

THAILAND

Third National Report

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A. REPORTING PARTY

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Information on the preparation of the report

Box I.

Please provide information on the preparation of this report, including information on stakeholders involved and material used as a basis for the report.

Office of Natural Resources and Environment Policy and Planning (ONEP), as a national focal point, has contracted a consultant to prepare the draft of the report. Interviewing key experts (including GO, NGOs, universities and independent organizations such as private firms and associations) for their opinions on effectiveness and weakness of CBD implementation in Thailand was conducted in August and September 2005. These experts were main focus groups who also provide crucial recommendations how to strengthen Thailand capability to be more active parties.

In addition to the interviews, almost 150 publications: agencies annual reports, workshop and meeting reports, technical papers, private company booklets and brochures were reviewed as secondary data to this report. Attending technical meeting and workshops on CBD issues provided update information to this report. These meetings and workshops were for example the Workshop on Climate Change (4-5 August 2005, Bangkok) and Workshop on Access to Biodiversity Genetic Resources (22 August 2005, Bangkok) and Meeting on Biodiversity Conservation and Sustainable Use (22-24 August 2005, Petchaburi) and the 2nd Thai Traditional Herbs and Medicines Fair (4-8th September 2005, Nonthaburi).

Another information source was websites relevant to CBD articles, including government, NGO, public organizations, interested groups, and private companies. There more than 100 websites were visited for information to fill this report.

All the incoming information and opinions were integrated to answer this Format. Three national consultation workshops were conducted in 16 September, 30 September and 21 October 2005. They were attended by key experts and major stakeholders. Comments and arguments had been taken to refine the full national report.

B. PRIORITY SETTING, TARGETS AND OBSTACLES

Box II.

Please provide an overview of the status and trends of various components of biological diversity in your country based on the information and data available.

Biological diverse of the country

Thailand is one of the riches biodiversity countries in Southeast Asia. With its climatic diversity, topographic complexity, long coastline (2,710 km), and extensive fringing reef systems, the Kingdom is endowed with a wild variety of floral and faunal habitats and rich biodiversity. The country lies within the two major biogeographical regions, the Indochinese region in the North and the Sundiac region in the South. However, its flora and fauna are also influenced by Indian and Palearctic biogeographical regions, as well. These has resulted six biogeographical units: North Highland, Korat Plateau, Central Plain of the Chao Phraya River, Southeast Upland, Tenassarim Hills, and Southern Peninsula. Details can be obtained in Thailand's Biodiversity.

These diversities can be accounted for 8-10% of plants and animals varieties in the world. Between 20,000 and 25,000 species of plant are found in Thailand, including 10,000 to 15,000 flower species. Number of know Thai plant are at least 12,253 species, comprise of 9,441 vascular plants, 2,154 non-vascular plants, and others phyta genera recorded in Thailand. Among these plants, orchidaceae is the most diverse in species. There are about 160 genera, and 1,116 species of which 177 species are endemic to Thailand. More than 1,000 species of vascular plants were used as traditional medicines.

It is estimated that 87,500 fauna species exist in Thailand, but only 18,073 species described. At least 4,072 species recorded. Vertebrate species consist of 294 mammals, 962 birds, 325 reptiles, 141 amphibian, 570 freshwater fishes, and 1,531 estuarine and marine fishes. Majority of invertebrates are insect species, in which only 8,705 have so far been described which account for 10% of the total estimated insect species. Among these invertebrate, it is estimate to be 2,000 marine fish species, accounting for 10% of total fish species estimated worldwide. 606 freshwater fishes species and 1,672 fishes species found in estuarine and seawater. It is also estimated to have 2,000 of marine mollusks, and 11,900 of marine invertebrate.

Further detail of number of extinct, threatened, and endemic species in Thailand can be found in the first and second Thailand national report. While the first national report has well present information on ecosystem and genetic diversity and general threat to biodiversity resources in Thailand, the second national report has well explained what have been achieved, and what major concerned issues are.

Thailand's implementation on the Convention

Even Thailand just recently ratified the CBD in 2004 it has developed two national biodiversity strategies and action plan (NBSAP). The 1st NBSAP (1998-2002) was replaced by the 2nd NBSAP (2003-2007) on 11 June 2002. Development process of these two NBSAP have

stimulated many national and local authorities to be more concern and well aware of biological resources. Participation from local universities and local government authorities had significantly improved during the development of the 2nd NBSAP.

In addition to these two NBSAP, Thai Cabinet has declared the years of 2003-2013 as the Decade of Natural Resources and Environment Rehabilitation. Many government agencies have oriented its goal toward environmental conservation, and adjusted its function to be more integrated and area based approach. Significant movement in government reformations, includes the change of institution structure, establishing new organization, identify strategic policy framework and comprehensive action plans were introduced as key administration tools with indicators. These moves directly support and help strengthen the country capacity to CBD implementation.

Movements that concern CBD implementation

In October 2002, the Ministry of Natural Resources and Environment (MONRE) was established taking with it the environmental and natural resources management functions of the former Ministry of Science, Technology and Environment (MoSTE), Ministry of Agriculture and Cooperatives (MoAC) and several other agencies related to mineral and water resources. The formation of MoNRE has tremendously increase effective inter-agency coordination on environmental cross-cutting issues. Today, MONRE serves as national focal point for all Conventions concerning to natural resources and environment, such as Biodiversity, Climate Change, CITES, Stockholm, Ramsar, World Heritage, and other UN Conventions.

Decentralization and people and public participation are seriously implemented in MoNRE. Most of the agencies in MONRE are transferring its responsibilities and budget to local governments. Many of these transferring processes expected to be finalized in 2006, including forest fire management. MONRE has delegated its authorities as delivery mechanisms of various departments to 16 Regional Environment Offices covering cluster of provinces based on landscape or ecosystem boundary. Along with the chief executive officer (CEO) provincial governor approach, MoNRE allocates its staff and resources working closely with the CEO in every province. This calls MoNRE Provincial Office, who will functions as MoNRE coordinator with other ministries and local governments to ensure and promote integration of environmental aspects into provincial development plans and management.

During the first year of MoNRE, 2003, the ministry focused its work to develop also a number of thematic national strategic plans to address biodiversity conservation. Issues include wildlife management, national park and protected areas, forest rehabilitations, watershed management, and community participation in forest management. These plans were draft in participatory approaches in 2003-2004. MoNRE set up several national committee and working groups to do these works. However, not all of them were successfully drafted due to the national election early 2004. Among these initiatives, the draft of "National Wildlife Conservation Master Plan" was endorsed successfully by MoNRE. With a comprehensive consultation, wildlife experts, researchers, private investors, NGO, and press fully accepted the plan. It has been forwarded to the Cabinet and awaiting for approval.

Due to the major change in institutions, many of the national committees were awaiting for reforming. Hence, in the past two years, official progress and adoptions of CBD decision, guideline, and implementation considerably delay.

Priority Setting

1. Please indicate, by marking an "X" in the appropriate column below, the level of priority your country accords to the implementation of various articles, provisions and relevant programmes of the work of the Convention.

Article/Provision/Programme of Work	Level of Priority		
	High	Medium	Low
a) Article 5 – Cooperation		X	
b) Article 6 - General measures for conservation and sustainable use		X	
c) Article 7 - Identification and monitoring		X	
d) Article 8 – <i>In-situ</i> conservation	X		
e) Article 8(h) - Alien species	X		
f) Article 8(j) - Traditional knowledge and related provisions	X		
g) Article 9 – <i>Ex-situ</i> conservation		X	
h) Article 10 – Sustainable use of components of biological diversity		X	
i) Article 11 - Incentive measures			X
j) Article 12 - Research and training		X	
k) Article 13 - Public education and awareness		X	
l) Article 14 - Impact assessment and minimizing adverse impacts		X	
m) Article 15 - Access to genetic resources	X		
n) Article 16 - Access to and transfer of technology		X	
o) Article 17 - Exchange of information	X		
p) Article 18 – Scientific and technical cooperation		X	
q) Article 19 - Handling of biotechnology and distribution of its benefits	X		
r) Article 20 - Financial resources			X
s) Article 21 - Financial mechanism		X	
t) Agricultural biodiversity		X	
u) Forest biodiversity	X		
v) Inland water biodiversity		X	
w) Marine and coastal biodiversity	X		
x) Dryland and subhumid land biodiversity			X
y) Mountain biodiversity			X

Challenges and Obstacles to Implementation

2. Please use the scale indicated below to reflect the level of challenges faced by your country in implementing the provisions of the Articles of the Convention (5, 6,7, 8, 8h, 8j, 9, 10, 11,12, 13, 14, 15,16, 17, 18, 19 and 20)																		
3 = High Challenge									1 = Low Challenge									
2 = Medium Challenge									0 = Challenge has been successfully overcome									
N/A = Not applicable																		
Challenges	Articles																	
	5	6	7	8	8h	8j	9	10	11	12	13	14	15	16	17	18	19	20
a) Lack of political will and support	1	0	2	0	3	2	1	0	3	3	2	1	3	2	3	2	1	3
b) Limited public participation and stakeholder involvement	N/A	1	2	3	3	1	3	3	3	2	3	3	3	3	2	3	3	3
c) Lack of mainstreaming and integration of biodiversity issues into other sectors	3	1	3	3	3	2	2	3	3	2	3	2	3	3	2	3	3	3
d) Lack of precautionary and proactive measures	3	2	3	2	3	0	2	3	3	2	2	3	3	3	2	3	3	3
e) Inadequate capacity to act, caused by institutional weakness	3	3	2	2	3	2	1	3	3	1	2	3	3	2	3	2	2	3
f) Lack of transfer of technology and expertise	N/A	N/A	1	2	3	1	1	2	3	1	2	3	2	2	1	0	2	3
g) Loss of traditional knowledge	N/A	N/A	1	2	3	N/A	2	1	3	1	2	3	3	3	2	2	2	N/A
h) Lack of adequate scientific research capacities to support all the objectives	N/A	2	1	1	1	1	1	2	3	1	3	3	3	1	0	0	2	3
i) Lack of accessible knowledge and information	N/A	1	3	2	2	1	1	3	3	1	2	3	3	3	1	1	3	3
j) Lack of public education and awareness at all levels	3	3	3	3	3	2	1	3	3	2	2	3	3	3	3	2	3	3
k) Existing scientific and traditional knowledge not fully utilized	3	2	0	3	3	2	3	3	3	3	2	3	3	3	2	2	3	3

