network, or local community, and mobilize social awareness to support more mitigation actions in society.Background information on the Global Greenhouse Gas situation and reduction

Background information on the Global Greenhouse Gas situation and reduction

An excerpt from the Thai Survey by HPPF.

In 1992, the United Nations Framework Convention on Climate Change (UNFCC) was adopted as the basis for a global response to the problem. The ultimate objective of the Convention is to achieve "stabilization of greenhouse gas concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system". Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.[4]

In November 2012, the United Nations Environment Program disseminated The Emissions Gap Report 2012 that indicated greenhouse gas (GHG) emissions around the world. It is indicated that the trend of the amount of the world's GHG emissions has increased since 1970-2010 and the amount of the world's GHG emissions in 2010 was 49-50 billion tons of carbon dioxide equivalent.[5]
The atmospheric concentration of CO2 has risen from 278 ppm pre-industry to 391 ppm in 2012, with a recent increasing rate of 1.8 ppm per year and has tended to increase continually, resulting in increasing global temperatures above 0.7°C.[6]

In Doha, Qatar, on 8 December 2012, the "Doha Amendment to the Kyoto Protocol" was adopted. The new commitments for Annex I Parties to the Kyoto Protocol agreed to take on commitments in a second commitment period from 1 January 2013 to 31 December 2020. During the first commitment period, 37 industrialized countries and the European Community committed to reduce GHG emissions to an average of five percent compared with 1990 levels. During the second commitment period, Parties committed to reduce GHG emissions by at least 18 percent below 1990 levels in the eight-year period from 2013 to 2020 but this amendment has not entered into legal force. However, the composition of Parties in the second commitment period is different from the first.[7]

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4 *United Nations. (1992)*
5 *UNEP. (2012)*
6 *World Bank. (2012)*
7 *UNFCCC. (2013) Kyoto Protocol.*

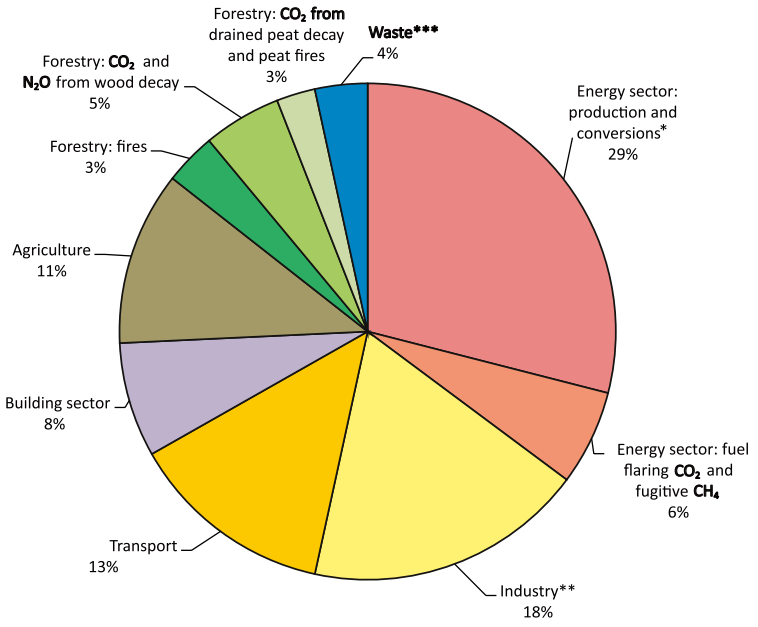

Figure: Global greenhouse gas emissions in 2010 by main sector (Source: UNEP, 2012)

The 37 parties with binding targets in the second commitment period are Australia, the European Union (and its 28 member states), Belarus, Iceland, Kazakhstan, Liechtenstein, Norway, Switzerland and Ukraine. However, Belarus, Kazakhstan and Ukraine have stated that they may withdraw from the Protocol or not legally enforce the Amendment with second round targets. Japan, New Zealand and Russia have participated in Kyoto's first-round but have not taken on new targets in the second commitment period. Other developed countries without second-round targets are Canada (which withdrew from the Kyoto Protocol in 2012) and the United States (which has not even ratified the Protocol).

The treaty recognizes that developed countries have contributed the most to the anthropogenic build-up of carbon dioxide in the atmosphere (around 77% of emissions between 1750 and 2004), and that carbon dioxide emissions per person in developing countries (2.9 tons in 2010) are on average, lower than emissions per person in developed countries (10.4 tons in 2010)[8]

However, there are 53 developing countries that already have their National Appropriate Mitigation Actions (NAMAs) and have also already launched their pledges such as Indonesia, Cambodia, Singapore, India, China, Brazil, South Africa, Bhutan, the Maldives, etc.[9]

Even though all these proposed NAMAs will be fully adopted by a number of countries, our globe is still in crisis. It estimates that if GHG emissions continue to grow, the global surface temperature could rise by more than 4°C in 2100.[10]

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9 UNFCCC. (2013) Kyoto Protocol.
10 World Bank. (2012)

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Climate Mitigation Effort Sharing in Mekong

In Pursuit of Greenhouse Gas Reductions in Vietnam and Thailand

Climate change is a pressing global issue but the confusion and lack of clarity surrounding it are hindering inclusive dialogues and effective solutions.

In the Mekong region, the biggest emitters of greenhouse gases are the biggest economies namely Thailand and Vietnam. The governments of both countries are well aware of climate change. They have acknowledged its impacts, elevated its priority level on national agendas and also produced numerous policies and action plans. There are, however, several problems related to tackling climate change which are common to both Thailand and Vietnam.

This report is a synthesis written based on two Surveys: The Survey and Assessment of The Appropriate Share of Climate Change Mitigation Actions in Developing Countries: The Case of Thailand by Healthy Public Policy Foundation (HPPF) and The Assessment of policies on GHG mitigation in Vietnam by Green Innovation and Development (Green ID).

This synthesis outlines the key findings of the two Surveys, discusses the main common ground and differences and concisely presents conclusions and recommendations.

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