# UNDP Project Document Format Royal Thai Government

United Nations Development Programme

# ENABLING ACTIVITIES FOR THE PREPARATION OF THAILAND'S SECOND NATIONAL COMMUNCIATION TO THE UNFCCC

#### **Brief description**

The objective of this project is to enable Thailand to prepare its Second National Communication under decision 17/CP7 of the United Nations Framework Convention on Climate Change. The SNC will build upon previous studies and the stocktaking exercise, based on the UNFCCC Guidelines. The project will be carried out by Ministry of Natural Resources and Environment in the most efficient and effective manner under the guidance of PSC and the National Climate Change Sub-committee. The main components of the projects are (a) GHG inventory for 2000, (b) Measures to facilitate adaptation to climate change, (c) Measures to mitigate climate change, (d) Relevant information to achieve the objective of the Convention including development and transfer of technology, education, training and public awareness and capacity building (e) Gaps and constraints and related financial, technical and capacity needs. The preparation of the SNC is expected to enhance general public awareness and knowledge, to integrate measures to address climate change into national sustainable development process of Thailand and to strengthen the cooperation between Thailand and other Parties to achieve the ultimate objective of the UNFCCC

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#### **Acronyms**

ALGAS Asian Least-cost Greenhouse Gas Abatement Studies

APF and NAPA Adaptation Policy Framework and National Adaptation Plan of Action

CDM Clean Development mechanism

COP Conference of Parties
CTA Chief Technical Advisor
EAII Enabling Activities II

ESTs Environmentally-Sound Technologies

GCMs General Circulation Models

GCOS Global Climate Observation System
GEF Global Environment Facilities

GHG Green House Gas

GPG Good Practice Guidance
INC Initial National Communication

IPCC Intergovernmental Panel on Climate Change

NAI parties Non-annex I parties NFP National Focal Point

NGOs Non-governmental Organizations

PSC Project Steering Committee

QA/QC Quality Assurance/Quality Control SNC Second National Communication

TOR Terms of Reference

UNDP United Nations Development Programme

UNDP-CO UNDP Country Office

UNFCCC UN Framework Convention on Climate Change V&A and mitigation Vulnerability and Adaptation and mitigation

#### 1. Elaboration of the Narrative

#### 1.1 Situation Analysis

Located in the southeastern region of the Asian mainland, Thailand is rich of highly diversified biological resources. The tropical climate of the country also makes it one of the most vulnerable to the adverse effects of climate change. Being a developing country, the capacity to adapt to climate change of Thailand is relatively limited. As agricultural and tourism based economy of more than one-half of its population heavily relied upon, vulnerability to climate change is even more serious, especially where adaptive capacities are extremely limited.

Since the ratification of the UN Framework Convention on Climate Change (UNFCCC) in 1995, Thailand has actively participated in the Convention process. Under the Convention principles, Thailand has aggressively implemented policies and measures to conserve energy and increase its efficiency. Regulatory, fiscal and monetary policies have been introduced to reduce the consumption of fossil fuels and increase the use of renewable energy such as the Energy Conservation Act, fiscal and monetary incentives for alternative energy.

Under the Convention process, Thailand submitted its Initial National Communication to the UNFCCC in 2000. It also received financial support to maintain its national capacity under the Enabling Activities II. Thailand also participated in bilateral and multilateral cooperation in climate change research.

Despite of more than a decade of capacity development in climate change, there are still many areas that need to be developed in Thailand. Among them are research capacity building in vulnerability and adaptation to climate change, climate variability and extreme events, and development and transfer of technology to address climate change, especially on adaptation and mitigation. General public understanding and participation in climate change has to be accelerated.

The second national communication of Thailand is a continuation of activities performed under the initial national communication (1998-2000) and enabling activities phase II (2000-2002). It will directly or indirectly address above capacity issues through strengthening country's technical and institutional potential for integration of climate change concerns in sectroral and national development priorities.

#### 1.2. Strategy

To maximize benefits from the SNC, the basic strategy for preparation of the SNC is to build upon the experiences gained from the preparation of the Initial National Communication. The national experts will be fully utilized and their capacities further enhanced to effectively develop the communication. Project development will be guided by a steering committee. The steering committee will comprise of representatives of relevant ministries, experts from academic and research institutes, NGOs and representatives of private sector. More specifically, the steering committee will comprise of representatives from ministries related to issues addressed in the SNC, including energy, agriculture, forestry, natural resources and environment, economics etc. Experts would be selected from academic and research institutes that have been involved in climate change process, particularly UNFCCC and IPCC.

To ensure the integration of climate change issues into the national sustainable development process, another strategy is to ensure consistency and timely information flow between project task forces, advisory and policy levels. The institutional framework will be established to ensure that the results would be integrated into the national sustainable development process effectively.

Thailand has strongly committed to regional and international cooperation in climate change. As national capacity is enhanced, it is envisaged that Thailand would further actively contribute to subregional and regional cooperation in climate change, especially in research and development.

#### 1.3. Management Arrangements

For management arrangements see Appendix B, section 5: Institutional Framework for Project Implementation.

#### 1.4 Monitoring and Evaluation

#### Monitoring responsibilities and events

A detailed schedule of project reviews meetings will be developed by the project management, in consultation with project implementation partners and stakeholder representatives and incorporated in the Project Inception Report. Such a schedule will include: (i) tentative time frames for Steering Committee Meetings, (or relevant advisory and/or coordination mechanisms) and (ii) project related Monitoring and Evaluation activities.

<u>Day to day monitoring</u> of implementation progress will be the responsibility of the Project Coordinator, Director or CTA (depending on the established project structure) based on the project's Annual Workplan and its indicators. The Project Team will inform the UNDP-CO of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion.

<u>Periodic monitoring of implementation progress</u> will be undertaken by the UNDP-CO through quarterly meetings with the project proponent, or more frequently as deemed necessary. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities.

#### **Project Monitoring Reporting**

The Project Coordinator in conjunction with the UNDP-GEF extended team will be responsible for the preparation and submission of the following reports that form part of the monitoring process.

#### (a) Inception Report (IR)

A Project Inception Report will be prepared immediately following the Inception Workshop. It will include a detailed First Year Work Plan divided in quarterly timeframes detailing the activities and progress indicators that will guide implementation during the first year of the project. The Report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12 months time-frame.

The Inception Report will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may effect project implementation.

When finalized the report will be circulated to project counterparts who will be given a period of one calendar month in which to respond with comments or queries. Prior to this circulation of the IR, the UNDP Country Office and UNDP-GEF's Regional Coordinating Unit will review the document.

#### (b) Quarterly Progress Reports

Short reports outlining main updates in project progress will be provided quarterly to the local UNDP-CO and the UNDP-GEF regional office by the project team.

#### (c) Technical Reports

Technical Reports are detailed documents covering specific areas of analysis or scientific specializations within the overall project. As part of the Inception Report, the project team will prepare a draft Reports List, detailing the technical reports that are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary this Reports List will be revised and updated, and included in subsequent APRs. Technical Reports may also be prepared by external consultants and should be comprehensive, specialized analyses of clearly defined areas of research within the framework of the project. These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.

#### **Audit Clause**

The Government will provide the Resident Representative with certified periodic financial statements, and with an annual audit of the financial statements relating to the status of UNDP (including GEF) funds according to the established procedures set out in the Programming and Finance manuals. The Audit will be conducted by the legally recognized auditor of the Government, or by a commercial auditor engaged by the Government.

#### 1.5 Legal Context

This Project Document shall be the instrument referred to as such in Article I of the Standard Basic Assistance Agreement between the Government of Thailand and the United Nations Development Programme, signed by the parties on 4<sup>th</sup> of June 1960. The host country implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government co-operating agency described in that Agreement.

UNDP acts in this Project as Implementing Agency of the GEF, and all rights and privileges pertaining to UNDP as per the terms of the SBAA shall be extended mutatis mutandis to GEF.