l) Loss of biodiversity and the corresponding goods and services it provides not properly understood and documented	2	0	2	3	3	2	0	2	3	0	1	2	3	2	1	1	3	3
m) Lack of financial, human, technical resources	3	2	3	3	3	2	2	2	3	2	3	3	3	3	2	1	3	3
n) Lack of economic incentive measures	3	N/A	3	3	3	2	3	3	N/A	3	2	3	3	3	3	3	3	3
o) Lack of benefit-sharing	N/A	N/A	3	3	3	2	0	3	3	2	2	3	3	3	2	2	3	3
p) Lack of synergies at national and international levels	3	0	2	1	3	2	0	2	2	2	2	3	3	3	2	1	2	3
q) Lack of horizontal cooperation among stakeholders	N/A	2	1	3	3	1	1	3	3	2	2	3	3	3	2	1	3	3
r) Lack of effective partnerships	1	2	3	3	3	1	1	2	3	1	2	3	3	3	2	1	3	3
s) Lack of engagement of scientific community	2	0	1	2	2	2	1	2	3	1	2	2	1	1	2	1	2	3
t) Lack of appropriate policies and laws	2	0	3	3	3	1	1	2	2	2	2	3	3	3	0	1	2	2
u) Poverty	N/A	N/A	N/A	2	N/A	1	N/A	1	2	N/A	1	1	N/A	N/A	N/A	N/A	1	N/A
v) Population pressure	1	N/A	N/A	3	2	N/A	N/A	3	2	N/A	2	N/A	N/A	N/A	1	N/A	1	3
w) Unsustainable consumption and production patterns	N/A	N/A	2	3	2	3	2	3	3	2	1	N/A	N/A	N/A	2	N/A	2	3
x) Lack of capacities for local communities	N/A	3	2	3	3	1	2	2	N/A	1	1	2	3	3	1	2	3	1
y) Lack of knowledge and practice of ecosystem-based approaches to management	3	3	2	2	3	2	2	3	3	3	3	3	3	3	2	3	2	3
z) Weak law enforcement capacity	N/A	N/A	3	1	3	2	1	3	N/A	N/A	N/A	3	3	3	1	N/A	3	N/A
aa) Natural	2	N/A	1	1	1	3	3	3	N/A	1	2	3	N/A	N/A	2	2	N/A	3

disasters and environmental change																		
bb) Others (please specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

2010 Target

The Conference of the Parties, in decision VII/30, annex II, decided to establish a provisional framework for goals and targets in order to clarify the 2010 global target adopted by decision VI/26, help assess the progress towards the target, and promote coherence among the programmes of work of the Convention. Parties and Governments are invited to develop their own targets with this flexible framework. Please provide relevant information by responding to the questions and requests contained in the following tables.

Box III.

Goal 1	Promote the conservation of the biological diversity of ecosystems, habitats and biomes.		
Target 1.1	At least ten percent of each of the world's ecological regions effectively conserved		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			X
Please provide details below.			
The global target just been adopted in 2004, it has not been incorporate into any of Thailand' national target.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural	X		136,000 sq.km. (85 million rai) to be bio -agriculture based.
b) Inland water	X		35 % of national wetland areas are target for conservation and restoration.
c) Marine and coastal	X		300 sq.km. of the marine ecosystem to be established as marine protected area 10 clusters of artificial reefs to be introduced as for restoring fish stock
d) Dry and subhumid land		X	
e) Forest	X		40% of the country area to be forest covered with 30% to be conservation forest and 10% to be economic forest.
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			X
c) Yes, into sectoral strategies, plans and programmes			X

Please provide details below.
The above targets refer to the targets declared in the 2 nd NBSAP which officially adopt in 2002, before the adoption of Target 2010.
IV) Please provide information on current status and trends in relation to this target.
-
V) Please provide information on indicators used in relation to this target.
-
VI) Please provide information on challenges in implementation of this target.
-
VII) Please provide any other relevant information.
In 2005, Kasetsart University (KU) to assess key types and habitats of ecosystem throughout the country in order to identify a national conservation target of all major ecosystem in Thailand according to the Target 2010. This exercise is expected to be finished in 2006, through several consultations with experts, managers, NGO and the public.

Box IV.

Target 1.2	Areas of particular importance to biodiversity protected		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			X
Please provide details below.			
The targets are explained as Box III.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural	X		136,000 sq.km. (85 million rai) to be bio -agriculture based.
b) Inland water	X		35 % of national wetland areas are target for conservation and restoration.
c) Marine and coastal	X		300 sq.km. of the marine ecosystem to be established as marine protected area 10 clusters of artificial reefs to be introduced as for restoring fish stock
d) Dry and subhumid land		X	
e) Forest	X		40% of the country area to be forest covered with 30% to be conservation forest and 10% to be economic forest.
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			X

c) Yes, into sectoral strategies, plans and programmes	X
Please provide details below.	
- Same as Box III.	
IV) Please provide information on current status and trends in relation to this target.	
-	
V) Please provide information on indicators used in relation to this target.	
-	
VI) Please provide information on challenges in implementation of this target.	
-	
VII) Please provide any other relevant information.	
Same as Box III.	

Box V.

Goal 2	Promote the conservation of species diversity		
Target 2.1	Restore, maintain, or reduce the decline of populations of species of selected taxonomic groups		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			X
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			X
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			

-
IV) Please provide information on current status and trends in relation to this target.
-
V) Please provide information on indicators used in relation to this target.
-
VI) Please provide information on challenges in implementation of this target.
-
VII) Please provide any other relevant information.
<p>Without the national target, Thailand steadily implements its programs toward the restoration and maintaining of population of the following selected species.</p> <ul style="list-style-type: none"> - Fauna: wild elephant, wild crocodile, dugong, coral, giant cat fish, native livestock (hen and buffalo), and native pet (hen, dog and cat) - Flora: native rice, wild orchid, banana, mango, lotus and lily, aloe wood, teak <p>These conserving and promoting of genetic diversity fauna and flora activities mostly implement by individual interests who may establish a group, club or network. They are for example:</p> <ul style="list-style-type: none"> - "Siamese Cat Conservation Center" in Samutsongkram Province, - "Crocodile Farm" in Samutprakarn Province - Thai dog Promotion Association, Conservation and Development of Thai Dog, and the Dog Association of Thailand - Thailand Network for the Conservation and Enhancement of Landraces of Cultivated Plants (TNCEL) <p>In addition, conservation of diversity of these species have been demonstrated and driven by His Majesty the King (Thai dog) and Her Majesty the Queen (lotus and lily).</p>

Box VI .

Target 2.2	Status of threatened species improved		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			X
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
-			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	

f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No		X	
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			
-			
IV) Please provide information on current status and trends in relation to this target.			
-			
V) Please provide information on indicators used in relation to this target.			
-			
VI) Please provide information on challenges in implementation of this target.			
-			
VII) Please provide any other relevant information.			
-			

Box VII.

Goal 3	Promote the conservation of genetic diversity		
Target 3.1	Genetic diversity of crops, livestock, and of harvested species of trees, fish and wildlife and other valuable species conserved, and associated indigenous and local knowledge maintained		
I) National target: Has a national target been established corresponding to the global target above?			
a) No		X	
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
-			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	

f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			X
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			
-			
IV) Please provide information on current status and trends in relation to this target.			
-			
V) Please provide information on indicators used in relation to this target.			
-			
VI) Please provide information on challenges in implementation of this target.			
-			
VII) Please provide any other relevant information.			
Same as Box V.			

Box VIII.

Goal 4	Promote sustainable use and consumption.		
Target 4.1	Biodiversity-based products derived from sources that are sustainably managed, and production areas managed consistent with the conservation of biodiversity		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			X
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
-			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	

f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			X
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			
-			
IV) Please provide information on current status and trends in relation to this target.			
-			
V) Please provide information on indicators used in relation to this target.			
-			
VI) Please provide information on challenges in implementation of this target.			
-			
VII) Please provide any other relevant information.			
Three biodiversity-based products which have been promote for sustainable use and consumption at national level are fisheries, non-timber forest product, and medicinal plant.			

Box IX.

Target 4.2	Unsustainable consumption, of biological resources, or that impacts upon biodiversity, reduced		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			X
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
-			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and			

strategies?	
a) No	X
b) Yes, into national biodiversity strategy and action plan	
c) Yes, into sectoral strategies, plans and programmes	
Please provide details below.	
-	
IV) Please provide information on current status and trends in relation to this target.	
-	
V) Please provide information on indicators used in relation to this target.	
-	
VI) Please provide information on challenges in implementation of this target.	
-	
VII) Please provide any other relevant information.	
The declaration of logging ban in 1989, and the annual declarations of no-fishing seasons and no-visiting seasons into particular national park are mechanisms that lead to this target.	

Box X.

Target 4.3	No species of wild flora or fauna endangered by international trade		
I) National target: Has a national target been established corresponding to the global target above?			
a) No	X		
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
-			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No	X		

b) Yes, into national biodiversity strategy and action plan	
c) Yes, into sectoral strategies, plans and programmes	
Please provide details below.	
-	
IV) Please provide information on current status and trends in relation to this target.	
-	
V) Please provide information on indicators used in relation to this target.	
-	
VI) Please provide information on challenges in implementation of this target.	
-	
VII) Please provide any other relevant information.	
Thailand implies its national program and activities towards the CITES provisions. Department of Agriculture (DoA), Department of National Parks, Wildlife and Plant Conservation (DNP), and Department of Fisheries (DoF) are CITES competent agencies for endangered plant, wild animal, and aquatic species, respectively.	

Box XI .

Goal 5	Pressures from habitat loss, land use change and degradation, and unsustainable water use, reduced.		
Target 5.1	Rate of loss and degradation of natural habitats decreased		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			X
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
-			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		x	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			

a) No	x
b) Yes, into national biodiversity strategy and action plan	
c) Yes, into sectoral strategies, plans and programmes	
Please provide details below.	
-	
IV) Please provide information on current status and trends in relation to this target.	
-	
V) Please provide information on indicators used in relation to this target.	
-	
VI) Please provide information on challenges in implementation of this target.	
-	
VII) Please provide any other relevant information.	
Threats to habitat loss and degradation have been defined and programs to reduce pressures are implemented. Loss and degradation of natural forest and marine habitats has been monitored and protected. Reforestation has been promoted to restore natural forest condition. However, there is no clear defined of a national target to reduce the natural habitat loss.	

Box XII.

Goal 6	Control threats from invasive alien species.		
Target 6.1	Pathways for major potential alien invasive species controlled		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			X
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
-			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			

a) No	X
b) Yes, into national biodiversity strategy and action plan	
c) Yes, into sectoral strategies, plans and programmes	
Please provide details below.	
-	
IV) Please provide information on current status and trends in relation to this target.	
-	
V) Please provide information on indicators used in relation to this target.	
-	
VI) Please provide information on challenges in implementation of this target.	
-	
VII) Please provide any other relevant information.	
There are plant and animal quarantine stations at major national borders posts and major seaports and airports throughout the country. These mechanisms are routine function implemented by the relevant agencies, such as DoA and DoF. More detail is explained in Q.49.	

Box XIII .

Target 6.2	Management plans in place for major alien species that threaten ecosystems, habitats or species		
I) National target: Has a national target been established corresponding to the global target above?			
a) No	X		
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
-			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No	X		

b) Yes, into national biodiversity strategy and action plan	
c) Yes, into sectoral strategies, plans and programmes	
Please provide details below.	
-	
IV) Please provide information on current status and trends in relation to this target.	
-	
V) Please provide information on indicators used in relation to this target.	
-	
VI) Please provide information on challenges in implementation of this target.	
-	
VII) Please provide any other relevant information.	
-	

Box XIV.

Goal 7	Address challenges to biodiversity from climate change, and pollution.		
Target 7.1	Maintain and enhance resilience of the components of biodiversity to adapt to climate change		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			X
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
-			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			X
b) Yes, into national biodiversity strategy and action plan			

c) Yes, into sectoral strategies, plans and programmes	
Please provide details below.	
-	
IV) Please provide information on current status and trends in relation to this target.	
-	
V) Please provide information on indicators used in relation to this target.	
-	
VI) Please provide information on challenges in implementation of this target.	
-	
VII) Please provide any other relevant information.	
Please see information in answers of article 6.	

Box XV.

Target 7.2	Reduce pollution and its impacts on biodiversity		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			x
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
-			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			X
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			
-			

IV) Please provide information on current status and trends in relation to this target.
-
V) Please provide information on indicators used in relation to this target.
-
VI) Please provide information on challenges in implementation of this target.
-
VII) Please provide any other relevant information.
There are two organizations responsible for reducing pollution and its impacts. They are the Pollution Control Department (PCD) and the Wastewater Management Authority (WMA). Both are under the administration of MoNRE by enforcing the Environmental Quality and Promotion Act B.E. 2535 (1992). The two agencies have their plans to control and reduce impact from pollution. However, these concerns are focus on the impact on human being more than on biodiversity. More detail can be obtained from www.mcd.go.th and www.wma.mnre.go.th .

Box XVI .

Goal 8	Maintain capacity of ecosystems to deliver goods and services and support livelihoods.		
Target 8.1	Capacity of ecosystems to deliver goods and services maintained		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established	X		
Please provide details below.			
The target ecosystems mentioned in Box III aim to serve for this goal.			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural	X		Same as Box III
b) Inland water	X		Same as Box III
c) Marine and coastal	X		Same as Box III
d) Dry and subhumid land		X	
e) Forest	X		Same as Box III
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes	X		

Please provide details below.
Same as Box III.
IV) Please provide information on current status and trends in relation to this target.
-
V) Please provide information on indicators used in relation to this target.
-
VI) Please provide information on challenges in implementation of this target.
-
VII) Please provide any other relevant information.
-

Box XVII.

Target 8.2	Biological resources that support sustainable livelihoods, local food security and health care, especially of poor people maintained		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			X
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
-			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			X
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			
-			

IV) Please provide information on current status and trends in relation to this target.
-
V) Please provide information on indicators used in relation to this target.
-
VI) Please provide information on challenges in implementation of this target.
-
VII) Please provide any other relevant information.
Support and promote community based management of forest, wetland, coastal, and marine resources, explained in questions on article 10, are measures to ensure this target. However, the target has not been clearly defined.

Box XVIII.

Goal 9	Maintain socio-cultural diversity of indigenous and local communities.		
Target 9.1	Protect traditional knowledge, innovations and practices		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			X
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
-			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			X
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			
-			

IV) Please provide information on current status and trends in relation to this target.
-
V) Please provide information on indicators used in relation to this target.
-
VI) Please provide information on challenges in implementation of this target.
-
VII) Please provide any other relevant information.
Traditional knowledge, innovation, and practices have been protected by the two laws namely the Plant varieties Protection Act B.E. 2542 (1999) and the Protection and Promotion of Traditional Thai Medical Intelligence Act B.E. 2542 (1999). Both acts provide also the establishment of independent fund to support and motivate either indigenous and local communities or individuals to enhance and further their knowledge, innovation and practice on biodiversity sustainable use. In addition to these two laws, Department of Livestock Development (DoLD) is developing a new law to promote and protect of native livestock species, namely the Promotion and Conservation of Native Livestock B.E....

Box XIX.

Target 9.2	Protect the rights of indigenous and local communities over their traditional knowledge, innovations and practices, including their rights to benefit sharing		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			X
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
-			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			X
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			

Please provide details below.
-
IV) Please provide information on current status and trends in relation to this target.
-
V) Please provide information on indicators used in relation to this target.
-
VI) Please provide information on challenges in implementation of this target.
-
VII) Please provide any other relevant information.
Same as Box XVIII.

Box XX.

Goal 10	Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources.		
Target 10.1	All transfers of genetic resources are in line with the Convention on Biological Diversity, the International Treaty on Plant Genetic Resources for Food and Agriculture and other applicable agreements		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			x
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
-			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			X
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			

Please provide details below.
-
IV) Please provide information on current status and trends in relation to this target.
-
V) Please provide information on indicators used in relation to this target.
-
VI) Please provide information on challenges in implementation of this target.
-
VII) Please provide any other relevant information.
There are several organizations work toward this target, such as the DoA, DoF, DoLD, National Research Council of Thailand (NRCT), and National Center Genetic Engineering and Biotechnology (BIOTEC).

Box XXI .

Target 10.2	Benefits arising from the commercial and other utilization of genetic resources shared with the countries providing such resources		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			X
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
-			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			X
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			
-			

IV) Please provide information on current status and trends in relation to this target.
-
V) Please provide information on indicators used in relation to this target.
-
VI) Please provide information on challenges in implementation of this target.
-
VII) Please provide any other relevant information.
-

Box XXII.

Goal 11	Parties have improved financial, human, scientific, technical and technological capacity to implement the Convention.		
Target 11.1	New and additional financial resources are transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with Article 20		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			x
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
-			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		x	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			X
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			
-			

IV) Please provide information on current status and trends in relation to this target.
-
V) Please provide information on indicators used in relation to this target.
-
VI) Please provide information on challenges in implementation of this target.
-
VII) Please provide any other relevant information.
-

Box XXIII.

Target 11.2	Technology is transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with its Article 20, paragraph 4		
I) National target: Has a national target been established corresponding to the global target above?			
a) No			X
b) Yes, the same as the global target			
c) Yes, one or more specific national targets have been established			
Please provide details below.			
-			
II) National targets for specific programmes of work: If such national target(s) ha(s)(ve) been established, please indicate here, and give further details in the box(es).			
Programme of work	Yes	No	Details
a) Agricultural		X	
b) Inland water		X	
c) Marine and coastal		X	
d) Dry and subhumid land		X	
e) Forest		X	
f) Mountain		X	
III) Has the global or national target been incorporated into relevant plans, programmes and strategies?			
a) No			X
b) Yes, into national biodiversity strategy and action plan			
c) Yes, into sectoral strategies, plans and programmes			
Please provide details below.			
-			
IV) Please provide information on current status and trends in relation to this target.			
-			

V) Please provide information on indicators used in relation to this target.
-
VI) Please provide information on challenges in implementation of this target.
-
VII) Please provide any other relevant information.
-

Global Strategy for Plant Conservation (GSPC)

The Conference of the Parties, in decision VI/9, annex, adopted the Global Strategy for Plant Conservation. Parties and Governments are invited to develop their own targets with this flexible framework. The Conference of the Parties considered the Strategy as a pilot approach for the use of outcome oriented targets under the Convention. In decision VII/10, the Conference of the Parties decided to integrate the targets into the reporting framework for the Third National Reports. Please provide relevant information by responding to the questions and requests contained in the following tables.

Box XXIV.

Target 1. A widely accessible working list of known plant species, as a step towards a complete world flora.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	X
b) No	
Please specify	
The target is included in the 2 nd NBSAP, but the scope of information accessibility is wider than plant species.	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	X
b) No	
Please specify	
The plan has been integrated into working program of several organizations, such as DNP, RFD, DoA, National Science Museum (NSM), The Rama 9 th Garden Foundation, Botanical Garden Organization (BGO), and several universities.	
III) Current status (please indicate current status related to this target)	
Information on plant can be reviewed at www.onep.go.th , www.doa.go.th , www.dnp.go.th , www.qsbg.org . The main publications of Thai forest plants are Flora of Thailand Journal, Thai Forest Bulletin. Major collections of plant specimen are at Bangkok Forest Herbarium (BKF) at DNP, Bangkok Plant Herbarium (BPH) at DoA, Queen Sirikit Botanical Garden (QSBG) at Chiangmai, and Freshwater Aquarium at DoF. Most of the available information also be printed and recorded in the CD-ROM.	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
-	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	

-
VI) Constraints to achieving progress towards the target
VII) Any other relevant information
More information has been explained in article 9.

Box XXV.

Target 2. A preliminary assessment of the conservation status of all known plant species, at national, regional and international levels.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	x
Please specify	
-	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	
b) No	x
Please specify	
-	
III) Current status (please indicate current status related to this target)	
-	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
-	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
-	
VI) Constraints to achieving progress towards the target	
-	
VII) Any other relevant information	
-	

Box XXVI.

Target 3. Development of models with protocols for plant conservation and sustainable use, based on research and practical experience.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	X
Please specify	
-	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	
b) No	X
Please specify	
-	
III) Current status (please indicate current status related to this target)	
There are several studies concerning sustainable use of plant, both for food security and health care, but no systematic pattern to develop a model.	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
-	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
-	
VI) Constraints to achieving progress towards the target	
-	
VII) Any other relevant information	
-	

Box XXVII.

Target 4. At least ten percent of each of the world's ecological regions effectively conserved.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	X
b) No	
Please specify	
As explained in Box III.	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	X
b) No	
Please specify	
As explained in Box III and in the answers for article 8.	
III) Current status (please indicate current status related to this target)	
As explained in the answers for article 8 (in-situ conservation). The reviewing for representative of all ecosystems is on going by Kasetsart University as explained in Box III.	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
As explained in Box III and in the answers for article 8.	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
-	
VI) Constraints to achieving progress towards the target	
-	
VII) Any other relevant information	
-	

Box XXVIII.

Target 5. Protection of fifty percent of the most important areas for plant diversity assured.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	X
Please specify	
-	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	
b) No	X
Please specify	
-	
III) Current status (please indicate current status related to this target)	
-	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
-	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
-	
VI) Constraints to achieving progress towards the target	
-	
VII) Any other relevant information	
-	

Box XXIX.

Target 6. At least thirty percent of production lands managed consistent with the conservation of plant diversity.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	X
Please specify	
-	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	
b) No	X
Please specify	
-	
III) Current status (please indicate current status related to this target)	
-	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
-	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
-	
VI) Constraints to achieving progress towards the target	
-	
VII) Any other relevant information	
-	

Box XXX.

Target 7. Sixty percent of the world's threatened species conserved <i>In-situ</i>.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	X
Please specify	
-	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	
b) No	X
Please specify	
-	
III) Current status (please indicate current status related to this target)	
A preliminary check list of threatened plants in Thailand has been published in January 2005 by the DNP. The full document can be downloaded from www.dnp.go.th . Most of them have been in-situ conserved in a protected area throughout the country.	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
-	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
-	
VI) Constraints to achieving progress towards the target	
-	
VII) Any other relevant information	
-	

Box XXXI.