The UNDP Resident Representative is authorized to effect in writing the following types of revision to this Project Document, provided that he/she has verified the agreement thereto by GEF Unit and is assured that the other signatories to the Project Document have no objection to the proposed changes:

- a) Revision of, or addition to, any of the annexes to the Project Document;
- b) Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation;
- c) Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and
- d) Inclusion of additional annexes and attachments only as set out here in this Project Document.

# 2. Total Budget and Workplan

Award ID	00041960
Award Title	Pims 2968 CC EA: Enabling Activity for the Preparation of Thailand's Second National Communication to the UNFCCC
Project ID	00048011
Project Title	Pims 2968 CC EA: Enabling Activity for the Preparation of Thailand's Second National Communication to the UNFCCC
<b>Executing Agency</b>	Ministry of Natural Resources and Environment

EXPECTED	OUTPUTS (and corresponding	RESPONSIBLE PARTY	PLANNED BUDGET											
Outcomes	indicators)		Source of Funds	Budget Code	Budget Description	Year 1 (US\$)	Year 2 (US\$)	Year 3 (US\$)	Total Budget (US\$)					
National	National Circumstances	MONRE	GEF	71300	Local consultants			8,000	10,000					
Communication				72100	General Operating expenses			2,000						
	National Greenhouse Gas	MONRE	GEF	71300	Local consultant	15,000	15,000	10,000	100,000					
	Inventories			71600	Travel	10,000	8,000	7,000						
				72100	General operating expenses	4,000	3,000	3,000						
				72200	Equipment & furniture	10,000	3,000	3,000						
				72400	Communication and audiovisual equipment	5,000								
				74000	Miscellaneous operating expenses	2,000	1,000	1,000						

Programmes containing	MONRE	GEF	71300	Local consultant	15,000	15,000	10,000	110,000
measures to facilitate adequate adaptation to climate change			71600 72100	Travel General operating	13,000	10,000	7,000	
chinate change			72100	expenses	7,000	6,000	5,000	
			72200	Equipment & furniture	10,000			
			72500	Supply	3,000	3,000	2,000	
			74500	Miscellaneous	1,500	1,500	1,000	
Programmes containing measures to mitigate	MONRE	GEF	71300	Local consultant	8,000	5,000	2,000	40,000
climate change			71600	Travel	6,000	5,000	3,000	
			72100	General operating expenses	3,000	2,000	2,000	
			72500 74500	Supply Miscellaneous	1,000 1,000	1,000	1,000	
Other relevant information (e.g.	MONRE	GEF	71300	Local consultant	4,000	5,000	3,000	20,000
research and systematic			71600	Travel	1,000	1,000		
observation, technology			72100	General operating	3,000	1,500	1,500	
transfer, education and public awareness, capacity building)				expenses				
Constraints & Gaps; Related Financial,	MONRE	GEF	71300	Local consultant		4,000	3,000	10,000
technical, & capacity needs			72100	General operating expenses		1,500	1,500	
Technical Assistance	MONRE	GEF	71200	International consultant	7,000		3,000	10,000
Compilation, Production of communication,	MONRE	GEF	71300	Local consultant	1,500	1,500	7,000	15,000
including Executive Summary & its translation			72400	Communication and audiovisual equipment	2,000	3,000		

	Project Management	MONRE, UNDP-CO	GEF	71400	Contractual services/individual	18,000	18,000	18,000	75,000
				72400	Communication and audiovisual equipment	5,000	5,000		
				72100	General operating expenses	2,500	2,500	2,000	
				74500	Sundry	1,000	2,000	1,000	
	Monitoring and reporting	MONRE, UNDP-CO	GEF	74100	Management and reporting	5,000	5,000	5,000	15,000
Total						164,500	128,500	112,000	405,000

# 3. Appendices

#### **Appendix A: Summary report of the self-assessment exercise**

#### The process and approach adopted for the stocktaking exercise

The main objective of the stocktaking exercise was to review development of climate change activities carried out since the INC. There were 4 main steps in the process of stocktaking exercise in Thailand. They are (1) preparation of a background paper on status of climate change development in Thailand; (2) organization of a brainstorming workshop on national communication; (3) preparation of a draft SNC proposal and (4) organization of a stakeholder consultation workshop on SNC proposal

The UNFCCC Guidelines was used as a basis to prepare the background paper. Documents on climate change research and other relevant reports on climate change activities were collected and reviewed. The status of activities corresponding to the sections in the guidelines was summarized. This included national circumstances, national inventory, general description of steps taken or envisaged to implement climate change (V&A and mitigation); other information (technology transfer, research and systematic observation network, education, training and public awareness, capacity building and information and networking); constraints and gaps and related financial, technical and capacity needs. In addition to the report of climate change related studies and activities carried out or being undertaken, the background paper also touched upon the lessons learned, gaps and uncertainties. New areas of studies to improve the information was identified and prioritized.

To ensure the coverage, comprehensiveness and up-to-date of the issues addressed, selected climate change experts, relevant public agencies and NGOs, including those involved in the INC preparation were invited to a brainstorming workshop. Each section was discussed, gaps were identified and priorities of areas per guidelines were proposed. The comments and suggestions from the brainstorming workshop were used to develop the draft SNC proposal.

The results of the stocktaking exercise generated essential information for the preparation of project proposals for SNC, especially on progress and gaps. The stocktaking helped to ensure the SNC would be built on previous activities, studies, experiences, and institutional settings. This exercise identified gaps and needs for further studies. Such information is important for the preparation of SNC.

#### Institutions and individuals involved

In the brainstorming workshop, selected experts and representatives of relevant government agencies, academic institutes, private sector and NGOs were invited to provide comments on the background papers. Among them were:

- Office of Natural Resource and Environmental Policy and Planning
- Royal Forest Department
- Meteorological Department

- Department of Industrial Works
- Universities
- Industrial Federation of Thailand
- World Wildlife Fund for Nature (Thailand)
- Thailand Environment Institute
- Thailand Development Research Institute
- Ministry of Energy
- Pollution Control Department
- Ministry of Agriculture and Cooperatives
- Ministry of Foreign Affair
- Office of Transport and Traffic Policy and Planning
- Department of Marine and Coastal Resources
- Office of National Economic and Social Development Board
- Thailand Research Fund
- Bureau of Environmental Health
- Southeast Asia START Regional Center

#### Number of workshops or consultation carried out

While communication with climate change experts was carried out during the course of preparation of background paper and stocktaking process, two formal workshops were also carried out – a brain storming and a stakeholder consultation workshop.

#### Main outcomes of the stocktaking, including priorities identified

In the stocking process, consultations were carried out by section indicated in the UNFCCC Improved Guidelines. The issues covered in the INC of Thailand were mostly consistent with those in the Guidelines (Table 1). The main outcomes obtained were summarized below.

Table 1 Items reported in the INC and the suggested list in the Improved Guidelines

Chapter in the INC	Sections listed in the UNFCCC Improved
	Guidelines
National Circumstances	National Circumstances
Inventory of Greenhouse Gases Emission in 1994	National Greenhouse Gas Inventory for 2000
Greenhouse Gas Projections and Mitigation Options	General Description of Steps taken or envisaged to Implement Climate Change  • Measures to facilitate adequate adaptation to climate change  • Measures to mitigate climate change
Vulnerability and Adaptation	
Policies and Measures	
Financial Resources, Technology Transfer and Capacity Building	Other information
Education and Public Awareness	
	Constraints and Gaps and Related Financial, Technical and capacity needs

#### **National Circumstances**

The national circumstances described in the INC described the physical and biological conditions and demographic and socio-economic profile of Thailand. As energy was the important factor fostering sustainable development, energy profile was also provided. Socio-economic development during the 1990s was discussed. Thailand faced serious economic crisis during this period. Secondary data from various government agencies were used. In preparing the national circumstance section, the draft paper went through the review by relevant government agencies through workshops and informal consultation.

In stocktaking, it was generally agreed that based on the experiences in the INC preparation, secondary data in Thailand should be sufficient to prepare the section of national circumstances. Similar profiles could be used with the emphasis of the progress made during the period after which provided in the INC.

#### **National GHG Inventory**

Preparation of national GHG inventory for 1994 was the most important part of the INC. Many experts were involved in the preparation. Thailand had experiences in GHG inventory from several projects carried out prior to the preparation of the INC. Thus, capacity to derive GHG inventory in Thailand had been developed. A team of five experts in different areas from academic institutes who had experiences from earlier studies, with the support from relevant government agencies, were the main researchers for inventory section. Their draft reports were reviewed by a group of reviewers from

relevant parties. During the period of INC preparation, training in GHG inventory preparation for relevant government agencies was also organized.

The 1994 national GHG inventory of Thailand covered six GHGs (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, CO, NOx and MNVOC). The inventory followed the dummy table provided in the UNFCCC Guidelines. Five sectors were covered – energy, industrial process, agriculture, land use change and forestry and waste. Default emission factors provided by IPCC were used. Activity data were obtained from national statistics. Review of the 1994 GHG inventory study revealed a number of shortcomings that common among NAI parties i.e. the lack of local emission factors and activity data. Uncertainty management or improvement of QA/QC for key sector (such as rice and livestock, land use change and forestry, and waste) would be useful for the preparation of the SNC.

Since the submission of the INC, Thailand has carried out several projects in which development of inventory studies progressed. In national CDM strategy study, a 1998 GHG inventory was estimated using the 1996 IPCC Revised Guidelines. Study on status and development of local emission factors was carried out in EAII project. Several researches on local emission factors for rice were also carried out in the country.

Considering the development of inventory study and the types of GHGs and reporting tables of the UNFCCC Improved Guidelines, the stocktaking workshop participants suggested that:

- In addition to the three main GHGs, other types of GHGs should be covered to the extent that data and technical expertise permit.
- Emphasis should be given to improve the local emission factors, especially for rice, livestock and land use change and forestry
- Activity data for forestry sector needed more improvement, followed by rice, livestock and waste sector
- The estimated inventory would be a basis for developing emission projection of the country as well
- Related government agencies should carry out the GHG inventory estimation with the experts from academic institutes as advisors.

#### **General Description of Steps**

Two main topics in the general description of steps were discussed in the stocktaking process – Programs containing measures to facilitate adequate adaptation to climate change and programs containing measures to mitigate climate change.

Study on vulnerability and adaptation to climate change (V&A) in Thailand was conducted as early as 1980s. The uncertainties of the impact results were high. More studies were carried out in 1990s e.g. those under the US Countries study program and ALGAS. Various sectors were covered including forestry, agriculture, water resources and coastal areas. The results of the analysis were considered preliminary. The Uncertainties remained high. There has not been any substantial progress in V&A study since 1990s. The synergies among climate change, biodiversity and desertification in the context of V&A are new areas of interest.

Most research studies in climate change, including V&A were conducted in the form of cooperation between government agencies and researchers from academic and research institutes.

The review of vulnerability and adaptation (V&A) indicated the lack of progress in this area for Thailand. The earlier studies indicated the serious limitations of global General Circulation Models (GCMs) in V&A analysis at country level. As concluded in the climate change technology need assessment in EAII, regional or sub-regional GCMs were needed to enhance reliability of impact scenario development. Lacking scientific and empirical knowledge on vulnerability and adaptation resulted in the serious short-coming of national capacity in addressing the issues.

The stocktaking workshop also discussed about the recent development in the studies of V&A to climate variation and extreme events. Thailand has not carried out such studies in the climate change context. Several points were made and areas for further development in V&A were proposed:

- Capacity enhancement on vulnerability and adaptation to climate change and climate variability and extreme events are of priority
- Capacity in APF and NAPA approaches in addressing V&A should be enhanced.
- Regional GCM should be used
- Sectors to be emphasized are agriculture, water resources, coastal areas and health.
- Studies on impact of sea-level rise and V&A of coastal areas should be enhanced

On programs and measures to mitigate climate change, Thailand has benefited from several studies since the 1990s. Development in this area was further enhanced by studies related to CDM issues. Energy, industry and forest were the three main sectors emphasized. Wider participation in studies on mitigation of climate change was observed. Besides academic, research institutes and government agencies, NGOs and private sector were also interested in issues related to mitigation of climate change.

The stocktaking exercise suggested areas for further development of climate change mitigation. They are:

- Mitigation potentials in other sectors, particularly agriculture
- More comprehensive benefit-cost analysis of mitigation options
- Socio-economic aspects of mitigation options

#### Other information

There are five areas of other information that suggested in the Guidelines – Technology transfer; research and systematic observation; education, training and public awareness; capacity building and information and networking.

Technology transfer has not been explicitly addressed in the INC or after. Thailand carried out a preliminary study on technology need assessment in EAII. However, they were not corresponding to the five themes specified under the development and transfer of technology of the Convention. In stocking process, participants recommended review and assessment of technology transfer should be carried out corresponding to the five themes under the Convention.

There was no specific discussion on research and systematic observation in INC. Systematic observation network at national level was reviewed in EAII. The status and potential development was discussed. Thailand also participated in development of regional systematic observation network carried out under GCOS. During the course of stocktaking, it was recommended that further

assessment should be made taking into account the progress on climate observation system of the country after the study of EAII.

On education, training and public awareness of climate change, Thailand has incorporated these areas in the promotion and campaign of natural resource and environmental conservation. Thailand just recently completed a study in development of framework for action plan to respond to Article 6 of the Convention. The results form a basis for further review of development in this area over the last few years.

Capacity building was recognized in the stocktaking process as a cross-cutting issue. Assessment of different areas above included the issue of capacity building, particularly in inventory, V&A, and education, training and public awareness. This issue will be taken from each section in the course of SNC preparation.

The last item of other information - information and networking was seen as an important tool to enhance climate change knowledge and experiences in Thailand. The stocktaking results indicated an inadequate networking among stakeholders in climate change ranging from technical to practice. A more thorough review and assessment of options to enhance information and networking, not only at the national but also sub-regional and regional levels, has been proposed.

The stakeholder consultations and validation process used for the preparation of the national communication project proposal are summarized below.

Name of institutions / stakeholders consulted	Stakeholder interests, official position or mandate	Reasons for inclusion	Role in the self-assessment process (e.g. consultation, preparation of draft report, data provider)
Office of Natural Resource and Environmental Policy and Planning	National focal point and secretary of the National Sub- committee on Climate Change	Responsible for SNC preparation	Consultation, administration, data provider
Royal Forest Department	Forest/responsible for forest sector	Involved in inventory, V&A, mitigation	Consultation, data provider
Meteorological Department	Meteorology, climate forecast agency	Climate modeling and scenario development	Consultation, data provider
Department of Industrial Works	Inventory and mitigation/Responsible for industrial sector	Inventory and mitigation	Consultation, data provider
Universities	Wide range of topics/experts in climate change	Provide technical views and experiences on climate change issues	Consultation, information provider
Industrial Federation of Thailand	Inventory and mitigation/represent industrial sector	Related to energy consumption/inventory/mitigation	Consultation, data provider
World Wildlife Fund for Nature (Thailand)	Climate change/ non- government organization	Provide technical and practical views on climate change	Consultation, information provider
Thailand Environment Institute	Climate change/a research foundation	Provide technical and practical views on climate change	Consultation, information provider
Thailand	Climate change/a	Provide technical and practical	Consultation, information