Target 8. Sixty percent of threatened plant species in accessible <i>Ex-situ</i> collections, preferably in the country of origin, and 10 percent of them included in recovery and restoration programmes.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	X
Please specify	
-	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	
b) No	X
Please specify	
-	
III) Current status (please indicate current status related to this target)	
Ex-situ conservation is implemented by several organizations, see answers in article 9. Recovery and restoration program are mainly focus on threatened orchids. However, there is no national target and plan to integrate these efforts according to this target.	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
-	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
-	
VI) Constraints to achieving progress towards the target	
-	
VII) Any other relevant information	
-	

Box XXXII.

Target 9. Seventy percent of the genetic diversity of crops and other major socio-economically valuable plant species conserved, and associated indigenous and local knowledge maintained.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	X
Please specify	
-	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	
b) No	X
Please specify	
-	
III) Current status (please indicate current status related to this target)	
<p>DoA has been actively working toward this target via both in-situ and ex-situ conservation. There are two in-situ wild rice conservation plots located in Prachinburi Province and Sakonnakorn Province. 35 agricultural plant research stations established throughout the country covering the socio-economic plants species, e.g. herb, orchid, durian, mango-stein, coconut, pineapples, mango, palmelo, sugarcane, tapioca, and para-rubber. More detail shown in answers for article 9 and 10.</p> <p>In addition, Her Royal Highness Princess Sirindhorn has initiated the "Plant Germplasm Conservation Project" since 1992. The objective is to provide an additional storage for plant genetic resources and to stimulate and cooperate with other agencies already engaged in conservation with the view to set up a permanent network for short, medium and long term conservation of plant germplasm throughout the country.</p>	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
<p>Three acts concern to this target are the Plant Varieties Act B.E. 2518 revised 2535 (1975 revised 1992), Plant Varieties Protection Act B.E. 2542 (1999), and Protection and Promotion of Traditional Thai Medical Intelligence Act B.E. 2542 (1999). The last two acts promote and support indigenous and local knowledge on plant utilizations.</p>	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
-	
VI) Constraints to achieving progress towards the target	
-	
VII) Any other relevant information	
-	

Box XXXIII.

Target 10. Management plans in place for at least 100 major alien species that threaten plants, plant communities and associated habitats and ecosystems.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	x
Please specify	
-	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	
b) No	x
Please specify	
-	
III) Current status (please indicate current status related to this target)	
Detail explained in answers for article 8 (j).	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
-	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
-	
VI) Constraints to achieving progress towards the target	
-	
VII) Any other relevant information	
-	

Box XXXIV.

Target 11. No species of wild flora endangered by international trade.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	x
Please specify	
-	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	
b) No	x
Please specify	
-	
III) Current status (please indicate current status related to this target)	
Thailand implies its national program and activities towards the CITES provisions. Department of Agriculture (DoA), Department of National Parks, Wildlife and Plant Conservation (DNP), and Department of Fisheries (DoF) are CITES competent agencies for endangered plant, wild animal, and aquatic species, respectively.	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
-	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
-	
VI) Constraints to achieving progress towards the target	
-	
VII) Any other relevant information	
-	

Box XXXV.

Target 12. Thirty percent of plant-based products derived from sources that are sustainably managed.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	x
Please specify	
-	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	
b) No	x
Please specify	
-	
III) Current status (please indicate current status related to this target)	
Please see also answers of the article 10.	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
-	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
-	
VI) Constraints to achieving progress towards the target	
-	
VII) Any other relevant information	
-	

Box XXXVI.

Target 13. The decline of plant resources, and associated indigenous and local knowledge, innovations and practices that support sustainable livelihoods, local food security and health care, halted.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	x
Please specify	
-	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	
b) No	X
Please specify	
-	
III) Current status (please indicate current status related to this target)	
-	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
<p>Two acts are in place, Plant Varieties Protection Act B.E. 2542 (1999), and Protection and Promotion of Traditional Thai Medical Intelligence Act B.E. 2542 (1999).</p> <p>DoLD has collected and documented traditional knowledge on native plant utilization for livestock. Two major books are printed in 2003 and 2004 namely "Local Weed for Native Livestock" and "Local Wisdom on Medicinal Plant for Cattles".</p> <p>Department of Medical Science (DMSc), Ministry of Public Health had supported and promoted for local farmers to grow qualified traditional herbs since 2001. In 2005, the department forwards to issue a qualified sign for Thai herbal dietary supplements, under the project calls "Thai Herbs Quality". After the physical and chemical analyzed as well as tested for bacterial contamination, heavy metals and pesticide residues, the herbal products or raw materials would be given the sign of Thai Herbs Quality. There are about 10 herb species which identified to be target species for industrial products, e.g. aloe vera, cucumber, tamarind, and turmeric.</p>	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
-	
VI) Constraints to achieving progress towards the target	
-	
VII) Any other relevant information	
-	

Box XXXVII .

Target 14. The importance of plant diversity and the need for its conservation incorporated into communication, educational and public-awareness programmes.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	X
Please specify	
-	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	
b) No	x
Please specify	
-	
III) Current status (please indicate current status related to this target)	
Awareness program on plant and its diversity conservation has been implemented as routine work for DNP, RFD and DoA.	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
-	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
-	
VI) Constraints to achieving progress towards the target	
-	
VII) Any other relevant information	
-	

Box XXXVIII.

Target 15. The number of trained people working with appropriate facilities in plant conservation increased, according to national needs, to achieve the targets of this Strategy.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	x
Please specify	
-	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	
b) No	X
Please specify	
-	
III) Current status (please indicate current status related to this target)	
-	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
-	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
-	
VI) Constraints to achieving progress towards the target	
-	
VII) Any other relevant information	
-	

Box XXXIX.

Target 16. Networks for plant conservation activities established or strengthened at national, regional and international levels.	
I) Has your country established national target corresponding to the above global target?	
a) Yes	
b) No	X
Please specify	
-	
II) Has your country incorporated the above global or national target into relevant plans, programmes and strategies?	
a) Yes	
b) No	X
Please specify	
-	
III) Current status (please indicate current status related to this target)	
<p>Most of the current national networks are sectoral based.</p> <p>Several national network and website established which serving to this target, such as, Thailand Network for the Conservation and Enhancement of Landraces of Cultivated Plants (TNCEL), www.panmai.com (general information on Thai plants, horticulture, traditional believes and provincial tree), www.members.thaicentral.com/watchara/fern-index (on ferns: its morphology, ecology and planting) and a number of web pages on medical plants: www.mednet.loxinfo.co.th/herbs/, www.medplant.mahidol.ac.th, www.samunpai.com, and www.thaiherbinfo.com.</p> <p>International network: Thailand is actively cooperates with South East Asian Botanical Collection Information Network (SEABCIN). This network provide searchable database that gives access to information on a number of member country plant specimens. It focuses for the time being on Dipterocarpaceae and a few other genera.</p>	
IV) Measures taken to achieve target (please indicate activities, legislative measures and other steps taken with a view to achieve the target)	
-	
V) Progress made towards target (please specify indicators used to monitor progress towards the target)	
-	
VI) Constraints to achieving progress towards the target	
-	
VII) Any other relevant information	
-	

Box XL.

Please elaborate below on the implementation of this strategy specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

-

Ecosystem Approach

The ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. Application of the ecosystem approach will help to reach a balance of the three objectives of the Convention. At its second meeting, the Conference of the Parties has affirmed that the ecosystem approach is the primary framework for action under the Convention (decision II/8). The Conference of the Parties, at its fifth meeting, endorsed the description of the ecosystem approach and operational guidance and recommended the application of the principles and other guidance on the ecosystem approach. The seventh meeting of the Conference of the Parties agreed that the priority at this time should be facilitating implementation of the ecosystem approach. Please provide relevant information by responding to the following questions.

3. ?¹ Is your country applying the ecosystem approach, taking into account the principles and guidance contained in the annex to decision V/6? (decision V/6)

a) No	
b) No, but application is under consideration	
c) Yes, some aspects are being applied	X
d) Yes, substantially implemented	

4. ? Is your country developing practical expressions of the ecosystem approach for national policies and legislation and for implementation activities, with adaptation to local, national, and regional conditions? (decision V/6)

a) No	
b) No, but development is under consideration	X
c) Yes, practical expressions have been developed for applying some principles of the ecosystem approach	
d) Yes, practical expressions have been developed for applying most principles of the ecosystem approach	

5. Is your country strengthening capacities for the application of the ecosystem approach, and providing technical and financial support for capacity-building to apply the ecosystem approach? (decision V/6)

a) No	
-------	--

¹ Please note that all the questions marked with ? have been previously covered in the second national reports and some thematic reports.

b) Yes, within the country	X
c) Yes, including providing support to other Parties	

6. ? Has your country promoted regional cooperation in applying the ecosystem approach across national borders? (decision V/6)

a) No	
b) Yes, informal cooperation (please provide details below)	
c) Yes, formal cooperation (please provide details below)	X

Further comments on regional cooperation in applying the ecosystem approach across national borders.

Thailand supports the promotion of ecosystem approach (EA) through Association of Southeast Asian Nations (ASEAN) and The Mekong River Commission (MRC), i.e. ASEAN Strategic Plan of Action on the Environment 1994 – 1998, ASEAN Environmental Education Action Plan, 2000 – 2005, ASEAN Regional Haze Action Plan, and the MRC programs which facilitate joint planning and development between the four member countries of the Lower Mekong Basin in a way that looks at the river basin as an ecological whole. More information, please see www.aseansec.org and www.mrcmekong.org.

At the implementation level, Thailand working with international organizations, in particular FAO, International Tropical Timber Organization (ITTO), World Wide Fund for Nature (WWF), Asia Development Bank (ADB) and The World Conservation Union (IUCN) in promoting EA across national borders. Projects are for example:

- Management of the Phatam Protected Forests Complex which aims to promote cooperation for transboundary biodiversity conservation between Thailand, Laos PDR, and Cambodia. www.forest.go.th.
- Greater Mekong Sub-region (GMS) Biodiversity Conservation Corridor Initiative to reduce potential adversely affect to ecosystems and high value biodiversity areas from the Region Economic Corridor Program. www.adb.org/Projects/GMS-biodiversity.

7. Is your country facilitating the exchange of experiences, capacity building, technology transfer and awareness raising to assist with the implementation of the ecosystem approach? (decisions VI/12 and VII/11)

a) No	
b) No, some programmes are under development	
c) Yes, some programmes are being implemented (please provide details below)	X
d) Yes, comprehensive programmes are being implemented (please provide details below)	

Further comments on facilitating the exchange of experiences, capacity building, technology transfer and awareness raising to assist with the implementation of the ecosystem approach.

Since EA has been informally and partially adopted as new paradigm of natural resources management and conservation in Thailand, several programs and projects implementing by government agencies and NGOs have facilitated and promoted capacity building, exchange of experiences, transfer of know-how, and raising awareness in EA implementation.

Nevertheless, it is important to note that those projects mostly do not refer the 12 principles of EA and normally focus on Principle 2, 3, 5, 6, 10, 11, and 12 only. This incompleteness may be due to the unawareness of CBD and its relevant decisions.