Development	research foundation	views on climate change	provider
Research Institute			
Ministry of Energy	Inventory, mitigation/energy agency	Related to energy policy and planning, inventory and mitigation	Consultation, information provider
Pollution Control Department	Inventory and mitigation/pollution control agency	Related to inventory in waste sector	Consultation, information provider
Ministry of Agriculture and Cooperatives	Inventory, V&A and mitigation/Responsible for agriculture sector	Involved in inventory, V&A and mitigation for agriculture sector	Consultation, information provider
Ministry of Foreign Affair	International cooperation	Capacity building/cooperation	Consultation, information provider
Office of Transport and Traffic Policy and Planning	Inventory and mitigation/Responsible for transport policy and planning	Related to transport sector, (Inventory and mitigation)	Consultation, information provider
Department of Marine and Coastal Resources	Sea-level rise, V&A/related to marine and coastal resource management	Seal-level rise, V&A	Consultation, information provider
Office of National Economic and Social Development Board	Wide area of climate change/Responsible for national economic and social development planning	Economic aspects in climate change (V&A, mitigation etc)	Consultation, information provider
Thailand Research Fund	Research issues/public research fund provider	Climate change research issues	Consultation, information provider
Bureau of Environmental Health	Health/responsible for health related to environment	Sea-level rise and health	Consultation, information provider
Southeast Asia START Regional Center	V&A/regional research center	Involved in V&A studies	Consultation, information provider

### **Appendix B: Technical components of the project proposal**

#### 1. Background/Context

As a non-Annex I party to the UNFCCC, Thailand has actively engaged in the process of the Convention. Thailand submitted its initial national communication to the Convention in November 2000. The communication described the national circumstances of vulnerable natural resources and environmental conditions of the country amidst economic difficulties she was facing. The communication also described various aspects of climate change issues, ranging from inventory to mitigation and adaptation to climate change. Thailand also provided the broad picture of its sustainable development policies and measures and the integration of climate change consideration into its national policies.

The initial national communication was the first attempt of the country to communicate with other parties to the Convention on issues related to climate change. With collective efforts of related parties, Thailand completed and gained substantial experiences from the preparation of its initial national communication. Thailand also received the "Enabling Activities II (EAII)" support to maintain the national capacity. Using the technology need assessment framework, the EAII project assessed the gaps and needs to improve national inventory process, technology need assessment in vulnerability, adaptation and mitigation and systematic observation network. The activity was a good bridge for national communication process of the country.

The second national communication of Thailand is a continuation of the initial national communication. Since the submission of its INC at CoP 6 in 2000, Thailand has gradually recovered from the economic difficulties in the 1990s. Various climate change activities in consistent with the country's sectoral and national policies have been carried out. Climate friendly technologies, particularly the renewable energy and energy efficiency have been aggressively promoted. The global economic integration over the period also affected national economic development greatly. Free trade agreement between Thailand and other countries has been advanced substantially.

Since its initial national communication, Thailand has also carried out several climate change research activities, such as EAII, National CDM Strategy Study, Action Plan Framework in Responding to Article 6. These projects enhanced the national capacity to address climate change. In preparing SNC, the "Guideline for the Preparation of National Communication from Parties Not Included in Annex I to the Convention" (decision 17/CP.8, UNFCCC) will be used.

In order to build the process upon existing activities, status of climate change activities was reviewed, stocking exercise and stakeholder consultation were implemented. Gaps and needs were identified and used as a basis for the SNC proposal. This SNC project will enhance the capacity of climate-related institutions to better analyze various aspects of climate change and potential respond measures. It will also strengthen the capacity of Thailand to contribute to the ongoing negotiations and to seek opportunities for new initiatives for the climate change

process. The project will contribute to the overall national sustainable development policies by intensifying "win-win" measures to address climate change.

### 2. Project Objectives

<u>Project Development Objective</u>: To enhance technical and institutional capacity of Thailand to mainstream climate change concerns into sectoral and national sustainable development priorities.

<u>Project Immediate Objective</u>: To enable Thailand to prepare and submit its second national communication to the UNFCCC and meet its Convention obligations.

#### 3. Project Strategy

As a continued process of the INC, the basic strategy of the preparation of SNC is to strengthen the collaboration among the experts involving in the INC and further broaden national capacity to relevant government agencies. The project will respond to this strategy by facilitating the collaboration through the Project Steering Committee (PSC) and UNDP country office, and by promoting public participation and awareness raising through workshops, electronic networking and other communication means.

Another important strategy for effective implementation of the project is to ensure efficient management system and national ownership. In responding to this strategy, PSC will be well represented and a core management body with good technical ground would be mobilized to coordinate with academic and competent public institutes, NGOs and private sector to carry out the project. Public participation, through technical and dissemination workshops will be appropriately carried out.

The project will be under the responsibility of Ministry of Natural Resources and Environment, Thailand's national focal point on climate change. The National Climate Change Sub-Committee would be the policy body overseeing this project. A project manager would be selected in the transparent manner to carry out the administration and coordinating task of the project. The UNDP, as an implementing agency, will be a PSC member and closely involved in the project implementation.

#### 4. Project activities

#### **Output 1 National circumstances**

Gaps and Priorities

National circumstances contain the information of geographical, demographic and socioeconomic characteristics of a country. The section also includes the institutional arrangement relevant to the preparation of national communication with consideration of continuation, responsibility and national ownership. The INC sufficiently covered the information described above.

#### Activities

The SNC will provide up-dated information related to changes in natural resource and environmental conditions, demographic and socio-economic development trends. Rapid growth of regional and global economic integration and development trends as well as their implication to Thailand will be discussed.

Since the submission of INC, The public sector of Thailand has gone through restructuring process. The institutional development, particularly those relevant to climate change will be described. This new information will be updated and its implication on climate change process will also be discussed.

#### Methodology

To meet the objectives, national statistics will be used to support the description of national circumstances and development trends indicated above. National policies on regional and global economic integration will be assessed from research works and consultation with relevant parties. Information from relevant government agencies will be utilized to discuss the revision of institutional arrangement and its implication on climate change process of the country, if any, as a result of restructuring of public sector.

#### **Output 2 Greenhouse gas inventory**

#### Gaps and Priorities

Thailand's GHG inventory in the INC covers sources and sinks as well as gases recommended by the IPCC 1996 Revised Guidelines. Default emission factors were used and some local emission factors were also applied. Emissions from the key sectors were also projected using simple methods. The major gaps and constraints encountered in preparing the INC were the lack of appropriate activity data and the local emission factors, particularly for agriculture and forestry. Lack of good models to develop future emission scenarios. There was also a need to enhance and maintain capacity of relevant government agencies in GHG inventory.

Methodologies for the estimation of Thailand's GHG inventory for 2000 will be taken from those in the IPCC 1996 Revised Guidelines. To enhance the estimation of GHG, other internationally acceptable methodologies would also be reviewed and selected to estimate the GHG inventory, particularly from the main sectors.

The gaps and constraints in preparing national GHG inventory were also reviewed and prioritized in the second phase of the Enabling Activities Project. Local emission factors for rice, livestock and forestry were given priorities. Improvement of activity data, especially for agriculture and forestry were recommended.

#### Activities

The activities to develop GHG inventory covers technical improvement and development of national capacity and inventory database. The main activities to be carried out in SNC include:

- Identify and mobilize national experts to review prioritization of sectors and prepare the GHG inventory work program.
- Review and select methodologies for the sectors, in addition to those in IPCC Guidelines
- Review and select appropriate emission factors, and if necessary develop local emission factors
- Train officials in GHG inventory in different sectors (IPCC 1996 Revised Guidelines, GPG, UNFCCC Improved Guidelines)
- Prepare national GHG inventory for 2000
- National expert and public review of the results
- Develop inventory management system
- Develop national GHG inventory database

#### **Methodologies**

An overall strategy aims at improvement of quality of GHG inventories. The fundamental part is to refine the activity data and use the local emission factors as much as possible. Activity data for the year 2000 and other related years would be refined to be more appropriate for the estimation methods. Local emissions would be developed and used.

On technical aspects, the 1996 IPCC Revised Guidelines will be used. Good practice guidance developed by IPCC will also be applied. Key sources analysis will be applied to review the sectors prioritized in the earlier assessment. The GHG inventory of Thailand will cover sources and sinks indicated in the UNFCCC Guidelines. It will also address the new or optional gases to the possible extent. Emission projection will be conducted using appropriate methodologies and analyzed in the context of national development.

For human resource development, the national experts will play supervisory role to guide officials from relevant agencies to carry out inventory estimation. On-the-job training in GHG inventory will be implemented. Higher tiers for inventory estimation will be used where appropriate.

To ensure the quality of the estimation, the GHG inventory will go through expert reviews and opened workshop for public comments.

Another important issue of this project is the sustainability of the inventory capacity, particularly in the public sector. This project will carry out the development of inventory management system to ensure that the inventory estimation could be carried out effectively

overtime. This includes development of GHG inventory database, inventory network among the personnel selected for the inventory capacity development.

# Output 3 Programmes containing measures to facilitate adequate adaptation to climate change

As stated in the summary of self-assessment, vulnerability and adaptation to climate change were the most neglected areas in the INC and will be emphasized here.

#### Gaps and priorities

Experiences from earlier studies on impact of climate change to identify vulnerability and adaptation in Thailand indicated various gaps and constraints in this area. Specifically, the uncertainties resulting from the simulation results of the global circulation models and the downscaling methods were high. In earlier studies, static downscaling method resulted in unusually high variation of climate in local areas of Thailand. The sectors involved were also extremely limited. The study on impact on agriculture selected on rice and corn in 3 provinces, compared to more than 70 provinces with widely diversified agricultural production.

The potential climate impacts on major sectors, agriculture, water resources, coastal areas and health, and the impact of sea-level rise on coastal areas have not yet been studied. Recently developed regional models and appropriate downscaling methods need to apply to improve the research in this area. Socio-economic scenarios were also needed to develop in V&A study.

The recent development of research in impact of climate variation and extreme events provides good opportunities to address short-term climate effects and adaptation options. Research in this area is also needed.

In order to narrow such gaps and constraints in SNC, it is essential to enhance research personnel in this area.

#### Activities

In addition to a brief overview of development on adaptation to climate change, climate variability and extreme events since the INC, the activities envisaged for development of vulnerability and adaptation section in SNC include human resources and technical capacity enhancement as well as research development. The activities include:

 Capacity enhancement on vulnerability and adaptation to climate change and climate variability and extreme events. Meteorologists will be mobilized to conduct research on regional climate models and cooperate with experts from agriculture, water resources, coastal areas and health to develop appropriate climate models for particular sectoral models

- Addressing vulnerability and adaptation to climate change using regional climate models should be developed. Regional climate models will be studied and selected to develop climate models for specific sectoral models to assess climate impact and their vulnerabilities. Sectors to be emphasized are agriculture, water resources, coastal areas and health.
- Models estimating sea-level rise and its potential impacts on coastal areas will be reviewed, selected and modified to address sea-level rise impact on coastal areas of Thailand. Vulnerability will be identified and appropriate adaptation options will be discussed.
- APF and NAPA approaches to address short-term V&A will be used.

#### Methodology

The basic approaches to prepare programmes containing measures to facilitate adequate adaptation to climate change are to mobilize national experts and enhance their capacities. The experts will work closely with related public agencies and research institutes to conduct research work on vulnerability and adaptation to climate change, climate variability and extreme events.

On climate change, the methodologies adopted by IPCC will be applied to Thailand circumstances. The climate values from regional climate models will be downscaled, using appropriate downscaling technique. For impact analysis, the key economic crops will be identified and appropriate models will be determined. Similarly, major watersheds and coastal areas as well as important climate related diseases will be emphasized.

On climate variability and extreme events, areas more severely vulnerable to drought and flood will be selected to conduct adaptation options. The NAPA and APF approaches will be critically reviewed and appropriate approaches will be adopted in this study.

#### Output 4 Programmes containing measures to mitigate climate change

#### Gaps and priorities

As developing countries, measures to mitigate climate change should also positively contribute to sustainable development process of the country. Several researches on GHG mitigation in Thailand have improved understanding on mitigation of greenhouse gases in energy sector over the past few years. Nevertheless, there are still some gaps and priorities in this area of research, particularly on emission projections and economic analysis of mitigation options. Another aspect of the mitigation options is the impact on the economy. This research will address the macroeconomic effects of the mitigation options studied. Thus, the gaps and priorities of measures to mitigate climate change are:

- GHG emission projections
- Mitigation potentials in other sectors, particularly agriculture
- Benefit-cost analysis of mitigation options
- Socio-economic aspects of mitigation options

#### Activities

National experts involving in research works related to greenhouse gas mitigation will be invited to participate in this particular study. Activities to study programmes containing measures to mitigate climate change include:

- Reviews of progress made in programmes/measures/actions contributing to GHG reduction of Thailand since the INC
- GHG emission projection, based on inventory study and socio-economic development scenarios
- Review of studies on mitigation options in non-energy sectors, especially agriculture
- Review of technical options to mitigate greenhouse gases in agriculture, perform benefit-cost analysis and socio-economic implication of those options
- Select lower potential options in energy sector and conduct benefit-cost analysis of those options

#### **Methodologies**

Review of development on activities related to GHG reduction of Thailand will base on national policies, plans and actions related to GHG reductions. For emission projection, socio-economic development scenarios will be developed. Such scenarios will extend from the economic forecasts performed by relevant public agencies in Thailand, using appropriate economic forecast models. The scenarios will be used to estimate the GHG emission projection for Thailand.

For study on mitigation options in agriculture, technical options will be identified and economic benefit-cost analysis technique will be applied. Socio-economic implications of those options on rural households will be analyzed. The same technique will be used to analyze in selected mitigation options in energy sector.

The mitigation options from previous studies and those analyzed in this study will be combined with emission forecast to analyze potential mitigation and consequences to future emissions of Thailand.

# Output 5 Other information considered relevant to the achievement of the objective of the Convention

#### Gaps and Priorities

There are several areas that relevant to the achievement of the objective of the Convention. Among them are technology transfer, research and systematic observation, education, training and public awareness, capacity building and information network

Gaps and priorities of these areas, as identified in the stocktaking process, are mainly in development and transfer of technology, capacity building, followed by research and

systematic observation, education, training and public awareness and information network. Development and transfer of technology as well as capacity building are vital to enhance capacity of Thailand to develop and apply appropriate technologies to address climate change.

Research and systematic observation have been implemented in Thailand, although the areas covered and the links to the global system are yet inadequate.

#### Activities

The main activities to be carried out under this category are to review the progress of Thailand, identify the problems encountered, constraints faced and possible ways to enhance the implementation, in the areas identified above since the submission of its INC. Among them are:

- Review and analyze activities related to development and transfer of technology under the Convention, especially on the issues of technology need assessment, enabling environment, capacity building, technology information and mechanism
- Review and analyze activities related to capacity enhancement under the Convention contributing to national capacity development to address climate change
- Review and analyze activities related to research and systematic observation such as GCOS and participation of Thailand in those areas
- Review and analyze development on climate change education, training and public awareness in Thailand in relation to the Convention
- Review and analyze development of information network related climate change, particularly at national and sub-regional levels

#### Methodology

The methodology for this section is basically to review the status and development of each category over the period since the submission of INC of Thailand. Identification of gaps, constraints and ways to enhance the implementation will be done through expert consultation, brain-storming and workshops.

# Output 6 Constraints and gaps, and related financial, technical and capacity needs

#### Gaps and Priorities

The issues in this section are cross-cutting ones. Hence, the gaps and priorities of them will be identified from studies of the earlier sections.