Samples of the current programs which promote and support exchange of experiences, capacity building, transferring technology and raising awareness on EA can be listed as follows:

- DNP is promoting EA as new paradigm of protected areas management under the Joint Management of Protected Areas Project (JoMPA). Key target actors are not only the staff of the department at national, regional, and target protected areas only, but also the local

communities and NGOs who involving in implementing the project.

- Department of Marine and Coastal Resources (DMCR) initiated the Ao PhangNga Management Project, which promote communities, NGO, and government agencies.
- Thai-EU Coastal Habitat and Resource Management (CHARM) is another project implied ecosystem approach.

8. Is your country creating an enabling environment for the implementation of the ecosystem approach, including through development of appropriate institutional frameworks? (decision VII/11)

a) No	
b) No, but relevant policies and programmes are under development	X
c) Yes, some policies and programmes are in place (please provide details below)	
d) Yes, comprehensive policies and programmes are in place (please provide details below)	

Further comments on the creation of an enabling environment for the implementation of the ecosystem approach.

Reform the government structure from sector based to area based approach was first finalized in 2003. However, after 2 years RTG is now concerning to restructure its institutions again. This current effort includes also reviewing and developing of new legal frameworks to support and promote decentralization, to establish facilities and mechanisms for people participation and to paradigm shift a managerial authority to integrate conservation, sustainable use, and development.

C. ARTICLES OF THE CONVENTION

Article 5 – Cooperation

9. ? Is your country actively cooperating with other Parties in respect of areas beyond national jurisdiction for the conservation and sustainable use of biological diversity?

a) No	
b) Yes, bilateral cooperation (please give details below)	X
c) Yes, multilateral cooperation (please give details below)	X
d) Yes, regional and/or subregional cooperation (please give details below)	X
e) Yes, other forms of cooperation (please give details below)	

Further comments on cooperation with other Parties in respect of areas beyond national jurisdiction for the conservation and sustainable use of biodiversity.

1. Bilateral cooperation:

Thailand has huge number of bilateral cooperation with other Parties. Most of them are to exchange and support each other technical collaboration and assistant in capacity building of the other Parties human resources and transfer of lesson learnt. Cooperation can be grouped into 4 categories:

- (1) exchange of experiences on managing and conserving of biodiversity resources
- (2) technical support on flora and fauna taxonomy, including microorganism taxonomy
- (3) research and development for utilization of biodiversity organism and biotechnology, including for medicinal plants
- (4) provide opportunity for field and laboratory research and study in natural science.

All of these have been initiated and continued by interests of government, organization, and individuals, which has no relation to the CBD.

Samples of these bilateral cooperation are:

Forestry: The project names "Establishment of Advanced Integrated Agroforestry Models at Khuon Than, BAC GIANG Province (EMAK)" started in 1997. The national agreement signed in 1997. Technical team from Thailand visited and trained Vietnamese foresters and villagers from the three villages in BAC GIANG Province. Thai government initially planned to allocate 62.24 million Baht for 5 years project (1997-2001). Unfortunately, the consequence from Asia economic crisis in 2000, the figure was decreased to be 34.83 million baht in 1999. Project activities included develop 2 demonstration plantation plots with total area of 41.6 ha, developed 100 units of check dam, reforest in 3 degraded areas with total areas of 6.12 square kilometer, and established 1 arboretum with an area of 50 ha.

Inland and marine fisheries Resources: Thai fisheries experts on taxonomy, hatcheries, and epidemic have been invited to neighboring countries under bilateral agreements and sometime on an emergency. This cooperation includes training, lecturing, inventing, and mitigating for fish and coral reefs diversity and its natural stock both in freshwater and marine ecosystem. These co-operations are long term based and target countries include Vietnam, Myanmar, Cambodia and Lao PDR.

Biotechnology: Bilateral agreements have been signed and implemented with several Parties both with government organization and with institutional level, including private companies. Cooperative activities are vary from (1) exchange information, co- research and exchange of technical expertise, (2) providing laboratory facilities, equipments and experts on biotechnology as Thailand is training hub for the region and (3) host and support international student exchanges and post-graduate programme on biotechnology. Name and country of existing collaboration are, for example, Korean Research Institute for Bioscience and Biotechnology (Korea), Chiba University (Japan), National Institute of Technology and Evaluation (Japan) Research Institute of Science (Lao PDR.) National Biotechnology Directorate (Malaysia), The Centre National De Genotypage (France), Novartis Co.Ltd. (Switzerland), Novozyme Co.Ltd. (Denmark).

Medical plant: With Thai-Chinese collaboration, Ministry of Public Health (MoPH) has initiated a project calls "Searching for Suitable Plantation Site in Thailand to Reduce Importing of Chinese Medicinal Herb". The agreement signed in 2002 by the two countries ministers of public health ministry. Chinese government agrees provides stock of 11 medicinal herbs for Thai government to have them plant and commercially produce for Thai and global market. In order to achieving goal of the project a national working group has been established in the really integrated approach. In order to have the site selected, maintained pharmaceutical quality, and mass produced for commercialize, the working group comprises of 7 departments from the 4 ministries. They are (1) Department of Alternative and Traditional Thai Medicinal Development, MoPH, (2) Department of Medicinal Science, MoPH, (3) Pharmaceutical Organization, MoPH, (4) Department of Land Development, MoAC, (5) Department of Agriculture, MoAC, (6) Department of Agricultural Extension, MoAC, and (7) Forest Industry Organization, MoNRE. Within 2 years, the working group has identified 40 sites to test 8 species, other 3 species to be done further.

Academic, research and exchange of field visits: Additional to those competent government agencies, most of the public universities develop bilateral agreement for Cooperation covers wide range of activities including exchange of experts and information, technical collaboration, and international education opportunity, and accessible to field experiment programmes.

Kasetsart University, which is one of the major academic institutes on biodiversity has bilateral agreements cover at least 11 Parties throughout the world, e.g. Canada, Finland, Denmark, Japan, Nepal, Indonesia, Malaysia, Philippines, Russia, Australia, and Laos. KU also offers Lao students for bachelor and master degree on forestry at the same registration fee as a Thai student.

2. Multilateral cooperation:

Thailand has ratified and actively implemented activities and programmes accordingly to the following international conventions, includes:

- Convention Concerning the Protection of the World's Cultural and Natural Heritage (The World Heritage Convention)
- Convention on International Trade in Endangered Wild Flora and Fauna Species (CITES)
- Man and Biosphere Program (MAB)
- Convention on Biological Diversity (CBD)
- Convention on Wetlands of International Importance (RAMSAR)

- United Nations Framework Convention on Climate Change
- Kyoto Protocol
- United Nations Convention to Combat Desertification (UNCCD)

Other than the activities and programme from above MEAs, Thailand has also actively participated with other Parties through mechanisms and forum of ASEAN, UN, UNESCO, MRC, World Bank, and GMS-ADB Development programmes toward capacity building, research, and ensuring of sustainable use of biological resources in the region.

Samples of these multilateral cooperation can be listed as follow:

ONEP has actively worked with ASEAN Regional Center for Biodiversity Conservation (ARCBC). As the national focal point, ONEP assisting ARCBC compile information from relevant agencies to fill up form and suggestion for identifying ASEAN capacity building need assessment and formulating ASEAN protected area manager competency.

Southeast Asian Fisheries Development Center (SEAFDEC) has its Training Division situated within DoF, Bangkok. Together with all ASEAN Member Countries, Thailand through SEAFDEC cooperates to promote responsible fisheries in the region. Series of Regional Guidelines for Responsible Fisheries were developed and adopted as framework for formulation of policies and programs to ensure responsible fishing practices at regional, national and even local levels.

Mekong River Commission (MRC) was established on 5 April 1995 by the Agreement on The Cooperation for The Sustainable Development of The Mekong River Basin. The MRC member countries are Cambodia, Lao PDR, Thailand and Viet Nam. MRC maintains regular dialogue with the two upper states of the Mekong River Basin, China and Myanmar. The member agree to co-operate in all fields of sustainable development, utilization, management and conservation of the water and related resources of the Mekong River Basin, such as navigation, flood control, fisheries, agriculture, hydropower and environmental protection.

10. Is your country working with other Parties to develop regional, subregional or bioregional mechanisms and networks to support implementation of the Convention? (decision VI/27 A)

a) No	
b) No, but consultations are under way	
c) Yes, some mechanisms and networks have been established (please provide details below)	X
d) Yes, existing mechanisms have been strengthened (please provide details below)	

Further comments on development of regional, subregional or bioregional mechanisms and networks to support implementation of the Convention.

In addition to the cooperation explained in Q.9 ASEAN and MRC, Thailand also actively participates and supports international organizations to support regional, subregional and bioregional network. In particular the cooperation through international organizations which have their regional offices in Thailand, e.g. FAO, UNDP, UNEP, UNESCO, ESCAP, World Bank, ADB, IUCN, WWF, WSC, and Wild Aids.

11. Is your country taking steps to harmonize national policies and programmes, with a view to optimizing policy coherence, synergies and efficiency in the implementation of various multilateral environment agreements (MEAs) and relevant regional initiatives at the national level? (decision VI/20)

a) No	
b) No, but steps are under consideration	
c) Yes, some steps are being taken (please specify below)	X
d) Yes, comprehensive steps are being taken (please specify below)	

Further comments on the harmonization of policies and programmes at the national level.

Most of MEAs policies and programmes have not been harmonized into national level, except ones referred in the World Heritage Convention, Ramsar Convention and CITES Convention.

Box XLI.

Please elaborate below on the implementation of this strategy specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Major constraints for Thailand to implement article 5 can be listed as follow:

- a. **Existing collaborations, relevant to the 3 objectives of CBD, have been in place long before the initiation of CBD. Many organizations in Thailand who working toward the 3 CBD objectives feel reluctant to refer those collaborations as implementation of the CBD.**
- b. **Accessible to CBD information, guidelines, decisions are limited to technical staff only. There is a need to support to translate those documents into local languages for decision makers and general public.**

Article 6 - General measures for conservation and sustainable use

12. Has your country put in place effective national strategies, plans and programmes to provide a national framework for implementing the three objectives of the Convention? (Goal 3.1 of the Strategic Plan)

a) No	
b) No, but relevant strategies, plans and programmes are under development	
c) Yes, some strategies, plans and programmes are in place (please provide details below)	X
d) Yes, comprehensive strategies, plans and programmes are in place (please provide details below)	

Further comments on the strategies, plans and programmes for implementing the three objectives of the Convention.

Even just ratified the CBD in 2004 Thailand has in place the 2nd NBSAP (2003-2007) which endorsed by the Cabinet on 11 June 2002. This 2nd NBSAP consists of 7 strategies, 14 expected outputs. Further information, please visit www.onep.go.th.

13. ? Has your country set measurable targets within its national strategies and action plans? (decisions II/7 and III/9)

a) No	
b) No, measurable targets are still in early stages of development	
c) No, but measurable targets are in advanced stages of development	
d) Yes, relevant targets are in place (please provide details below)	X

e) Yes, reports on implementation of relevant targets available (please provide details below)	
Further comments on targets set within national biodiversity strategies and action plans.	
Targets identified in the 2nd NBSAP (2003-2007) are as follow:	
Specific Measurable Targets/indicators	
<ul style="list-style-type: none"> • Promote the education on the basic knowledge of biodiversity and public awareness in every age–group to the minimum 50% of the entire population in each province and every local administrative organization, by the year 2007. • Encourage the implementation to increase the number of taxonomists for every taxa in government organizations and academic institutions, at least 20 personnel by the year 2007. • Develop and harmonize the biodiversity database of every institution/organization. Keep them updated and linked together as “Thailand’s Biodiversity Information Network” by the year 2004. • Conserve the forest ecosystems at least 30% of the total area. And additionally recover about 10% of the total area to create “the community forest” and other uses by the year 2007. • Conserve and restore wetlands at least 35% of the total area in the country. • Survey and monitor the biodiversity of plants, animals, insects and micro–organisms in the following protected areas and wetlands, by the year 2007: <ul style="list-style-type: none"> ○ The Biosphere Reserves ○ Western Forest Complex (in the western region) ○ Eastern Forest Complex (in the eastern region) ○ Khlong Sang–Khao Sok Forest Complex ○ Doi Phu Kha–Mae Yom Forest Complex ○ Songkram River Basin Forest • Proceed taxonomic studies, collect and conserve the diversity of plants, crops, rice species, herbal plants, microorganisms, fungi and insects by the year 2007. • Survey the presence and distribution of invasive alien species in and surround the protected areas, and develop the measures to control the invasion of alien species, by the year 2007. • Develop “the Biodiversity Conservation Network” which has the unity nationwide, by the year 2007. • Building capacity of the people and local administrative organizations on the conservation and sustainable use of biodiversity at least 40% of the country’s total area. • Support the Thai delegates/representatives to participate and negotiate in the international or regional meetings or workshops concerning biodiversity. • Organize at least two international workshops on biodiversity in Thailand. • Nominate the most appropriate sites for biodiversity conservation to the following Convention and Agreement by the year 2007. <ul style="list-style-type: none"> ○ At least one site to the Convention on World Heritage ○ At least one site to the ASEAN Agreement on ASEAN World Heritage ○ At least twenty five sites to the Ramsar Convention ○ At least two sites to the Convention on Migratory Species of Wild Animals ○ At least five sites to the Man and Biosphere Programme • Support the education and improve laws or regulations on the access to biological resources, technological transfer and benefit sharing, by the year 2007. 	

14. Has your country identified priority actions in its national biodiversity strategy and action plan? (decision VI/27 A)	
a) No	
b) No, but priority actions are being identified	
c) Yes, priority actions identified (please provide details below)	X
Further comments on priority actions identified in the national biodiversity strategy and action plan.	

In addition to the ensuring of conservation and sustainable use of biodiversity, ecosystem and habitat, education and public awareness, and capacity building of institutions and staff were identified as the high priorities in the National Economic and Social Development Plan (NESDP).

15. Has your country integrated the conservation and sustainable use of biodiversity as well as benefit sharing into relevant sectoral or cross-sectoral plans, programmes and policies? (decision VI/27 A)

a) No	
b) Yes, in some sectors (please provide details below)	
c) Yes, in major sectors (please provide details below)	X
d) Yes, in all sectors (please provide details below)	

Further information on integration of the conservation and sustainable use of biodiversity and benefit-sharing into relevant sectoral or cross-sectoral plans, programmes and policies.

The NESDP, which is the 5 years principle plan of the country has included content and targets of conservation and sustainable use of biodiversity and benefit-sharing. The current plan (9th plan 2002-2006) has identified the importance of government investment in (1) biodiversity database networking, (2) research for strengthening institutions and legal instruments to protect key flora and fauna species, and (3) strengthen people and local communities involving in biodiversity conservation through species protection.

In compliance with the 9th NESDP, the current government leading by Prime Minister Pol. Lt. Col. Thaksin Shinawatra has declared the 4 years National Administration Strategic Plan B.E. 2548-2551 (2005-2008) which consists of 9 strategies as follow:

- (i) Poverty eradication
- (ii) Human resources and social Development
- (iii) Improvement for balance and competitiveness economic structure
- (iv) Strengthen Natural Resources and Environmental Management
- (v) Enhance international economic affair
- (vi) Development legal mechanism and promote for good governances
- (vii) Promote democracy and society process
- (viii) Ensure national security
- (ix) Ensure the competent for change and dynamic of world society

Principle of sustainable use of biodiversity resources was referred to not only in the fourth strategy, but in almost all strategies.

Another key national mechanism is the adoption of sustainable development as a national agenda, and hence the establishment of the **National Committee on Sustainable Development**. This national committee chairs by the Prime Minister and secretariat by the National Economic and Social Development Board (NESDB), who is also the executing agency to formulate and monitor the National Plan. ONEP, national focal point of CBD, and Director General of Department of International Organization, representative of the Thailand in COP are also the member in national committee. Main principle for sustainable development identifies by the committee is to restore of the nature balance. Restoration of the nature balance does not only mean plantation, but also mean the need to integrate with others, e.g. community participation, solving social problem, alleviating poverty, and etc.

The **Song Khla Lake Watershed Management Plan Project** leads by NESDB, is one of the most challenging cases for Thailand to prove whether integration of cross-sectoral plans, programmes and policies can make sustainable development principles real or not. The Lake, with an area of 8,495 sq.km. covers 3 provinces in the South of Thailand, had been intensive focus on infrastructure development since 1961. These developments were, for example, converted water flow, road and deep sea port constructed, cash crops promoted, 1/4 of forest area replaced by pararubber, irrigations stored freshwater for double rice crops. After forty years, even living conditions seem to be more comfortable, but there are conflicts everywhere. People learnt that they are unhappy, government were untrustworthy. In 2002, 40 tons of fish (more than 40 million baht) caged in the lake died because of water pollution. The principle of sustainable development was requested to

mitigate the situation. The National Committee for Songkhla Lake Development formed on 12 November 2002, chaired by the Deputy Prime Minister. Key implementing agencies were MoNRE and Ministry of Interior (MoIn).

16. Are migratory species and their habitats addressed by your country's national biodiversity strategy or action plan (NBSAP)? (decision VI/20)	
a) Yes	X
b) No	
I) If YES, please briefly describe the extent to which it addresses	
- Conservation, sustainable use and/or restoration of migratory species	Inventory of waterfowl in wetlands (measure 3.3.1)
- Conservation, sustainable use and/or restoration of migratory species' habitats, including protected areas	Identify and propose at least 2 sites for Anatiadae and Shorebird Network (Convention on Migratory Species) At least 5 sites per year propose for Ramsar Sites Seagrass bed restoration in 3 marine parks (measure 3.1.1) Restorations of several wetlands 3.1.1 Study international and national important wetland and its surrounding areas to develop land use policy and urban planning (measure 3.3.2) Promote youth conservationists, community networks at Sam Roy Yod Wetland (measure 3.4.2) Ecotourism and nature education in Don Hoi Lord Ramsar Site and others (measure 6.1.1)
- Minimizing or eliminating barriers or obstacles to migration	Develop master plan for conservation and sustainable use of wetland (measure 3.1.1) Prevent and monitor misused of wetland (measure 3.1.2) Promote organic farming (measure 4.1.2)
- Research and monitoring for migratory species	Establish ecological database at Sam Roy Yod Wetland (measure 2.4.1) Establish database network on biodiversity and wetland (measure 2.4.2) Monitor habitat condition and ecological changes in Bueng Boraphet and Sam Roy Yot National Park (measure 3.3.1) Monitor ecological change affect to waterfowl in Bueng Boraphet (measure 3.3.2) Monitor water quality (measure 5.3.3)
- Transboundary movement	-
II) If NO, please briefly indicate below	
(a) The extent to which your country addresses migratory species at national level	
(b) Cooperation with other Range States since 2000	

Biodiversity and Climate Change

17. Has your country implemented projects aimed at mitigating and adapting to climate change that incorporate biodiversity conservation and sustainable use? (decision VII/15)	
a) No	
b) No, but some projects or programs are under development	
c) Yes, some projects have been implemented (please provide details below)	X
Further comments on the projects aimed at mitigating and adapting to climate change that incorporate biodiversity conservation and sustainable use.	
<p>DNP, RFD and DMCR has conducted several carbon sink research stations in different forest types, mostly the projects supported by Thai Government and Government of Japan. Several researchers, in particular Dr. Kanthree from Ramkhamheang University, Bangkok, has used GCM UK89 Model to predict climate change scenarios and plausible impacts in Thailand. She has also identified climate change hot spot throughout the country and listed out 16 national parks and 17 wildlife sanctuaries which could be affected along with those hot spots.</p> <p>On 5 August 2005, DNP conducted 3 days multidiscipline national workshop to identify priority and necessary programme for preparation toward climate changes. Outcomes of the workshop identified the strong need for the country to develop "National Climate Change Research Center" and intensively build up human resources concerning the following issue:</p> <ul style="list-style-type: none"> - Effect and adaptation of forest resources - Effect and adaptation of agricultural resources - Effect and adaptation of inland water sources - Modeling on climate in Thailand - Effect and adaptation of coastal area and resources 	

18. Has your country facilitated coordination to ensure that climate change mitigation and adaptation projects are in line with commitments made under the United Nations Framework Convention on Climate Change and the United Nations Convention to Combat Desertification? (decision VII/15)	
a) No	
b) No, but relevant mechanisms are under development	X
c) Yes, relevant mechanisms are in place (please provide details below)	
Further comments on the coordination to ensure that climate change mitigation and adaptation projects are in line with commitments made under the UNFCCC and the UNCCD.	
<p>Thailand ratified UNFCCC in June 1994 and Kyoto Protocol in August 2002, and the UNCCD in . MoNRE, by ONEP is also the national focal point for these conventions, so does the CBD and Ramsar. Therefore, this can ensure that all programmes on CBD would be in line with UNCCD and Kyoto Protocol.</p>	

Box XLII .

<p>Please elaborate below on the implementation of this article and associated decisions specifically focusing on:</p> <ul style="list-style-type: none"> a) outcomes and impacts of actions taken; b) contribution to the achievement of the goals of the Strategic Plan of the Convention; c) contribution to progress towards the 2010 target; d) progress in implementing national biodiversity strategies and action plans; e) contribution to the achievement of the Millennium Development Goals; f) constraints encountered in implementation.
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Since 2002, Thailand has been implemented NBSAP which have been recognized as ways and means for coordinated works related to biodiversity among relative agencies. Unfortunately, all the plans could not be fulfilled due to limitation of technical and capacity building. Even there were numbers of biodiversity related projects from various “donors”, but NBSAP was rarely identified in those work programmes.

Article 7 - Identification and monitoring

19. ? On Article 7(a), does your country have an ongoing programme to identify components of biological diversity at the genetic, species, ecosystem level?

a) No	
b) Yes, selected/partial programmes at the genetic, species and/or ecosystem level only (please specify and provide details below)	X
c) Yes, complete programmes at ecosystem level and selected/partial inventories at the genetic and/or species level (please specify and provide details below)	

Further comments on ongoing programmes to identify components of biodiversity at the genetic, species and ecosystem level.