#### Activities

The main activities for this section are review the issues identified in the INC and the progress made since the INC. Such review will form a basis for the assessment of the issues for the SNC. The constraints and gaps, and related financial, technical and capacity needs will be identified from activities conducted on national inventory, programs and measures to address adaptation and mitigation and those under the other information section. The results from different topics will be put together and summarized in this section.

#### *Methodologies*

There is no special technique for this analysis. The general approach to be applied is expert review and public participation. In particular, the experts involved in each section will identify constraints and gaps, and related financial, technical and capacity needs in the respective section. The results will be the bases for public participatory workshops to discuss, exchange experiences and prioritize the issues.

#### 5. Institutional Framework for Project Implementation

The Ministry of Natural Resources and Environment will be responsible for executing the project. To ensure the link between project implementation and policy level that facilitate the integration of climate change to national policies, three levels of institutional arrangement have been established.

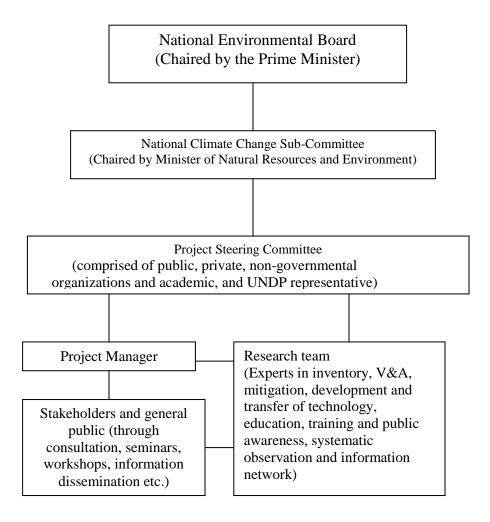
At policy level, the National Climate Change Sub-Committee which comprises of representatives of relevant public agencies, private sector, non-government organizations and experts will provide overall policies and guidance of project implementation. The sub-committee will receive regular reports of the progress and approve the final reports of the project.

At administrative level, a project steering committee will be established to oversee the implementation of the project. The National Climate Change Sub-Committee will decide on the composition of the project steering committee. In general, the main agencies relevant to the study, representatives of UNDP country office, non-governmental organization and selected experts will be included. The project steering committee will oversee the project team in carrying out the project activities, provide guidance and recommendation and support to ensure the project activities are carried out efficiently and effectively.

At implementation level, a project manager with qualified expertise and experiences will be selected to carry out the project management. The project manager will work directly under the project steering committee and will be responsible for the achievement of the project. A team of national experts on the issues identified above will be selected to carry out the technical works. The team will work closely with the project manager. If needed, international experts will be invited to support the national team.

In addition, to ensure capacity building in GHG inventory, personnel from relevant government offices, particularly those related to GHG inventory, will be selected to carry out inventory estimation under technical supervision and support of the national inventory experts.

The diagram below shows the linkages between the three levels and the channel to integrate climate change into national sustainable development process.



#### 6. Assessing project impact

As shown above, the institution framework of the project implementation of Thailand provides a concrete ground for two ways communication among project task forces, advisory committee, implementing agencies and policy makers.

During the implementation period, the policy makers dealing with activities related to climate change would be regularly informed about project development. Activities carried out by the project manager and research team would be ensured to meet national interest and priority.

The institution framework also establishes a strong link between the researchers and the stakeholders and general public in climate change development. During the project implementation, specific emphasis will be given to strengthen the dialogue, information exchange and cooperation among all relevant stakeholders including governmental, non-governmental, academic and private sectors. This will enhance public awareness and participation in climate change.

When the project is completed, the institutional framework requires the SNC to be submitted to the National Climate Change Sub-Committee for approval. The communication will be further submitted to the National Environmental Board for consideration as the Second National Communication to be submitted to UNFCCC. In this process, the study will provide policy recommendations to the National Environmental Board for its consideration.

Thus, it is envisaged that the SNC project would have the impacts at all levels. At policy level, the results of the study will be transmitted to policy decision process. At the implementation level, the project would enhance the technical capacity of the national experts and government officials. The project would ensure the national ownership by strengthening the stakeholders and public participation through out the project implementation period. The SNC project for Thailand would also strengthen the cooperation with other country parties through research cooperation and information exchange.

The assessment of the project impact shall be undertaken at several strategic levels. The first shall comprise the efforts to develop a practical framework to assess capacity development and impacts indicators as a result of the national communication process.

The second shall involve process to ensure successful implementation of capacity development, which will be assessed at three levels, namely at the:

- *Individual Level*: the process of changing attitudes and behaviors, most frequently through imparting knowledge and developing skills through training, learning by doing, participation, ownership, and processes associated with increasing performance through changes in management, motivation, morale, and levels of accountability and responsibility;
- *Organizational Level:* overall performance and functioning capabilities, such as developing mandates, tools, guidelines and information management systems for the ability of the organization to adopt change;
- **Systemic Level** creation of enabling environments i.e. the overall policy, economic, regulatory and accountability frameworks within which institutions and individuals operate, relationships and processes between institutions.

Finally, the development and application of several key indicators to establish that envisaged capacity development are actualized. These shall cover the following core functions:

- Framework to ensure improved means of application of new skills and knowledge to addressing climate change concers.
- National policy, legal and regulatory frameworks
- Availability of institutional mandates for key institutions participating in the project or likely to be associated with the implementation of outcomes of the project. There also the need for the availability of process and mechanism for coordination, interaction and cooperation between all stakeholders
- Process and mechanism for information gathering, management, monitoring and observations
- Framework and guidance for mobilization of science in support of decision making at different levels on issues related to climate change concerns.
- Mechanism for coordinated financial resources to support project continuity and activities sustainability
- Cooperation and networking within and among the different levels of government.
- Mechanism and framework for institutional management and performance to address climate change in a more sustainable manner.

# 7. Budget

<b>Activity in Second National Communications</b>	Activities	Outputs	Total
II. NATIONAL CIRCUMSTANCES			10,000
Development priorities, objectives and circumstances			
Existing arrangements for preparing communications continuously			
III. NATIONAL GREENHOUSE GAS INVENTORIES			100,000
National GHG inventories			
Cost-effective programmes to develop country-specific emission factors			
Arrangements to collect and archive data for continuous inventory			
preparation			
Level of uncertainty associated with the inventory data			
IV. GENERAL DESCRIPTION OF STEPS			150,000
Steps towards formulating programs to facilitate adequate adaptation			
Vulnerability to adverse effects of climate change & adaptation options			
Vulnerability to adverse effects of climate variability and extreme events and			
adaptation options			
Evaluation of strategies & measures for adapting to climate change, climate			
variability and extreme events			
Policy frameworks for developing and implementing adaptation strategies			
Steps for formulating programs to mitigate climate change			
Mitigation options in selected sectors and socio-economic implication			
Development of mitigation strategies			
V. OTHER RELEVANT INFORMATION			20,000
Transfer of, and access to ESTs, development of endogenous capacities;			
enabling environments			
Climate Change research and systematic observation			
Climate Change education, training and public awareness			
Capacity Building Activities, Options and Priorities			
Efforts to promote information sharing and networking			
VI. CONSTRAINTS & GAPS; RELATED FINANCIAL, TECHNICAL, & CAPACITY			10,000
NEEDS			
Constraints, gaps and needs, and activities for overcoming gaps, etc.			
Financial resources & technical support needs to address climate changes			
Projects proposed for financing or in preparation for arranging support			
VII. TECHNICAL ASSISTANCE			10,000
VIII. COMPILATION, PRODUCTION OF COMMUNICATION, INCLUDING			15,000
EXECUTIVE SUMMARY & ITS TRANSLATION			
IX. PROJECT MANAGEMENT (BASED ON 3 YEARS DURATION)			75,000
X. MONITORING AND REPORTING			15,000
TOTAL			405,000

# **Detailed Workplan**

Outputs/activities			ar 1		Year 2					Year 3			
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	
	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	
Output 1. National circumstances													
Update information on natural													
resources and environmental													
conditions, demographic and socio-													
economic development trend in													
relation to climate change													
Output 2. Greenhouse gas inventory													
Establishment of inventory team													
Identify the new sources of activity													
data, key source categories and													
priority sectors													
Review and select methodologies for													
the sectors													
Review and development of local													
emission factors for priority sectors													
Training in inventory preparation													
GHG inventory estimation													
Expert and public review process													
Development of inventory database													
Prepare the national inventory report													
for 2000 and other years as													
appropriate;													
<b>Output 3. Programmes containing</b>													
measures to facilitate adequate													
adaptation to climate change													
Establishment of V&A team													
Select the appropriate methods and													
approaches for development of													
climate change scenarios;													
Training on development of climate													
scenarios using appropriate scaling													
technique and V&A studies													
Development of climate change													
scenario for Thailand													
Assessment of vulnerability and													
adaptation to climate change in													
agriculture, water resources, coastal													
areas and health													
Assess the climate variability and													
extreme events (droughts, floods													
etc.)													
Select and conduct research in areas													
with more vulnerability and													
adaptation needed, using public													
participatory approach													
Select and conduct research in areas													
with more vulnerability and													
adaptation needed, using Adaptation													
Policy Framework.													

	1	1	1		1		1	1
Identify the most vulnerable and								
country's priority for adaptation								
sectors/systems;								
Identify the ways and means for								
effective integration of adaptation								
measures into the sustainable								
development strategy of Georgia;								
Formulate the national adaptation								
and vulnerability report;								
Raise the awareness among the								
policy and decision makers.								
<b>Output 4. Programmes containing</b>								
measures to mitigate climate								
change								
Set up mitigation team								
Review status and progress in								
mitigation								
Conduct study on mitigation options								
in non-energy sector								
Conduct benefit-cost analysis of								
mitigation options for non-energy								
sectors								
Select options in energy sector for								
benefit-cost analysis								
Development of emission scenarios								
Conduct analysis of socio-economic								
implication of mtigation options								
Expert and public reviews								
Develop climate change mitigation								
measures								
Raise public awareness and								
participation								
Output 5. Other information								
considered relevant to the								
achievement of the objective of the								
Convention								
Establishment of research team								
Assessment of development and								
transfer of technology								
Assessment of national programmes								
in research and systematic								
observation and assess the needs of								
research and observation of climate								
change								
Assessment of education, training								
and public awareness on climate								
change, identify gaps, needs and								
priorities								
Assessment of capacity-building								
activities in relation to climate								
change, identify gaps, needs and								
priorities  Report on the efforts to promote the								
Report on the efforts to promote the information sharing and networking								
in the country and region	j l							

Preparation of report on other						
information						
Expert and public review						
Output 6. Constraints and gaps,						
and related financial, technical						
and capacity needs						
Provide information on status of						
financial, technical and capacity						
development in relation to climate						
change and preparation of national						
communication						
Collection of information related to						
constrains and gaps and related						
financial, technical and capacity						
needs identified in output 1-5						
Summary of constraints and gaps						
and related financial, technical and						
capacity needs in relation to climate						
change (e.g. inventory, adaptation						
and mitigation, development and						
transfer of technology, education,						
training and public awareness)						
Preparation and submission of the						
NC						

## **Appendix C: Terms of Reference**

## **TOR for National Project Coordination Management**

Responsibilities of project management include day-to-day management, supervision of the implementation of the SNC and preparation of the SNC. The project management agency or person shall also provide technical support to the project activities. More specifically, responsibilities of the project management agency/person are as follows:

- Responsible for day-to-day management of the project
- Ensure timely and effective management of resources and activities as scheduled
- In consultation with NFP, prepare a comprehensive outline of the SNC and submit for approval from PSC
- In consultation with the PSC and NFP, develop TOR and identify task leaders responsible for different parts of the SNC such as: GHGs national inventory; vulnerability & adaptation section; measures for mitigation; other information
- Coordinate, oversee and support the task leaders in task execution and preparation of outputs of each part
- Assessment of performances of the task leaders and provide recommendations to PSC
- Provide support and facilitation in organizing the scheduled consultations/workshops and ensure their success
- Prepare periodic progress report of the activities of the project
- Prepare technical, policy and briefing papers as requested by NFP or PSC
- Integrate the outputs of different tasks, complete the unallocated sections and prepare the final SNC
- Other tasks as designated by the PSC

#### Qualifications and experience

- Minimum of master degree in environmental economics, energy, environmental management and policy or other field relevant to the project;
- A minimum of 5 years of working experience in the area relevant to the project;
- Experiences in the preparation of the initial National Communication is an asset;
- A demonstrated ability in managing projects, and in liaising and co-operating with relevant parties, particularly government agencies, scientific institutions, NGOs, and private sector;
- Good understanding of sustainable development issues;
- Good understanding and experience in government and in inter-departmental procedures preferred:
- Familiarity with computers, especially word processing and spreadsheet programs
- Proficiency in written English.

#### Period of service

3 years

#### Budget

To be determined

## TOR for Project Steering Committee (PSC)

In order to ensure successful implementation of the UNDP-GEF climate change projects, the Ministry of Natural Resources and Environment as the Executing Agency of the Project has agreed on establishment of Project Steering Committee (PSC), chaired by the Secretary General of Office of Natural Resources and Environmental Policy and Planning, and composed of senior officials from the relevant ministries, research institutes, UNDP and NGOs and private sector.

The duties, responsibilities and operating rules of the above PSC are as following:

- Provide guidance, assistance and support to the project manager and the task leaders during the implementation process of all project activities
- Review and make necessary comments on activities and documents prepared in the project
- Meet at least twice a year.
- Operate on the basis of consensus
- Regularly report the progress of the project and, to the extent possible, provide recommendations to National Climate Change Sub-committee
- For project task forces to be developed by the project manager in consultation with the national focal point and with the guidance from PSC

# Generic TOR for scoping and implementing the V&A component of the National Communication

These generic terms of reference for the preparation of the V&A studies identify the basic set of activities that the V&A expert/consultant will be responsible for under the supervision of the National Communication's Coordinator. It is important to note that these generic terms of reference do not intend to limit the work of the expert but to guide countries on the general profile of the V&A expert and on the activities generally expected to be carried out.

#### Profile of the V&A expert/consultant

The V&A expert should be very knowledgeable and with hands-on experiences on V&A issues, have a solid understanding of the gaps and needs for developing/improving vulnerability assessments, and have technical expertise in the formulation of adaptation options. The V&A expert should be able to scope technical studies in the V&A area and design an implementation strategy to carry out the different V&A activities within the framework of the NC. He/She should also have a solid understanding of the institutional arrangements and resources required to carry out the V&A work.

Although the NC project document already provides the framework for the V&A studies, the expert should be able to advise on any adjustments if needed, both at the organizational and technical levels, for a successful implementation of the V&A studies.

#### **Activities**

In general, the V&A expert/consultant should be responsible for ensuring that the following set of activities is carried out. Emphasis on different activities will depend on the scope of the work already described in the NC project document and/or on the specific activities the V&A expert would be assigned to.

#### Policy and institutional issues

- 1. Identify the key policy issues the V&A study of the SNC project aims to address, e.g.,
  - a. to scope the scale of risks associated with projected climate change;
  - b. to aid in the identification of priorities for adaptation;
  - c. to support the development of a national adaptation strategy.
- 2. Identify the expected output of the V&A study of the SNC project on the basis of the project document, e.g.,
  - a. impacts assessment at the sectoral level for the given priorities identified in the project document;
  - b. a national adaptation strategy, including policies, programs and projects.
- 3. Develop a clear strategy to link the V&A outputs to national development planning. This would include, among others:
  - a. assessment of institutional arrangements/stakeholders engagement required to facilitate linking the outcome of the V&A studies to sectoral or national planning;
  - b. framework for assessing how the above linkage can be monitored and measured in the short and long terms, for instance through the development of practical indicators.