Since 1960s, Thailand has accumulative invested and conducted on identification programmes to cover all levels of diversity: ecosystem, species, and genetic. Even though the tremendous works have been achieved, but there are far more to be done. Samples of well known journal and books on taxonomy in Thailand issued in 1960s can be listed as follow:

- **Flora of Thailand Journal** and **Thai Forest Bulletin** which is the first and only systematic attempt to inventory, catalogue, describe and elucidate all plant life of Thailand. The project started in 1960s with the efforts and contributions of the outstanding Thai taxonomist: Prof. Tem Smitinand. Cooperation with foreign botanists (Danish, Japanese, and Dutch) the project and journal has been successfully published up to nowadays.
- **Mammal of Thailand** (B Lekagul and JA McNeely) as the first fully comprehensive treatment of the taxonomy and distribution of the Thai mammal fauna.
- **Bird Guide of Thailand** (First edition in 1986) with colorful drawing identifies birds found in Thailand and its habitats. It was the first comprehensive guide book illustrated and described by B.Lekagul and his staff.

Nowadays, books, texts, magazines relate to taxonomic of Thai flora and fauna are commonly found in library and bookstores.

Today, institutions mentioned in Q.88 implement an on going program on identify components of biodiversity at all level. For example, DNP has conducted inventory of insect species in Thai protected areas which is an initiative together with Natural History Museum, UK and US National Science Museum and etc. DoA has actively collect DNA fingerprint of economic plant species, e.g. rice, oil palm, silkworm, and rhynchostylis (orchid).

With an ongoing research in diverse ecological surroundings, there are new records and new species identified every year. For example, the *Sirindhornella cristata* and *Plumatella chulabhornae* are the bryozoans found in 2004 and 2005 respectively. Whilst in 2004, research funded by BIOTEC, Biodiversity Research and Training Program, recorded 64 new found species in 2004.

ONEP, as the national GTI focal point, has conducted national taxonomic needs assessment, compile national lists of institutions and experts on taxonomy, and establishing and maintaining a national taxonomic network. With support from ARCBC, outcome of the study were consulted at national meeting in Bangkok on 17-18 October 2001 and presented briefly in Thailand 2nd National Report which can be summarized as follow:

- Urgent need for taxonomist to replace those who retired, to develop para-taxonomists who can shift some work load from taxonomists,
- Improve collection facilities, laboratories, equipment for specimen collection, for classification and for data collection, and taxonomic reference materials
- Extra investment to create taxonomic information network, forum for information

20. ? On Article 7(b), which components of biological diversity identified in accordance with Annex I of the Convention, have ongoing, systematic monitoring programmes?

- at ecosystem level (please provide percentage based on area covered)	X
- at species level (please provide number of species per taxonomic group and percentage of total known number of species in each group)	X
- at genetic level (please indicate number and focus of monitoring programmes)	X

Further comments on ongoing monitoring programmes at the genetic, species and ecosystem level.

Land use monitoring: Forest cover and type of forest cover is reported in the Statistic of Forestry every year. For example. Number and area of national forest reserves can be obtained at www.forest.go.th

Forest Ecological quality: DNP has established 6 long term permanent plots in 6 major forest types in every part of the country. Each plot covers the area of 16-50 ha. Diameter at Breast High of every woody tree that bigger than 1 cm. will be measured and recorded as well as its coordinated location which will be repeated in 5 years period. Today more than 260,000 trees of approximately 1,500 species were recorded.

21. ? On Article 7(c), does your country have ongoing, systematic monitoring programmes on any of the following key threats to biodiversity?

a) No	
b) Yes, invasive alien species (please provide details below)	
c) Yes, climate change (please provide details below)	X
d) Yes, pollution/eutrophication (please provide details below)	X
e) Yes, land use change/land degradation (please provide details below)	X
f) Yes, overexploitation or unsustainable use (please provide details below)	X

Further comments on monitoring programmes on key threats to biodiversity.

Four Biosphere Reserves in Thailand are target areas for monitoring program on the above lists. These four areas are:

- **Sakaerat Biosphere Reserve:** Locates in Nakon Ratchasima province . Key ecosystem types are dry evergreen forest and dry dipterocarp forest.
- **Kogma - Maesa Biosphere Reserve:** Locates in Chiang Mai Province. Key ecosystem types are mixed deciduous forest, dry dipterocarp forest, hill evergreen forest and pine forest.
- **Huay Tak Teak Biosphere Reserve:** Locates in Lampang Province . Key ecosystem types are planted and natural teak in Thailand and with mixed deciduous forest and dry dipterocarp forest. It is also one of the teak seed orchards of the world.
- **Ranong Biosphere Reserve:** Locates in Ranong province on the west coast of the Thai Peninsula . Key ecosystem type is mangrove.

These areas have also a research station and facilities which also attracts local, national, and international researcher to conduct their research.

Beyond the monitoring program at the four biosphere reserves above, there are also a wide range of permanent monitoring plots throughout the country implement by DNP, DoF, DoA, DMCR, Thailand Institute of Science and Technological Research (TISTR), Geo-informatics and Space Technology Development Agency (GISTDA), and national and local academic institutions. More detail, please see Q. 88.

22. ? On Article 7 (d), does your country have a mechanism to maintain and organize data derived from inventories and monitoring programmes and coordinate information collection and management at the national level?	
a) No	
b) No, but some mechanisms or systems are being considered	
c) Yes, some mechanisms or systems are being established	
d) Yes, some mechanisms or systems are in place (please provide details below)	X
e) Yes, a relatively complete system is in place (please provide details below)	
Further information on the coordination of data and information collection and management.	
Competent authority on each topic is responsible for the management of information collection and management at national level. For example, RFD for forest ecology, DoF for freshwater ecology, DMCR for marine and coastal ecology, DoA for agriculture ecology and insects, Land Development Department (LDD) for land use and soil quality, DNP for forest insect, DoLD for livestock and its feeding, BIOTEC for microorganism, and DMSC for medical plants. However, ONEP as a national focal point and CHM on CBD is looking for mechanism to integrated these mechanisms at national level.	

23. ? Does your country use indicators for national-level monitoring of biodiversity? (decision III/10)	
a) No	X
b) No, but identification of potential indicators is under way (please describe)	
c) Yes, some indicators identified and in use (please describe and, if available, provide website address, where data are summarized and presented)	
d) Yes, a relatively complete set of indicators identified and in use (please describe and, if available, provide website address, where data are summarized and presented)	
Further comments on the indicators identified and in use.	

Box XLIII.

<p>Please elaborate below on the implementation of this article and associated decisions specifically focusing on:</p> <ul style="list-style-type: none"> a) outcomes and impacts of actions taken; b) contribution to the achievement of the goals of the Strategic Plan of the Convention; c) contribution to progress towards the 2010 target; d) progress in implementing national biodiversity strategies and action plans; e) contribution to the achievement of the Millennium Development Goals; f) constraints encountered in implementation.

Decisions on Taxonomy

24.? Has your country developed a plan to implement the suggested actions as annexed to decision IV/1? (decision IV/1)	
a) No	
b) No, but a plan is under development	X
c) Yes, a plan is in place (please provide details below)	
d) Yes, reports on implementation available (please provide details below)	
Further information on a plan to implement the suggested actions as annexed to decision IV/1.	
<p>There are several activities in the annex implemented and listed in the 2nd NBSAP (particularly the Strategy 2, Objective 2.1). For example, the roster of experts in CHM, and the menu of indicators in thematic areas (being studied by KU). But there is no overall plan for actions that listed in the annex.</p>	

25.? Is your country investing on a long-term basis in the development of appropriate infrastructure for your national taxonomic collections? (decision IV/1)	
- No	
- Yes (please provide details below)	X
Further information on investment on a long-term basis in the development of appropriate infrastructure for your national taxonomic collections.	
<p>Plant Museum (in Queen Sirikit Botanical Garden), National Natural Science Museums (operates by Natural Science Museum), Bangkok Forest Herbarium (DNP), Bangkok Microbiological Research Center (Bangkok-MIRCEN, TISTR), Agriculture Plant and insect museum, Mushroom and microorganism collection (in DoA), Microbiology Culture Collection (BIOTEC) Aquarium and fishes specimens collections (DoF), Center of Excellence for Biodiversity (at Chulalongkorn University), Center on Molecular Taxonomy of Some Endangered Wildlife Species in Thailand (Faculty of Veterinary Science, Mahidol University) and several specimen collections in academic institutes throughout the country are established and operated permanently by Thai budget.</p> <p>Some of these infrastructures have become not only the heritage of the nation, but also a major attraction for the public. In addition, there are a number of private investments in museum, herbarium, zoo, and botanical garden.</p>	

26.? Does your country provide training programmes in taxonomy and work to increase its capacity of taxonomic research? (decision IV/1)	
- No	
- Yes (please provide details below)	X
Further information on training programmes in taxonomy and efforts to increase the capacity of taxonomic research.	
<p>Not only departments and universities listed in Q.88, most of the departments working toward identification and monitoring also provide training courses on taxonomy. The programmes include in-service training, exchanging staff with other Parties, and student internships. The Queen Sirikit Botanical Garden also provides the annual training course call "Parataxonomist Training" for interested person (http://www.qsbg.org/educational.asp)</p> <p>Most of the academic institutes have cooperation with other parties (donors) to support Thai neighboring countries on taxonomy. These cooperation normally make use of Thai experts and facilities to build capacity on taxonomy for neighboring countries. For example, Chiang Mai University (CMU) provides training course for taxonomy of algae and zooplankton, Prince Songkhla University (PSU) under the cooperation with GTI arrange a training workshop on Rotifer and Holothuroidea for</p>	

Myanmar, Cambodia, Lao PDR, and Vietnam.

In addition, there are a number of NGO and private groups who provide taxonomic activities to introduce children and general public. They are for example Bangkok Bird Club, WFT, Green World Foundation, The Mushroom Researchers and Growers Society of Thailand.

Lastly, there are several types of book, magazine, text, and journal available in the public and private bookstore.

27.? Has your country taken steps to ensure that institutions responsible for biological diversity inventories and taxonomic activities are financially and administratively stable? (decision IV/1)

- No	
- No, but steps are being considered	
- Yes, for some institutions	
- Yes, for all major institutions	X (even they are stable, but extra financial support needed for capacity building, in particular to build and motivate young taxonomist, and installation of permanent infrastructure & equipments)

28.*² Is your country collaborating with the existing regional, subregional and global initiatives, partnerships and institutions in carrying out the programme of work, including assessing regional taxonomic needs and identifying regional-level priorities? (decision VI/8)

a) No	
b) No, but collaborative programmes are under development	
c) Yes, some collaborative programmes are being implemented (please provide details about collaborative programmes, including results of regional needs assessments)	
d) Yes, comprehensive collaborative programmes are being implemented (please provide details about collaborative programmes, including results of regional needs assessment and priority identification)	X

Further information on the collaboration your country is carrying out to implement the programme of work for the GTI, including regional needs assessment and priority identification.