#### **Technical issues**

#### Scope of the V&A study

- 4. Elaborate on the scope (geographic, thematic, sectoral coverage, time horizon) of the V&A study, e.g.,
  - a. designing a strategy to build on but advance what was done within INC, and while applicable, NAPA project;
  - b. elaborating on the scope of studies to address sectors/regions not covered by INC, sectors/regions identified as sensitive/vulnerable to climate change, as per the NC project proposal;
  - c. preparing a detailed workplan for each of the study to be carried out, including a strategy to involve the relevant stakeholders, timeline, etc.;
  - d. designing a strategy, as applicable, to link the V&A studies with previous and ongoing related projects/activities (e.g., land degradation, biodiversity, international waters.)

#### Methodological framework

- 5. Elaborate on the overall methodological framework for the V&A study as per the project document and in consultation with the project coordinator. In doing so, the V&A expert should ensure that:
  - a. The proposed methodological framework is the most appropriate given the policy questions to be addressed, the characteristics of the study (e.g., sectoral focus, spatial and temporal scales, stakeholders involved, and data requirement, etc.), and data availability;
  - b. In-country expertise required for such a methodological framework is available. If needed, the V&A expert should develop a strategy to address technical capacity gaps. For instance, by exploring the possibility of applying another framework in which more in-country expertise exists, or by designing a training/technical backstopping strategy, etc.

#### Scenarios development

- 6. Identify the types of scenarios required to conduct the V&A assessment, e.g., climate, socio-economic, sea level, adaptive capacity, technology, land-use land-cover.
- 7. Identify the temporal and spatial resolution needed for these scenarios (e.g., national, subnational, watershed, community, farm level, multi-decadal average, annual, monthly, daily, mean conditions, extreme events, etc.). In doing so, the expert should justify the choices.
- 8. Develop the strategies for developing such scenarios, e.g., model-based, expert judgment, etc.

In the preparation of the scenarios development strategy, the expert should assess the feasibility of the scenario needs and the methods for developing these scenarios, given the characteristics of the studies, and data availability. For instance, the expert would be expected to advice on alternative options to running regional climate models or other resource intensive and time consuming exercises. The V&A expert would also assess whether there is enough in-country expertise to develop such scenarios and/or identify options to address the needs for additional expertise.

#### Sectoral assessment (to be considered by each of the sectors to be covered in the V&A study)

- 9. Elaborate on the methods and tools, as per the project document, chosen to undertake sectoral assessments, e.g., numerical models, elicitation of expert views, stakeholder consultations, focus groups, etc. In doing so, the expert will advise on any adjustments needed to the options identified in the project document.
- 10. Provide justifications for the selection of the methods/tools considering the research questions, characteristics of the study, and requirements of data and technical expertise of these methods/tools.
- 11. Assess in-country expertise required to apply the selected methods/tools and prepare training/technical backstopping strategy as required.
- 12. Develop a strategy to integrate findings from sectoral assessment, as needed. For instance, by applying an integrated model, synthesizing sectoral information, etc.

#### **Technical assistance needs**

13. Develop a technical backstopping/training strategy to strengthen the national capacity needed to carry out the different V&A studies, This would include details on the type of support needed (training courses on particular methodological frameworks/tools, guidance material, technical documents and good practice) and the, timeline for such support.

### **Appendix D: Endorsement letters**

• UNFCCC Focal Point



No 1008/ 3591



Office of Natural Resources and Environmental Policy and Planning 60/1 Soi Phibun Wattana 7 Rama VI Road, Bangkok 10400 Thailand Tel. (662) 265 - 6611 Fax. (662) 265 - 6612

2 6 April B.E. 2549 (2006)

Dear Ms. Merlin - Scholtes,

Subject: Endorsement of the project proposal on Climate Change Enabling Activity for the preparation of the second National Communication

Please refer to our letter No.1008/ 1452 dated 15 February 2006, concerning submission of "the Climate Change Enabling Activity for the Preparation of the Second National Communication" for your approval.

Please be informed that I, as Thailand's UNFCCC National Focal Point, approve and endorse the attached project proposal. Please also note that the GEF funds will be used to support the further preparation of the Second National Communication, according to the decision 6/CP8 of the eighth session of the Conference of the Parties (COP8). Therefore, it would be highly appreciated to your encouragement of the GEF to approve funding as expeditiously as possibly.

We would be grateful for your consideration.

Yours sincerely,

N Koridanna

(Mrs. Nisakorn Kositratna) Secretary-General

Ms. Joanna Merlin – Scholtes UNDP Represent Residents UNDP 12<sup>th</sup> floor, United Nations Building Rajdamnoen Nok Avenue, Bangkok 10200 Tel: (662) 288 1234 Ext. 288 Fax: (662) 280 0556

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#### GEF Operational Focal Point



No. 0204/ **1488** 

Ministry of Natural Resources and Environment 92 Soi Phahon Yothin 7 Phahon Yothin Road Bangkok 10400 Thailand Tcl: (662) 298-2014 Fax: (662) 298-2659

June B.E. 2547 (2004)

Dear Mr. England,

Subject: Climate Change Enabling Activity for the Preparation of the Second National Communication (Self-Assessment Exercise).

According to the decision 6/CP8 of the eighth session of the Conference of the Parties (COP8), Thailand is eligible to receive the financial support from the Global Environment Facility (GEF) at an appropriate level to cover the requirements of the improved guideline for the preparation of her Second National Communication.

In this connection, I, in my capacity as GEF Operational Focal Point, hereby, endorse the request of funding for US\$ 15,000 for the self-assessment exercise, to be presented through the United Nations Development Programme (UNDP) to GEF. Enclosed herewith please find the proposal for the aforementioned activity for your consideration and further action.

We would greatly appreciate it if you would consider this request and let us know the outcome at your earliest convenience.

Yours sincerely,

(Mr.Chartree Chucyprasit) Deputy Permanent Secretary

Ministry of Natural Resources and Environment

Mr. Robert England UN Resident Coordinator UNDP Resident Representative United Nations Building Rajdamnern Nok Avenue, Bangkok 10200 Tel: (662) 288 1234 Ext. 288

Tel: (662) 288 1234 Ext. 288 Fax: (662) 280 0556

# SIGNATURE PAGE

Country: Thailand

UNDAF Outcome(s)/Indicator(s): (Link to UNDAF outcome. If no UNDAF, leave blank)	Agriculture and rural development activities to improve livelihoods and food security, as well as reinforcing the economic and social rights of the most vulnerable in targeted rural areas
Expected Outcome(s)/Indicator (s):  (CP outcomes linked to the SRF/MYFF goal and service line)	Strengthened capacity to enforce international conventions and national legislation and regulation
Expected Output(s)/Indicator(s):  (CP outcomes linked to the SRF/MYFF goal and service line)	Contribution of biodiversity and ecosystem services to food security, health, livelihoods and reduced vulnerability to natural disasters factored into national planning for the achievement of development goals, including safeguards to protect these resources
Implementing partner: (designated institution/Executing agency)	Ministry of Natural Resources and Environment
Other Partners: (formerly implementing agencies)	UNDP-Thailand
Programme Period: 2006-2009 Programme Component: Energy and Environment for Sustainable Development Project Title: Enabling Activities for the Preparation of the Thailand's Second National Communication to the UNFCCC Project ID: 00039145 Project Duration: 3 years Management Arrangement: NEX	Budget US\$ 405,000  General Management Support Fee  Total budget: US\$ 405,000  Allocated resources:  Government  Regular  Other:  O Donor  Donor  Donor  In kind contributions  Unfunded budget:  US\$ 405,000  O DONOR  US\$ 405,000  IN\$ 405,000  O DONOR  O DO
Agreed by (Government):  Agreed by (Implementing partner/Executing agency):	
Agreed by (UNDP):	