Thailand has actively worked with ASEAN Regional Centre for Biodiversity Conservation (ARCBC) on taxonomic needs assessment and other activities.

29.* Has your country made an assessment of taxonomic needs and capacities at the national level for the implementation of the Convention? (annex to decision VI/8)

a) No	
b) Yes, basic assessment made (please provide below a list of needs and capacities identified)	X
c) Yes, thorough assessment made (please provide below a list of needs and capacities identified)	

Further comments on national assessment of taxonomic needs and capacities.

² The questions marked with * in this section on Taxonomy are similar to some questions contained in the format for a report on the implementation of the programme of work on the Global Taxonomy Initiative. Those countries that have submitted such a report do not need to answer these questions unless they have updated information to provide.

Through the ARCBC question list. Summary results showed in Q.19. However, there is no follow up to fulfill the needs identified.

30. * Is your country working on regional or global capacity building to support access to, and generation of, taxonomic information in collaboration with other Parties? (annex to decision VI/8)

a) No	
b) Yes, relevant programmes are under development	
c) Yes, some activities are being undertaken for this purpose (please provide details below)	X
d) Yes, many activities are being undertaken for this purpose (please provide details below)	

Further comments on regional or global capacity-building to support access to, and generation of, taxonomic information in collaboration with other Parties.

Many institutions, e.g. BIOTEC, DoF, RFD, DoA, BGO, NSM, and academic institution conduct bilateral and multilateral agreements with other parties on this issue. More detail explained in Article 5.

31. * Has your country developed taxonomic support for the implementation of the programmes of work under the Convention as called upon in decision VI/8? (annex to decision VI/8)

a) No	
b) Yes, for forest biodiversity (please provide details below)	X
c) Yes, for marine and coastal biodiversity (please provide details below)	X
d) Yes, for dry and sub-humid lands (please provide details below)	
e) Yes, for inland waters biodiversity (please provide details below)	X
f) Yes, for mountain biodiversity (please provide details below)	X
g) Yes, for protected areas (please provide details below)	X
h) Yes, for agricultural biodiversity (please provide details below)	X
i) Yes, for island biodiversity (please provide details below)	X

Further comments on the development of taxonomic support for the implementation of the programmes of work under the Convention.

Thailand have long term cooperation with recommended organizations in the annex, e.g. Center for International Forestry Research (CIFOR), International Center for Research in Agroforestry (ICRAF), International Society for Mangrove Ecology (ISME), Wetlands International (WI), and FAO.

32. * Has your country developed taxonomic support for the implementation of the cross-cutting issues under the Convention as called upon in decision VI/8?

a) No	
b) Yes, for access and benefit-sharing (please provide details below)	X
c) Yes, for Article 8(j) (please provide details below)	X
d) Yes, for the ecosystem approach (please provide details below)	X
e) Yes, for impact assessment, monitoring and indicators (please provide details below)	X

f) Yes, for invasive alien species (please provide details below)	X
g) Yes, for others (please provide details below)	
Further comments on the development of taxonomic support for the implementation of the cross-cutting issues under the Convention.	
Most of the taxonomists from thematic areas become key informants and actors in these cross-cutting issues.	

Article 8 - *In-situ* conservation [excluding paragraphs (a) to (e), (h) and (j)]

33. ? On Article 8(i), has your country endeavored to provide the conditions needed for compatibility between present uses and the conservation of biological diversity and sustainable use of its components?	
a) No	
b) No, but potential measures are being identified	
c) Yes, some measures undertaken (please provide details below)	
d) Yes, comprehensive measures undertaken (please provide details below)	X
Further comments on the measures taken to provide the conditions needed for compatibility between present uses and the conservation of biological diversity and sustainable use of its components.	
<p>Forestry and fisheries are two main sectors that measures have been taken.</p> <p>Forestry: Consequent of mismanagement in the past, today Thai general public perceives forest as a resource for preservation not utilization. Today, consumption of timber to household and industry use relies on imported wood and mostly replaced by other materials. Forest plantations on teak and other commercial tree species are not as popular as para-rubber and eucalyptus. With technology in wood preservation, para-rubber becomes popular and major volume for exporting. It is sometime called “white teak”. Eucalyptus is mostly for paper pulp.</p> <p>Currently mechanism in place found to be in-effective, however, revision of them are under process by MoNRE. This includes reform of Forestry Industry Organization (FIO) and Royal Forest Department (RFD), and (2) review existing law and regulation. Other than these two reviews, routine measures that in place for ensure the balance condition for present use and its capacity are for example:</p> <ul style="list-style-type: none"> • enforcement of Forestry Act B.E. 2484 (1941), • registration of forest and wood product merchandisers (including importer and exporter), • promotion for private investment in forest plantation, • strengthening local communities and authorities to manage their forest resources well (under principle of their community forest), • research and development on utilization of timber, wood and non-wood product, and • research and development on reforestation silviculture, wood technology and industry and wood substitution material. <p>Fisheries: Inland fresh water and marine fisheries both in Andaman Sea and Gulf of Thailand are one of the major contributions to food security and also national GDP. Fisheries have long been part of Thai culture, subsistence fishing commonly found throughout the country. Over fishing and pollution in river and wetlands, and the rapid change of land use pattern, (human settlement, industry, agriculture, and tourism development) have threatened the sustainable use of fish stock in nature condition. A number of measurements to ensure the sustainable use of fisheries use have been leading by DoF, for example,</p> <ul style="list-style-type: none"> • enforcement of Fisheries Act B.E. 2490 revised 2537 (1947 revised 1994) to restrict and limited type of fishing tools and declare no-fishing season in particular area. • research, development and promotion of aquaculture, • registration of fishermen and merchandiser (including importer and exporter), • promotion for food safety process, • strengthening local organization and individual to manage their wetland properly, • declare and campaign for no-fishing and restore fish stock into wetlands on National Fisheries Day (13 April), and 	

- declare of no-fishing in Gulf of Thailand during spawning season.

34. ? On Article 8(k), has your country developed or maintained the necessary legislation and/or other regulatory provisions for the protection of threatened species and populations?

a) No	
b) No, but legislation is being developed	
c) Yes, legislation or other measures are in place (please provide details below)	X

Further information on the legislation and/or regulations for the protection of threatened species and populations.

The existing legislation are listed as follow

- Forestry Act B.E. 2484 (1941): protect and manage of forest trees and forest non-timber product species
- National Parks Act B.E. 2504 (1961): protect habitat and population of all species inside a national park.
- National Reserved Forest B.E. 2507 (1964): protect and manage of forest habitat
- Wildlife Protection and Reservation Act B.E. 2503 revised B.E. 2535 (1960, revised 1992): protect and manage of wild fauna species, its habitat and population
- Environmental Quality Promotion Act B.E. 2535 (1992): protect species habitat
- Fisheries Act B.E. 2490 revised 2537 (1947, revised 1994): protect and manage fish habitat and population
- Hazardous Substance Act B.E. 2535 (1992): protect pollution into species habitat.
- Plant Varieties Protection Act B.E. 2542 (1999)

Due to the change in Thai society: consequent from the Constitution of the Kingdom of Thailand B.E. 2540 (1997) and effected by socio- economic situation, there is a need to review above acts to facilitate and ensure the right of people and community in management of natural resources. In 2005, the government declared reviewing its relevant laws and regulations. This review has been identified as a national agenda, to be finished within this government period (2008).

35. ? On Article 8(l), does your country regulate or manage processes and categories of activities identified under Article 7 as having significant adverse effects on biological diversity?

a) No	
b) No, but relevant processes and categories of activities being identified	X
c) Yes, to a limited extent (please provide details below)	
d) Yes, to a significant extent (please provide details below)	

Further comments on the regulation or management of the processes and categories of activities identified by Article 7 as having significant adverse effects on biodiversity.

In 2005, ONEP has initiated the project calls "Identify and Initiate Monitoring Data System of Thailand Biodiversity Hotspot". From the government budget, ONEP contracts Kasetsart University to lead the process, which requires several national, regional, and focus group consultations. Outcome of the study would be list of (1) Thailand biodiversity important areas (BIA) or hotspots and target species (2) develop ecological database and roaster of experts for clearing house mechanism, and (3) building relevant officer capacity in inventory and management of the data in GIS. This project aims to be finalized in early 2006.

Box XLIV.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation

Implementation of this article has been practiced in Thailand before the initiation of the CBD. Budget and staff allocated to these implementations also totally depend on national budget, without any relevant to CBD and its decision.

These implementations certainly serve positively to the goals of the Strategic Plan of the convention, progress towards the 2010 target, and toward the NBSAP, and the MDG.

Understanding of staff and stakeholders about CBD and its related articles, program of works, and targets are very limited, almost none.

Programme of Work on Protected Areas (Article 8 (a) to (e))

36. Has your country established suitable time bound and measurable national-level protected areas targets and indicators? (decision VII/28)

a) No (please specify reasons)	
b) No, but relevant work is under way	
c) Yes, some targets and indicators established (please provide details below)	X
d) Yes, comprehensive targets and indicators established (please provide details below)	

Further comments on targets and indicators for protected areas.

Thailand has set up its target of protected area to be 25 % of the country area since the 7th NESDP (1992-1996). Presently, the current protected area declared by Royal Decrees (under DNP responsible) is approximately 20% of the country area. The following table shows all types of forest, marine and coastal areas which have been managed mainly through protection function, except the list of International recognitions in which management will be accordingly to international regime.

Protected areas are complicated and need a national review to establish a national system. The complication due to aging of the establishment started in 1960s. Many areas are declared under inappropriate category. The following table listed number of PA according to its official objective.

Types and Areas of Thai Protected Areas, 2004

Categories	Refer to IUCN Protected Area Category	Number	Total area (Sq.km.)	Percentage of Total Country Area
By Royal Decrees				
National Park	II	114	63,464.33	12.37
Wildlife Sanctuary	Ia & Ib	59	36,758.53	7.16
Marine National Park	II	27	8,627.62	1.68
Non-hunting Area	VI	55	4409.59	0.86
By Ministerial Declarations				
Forest Park	III	67	870.49	0.17

Botanical Garden	VI	15	58.96	0.01
Aboretum	VI	54	36.08	0.01
By Cabinet Resolutions				
Watershed Class 1 and 2*	I, II, IV & VI			
Conservation Mangrove*	VI			
Environmentally Protected Area				
International recognitions				
World Heritage (nature)*	II	2**		
Ramsar Site*	VI	10***		
Biosphere Reserve	VI	4		
ASEAN Heritage*	II	2**		

* Does not shown all total area (sq.km.) because some of them are overlaps with other categories, e.g. national park, wildlife sanctuary, and non-hunting area.

** Legal status of the World Heritage and ASEAN Heritage are either a wildlife sanctuary or a national park.

*** Status of some Ramsar Site (8 of 10) is a non-hunting area.

Source: DNP, 2004 and ONEP, 2004

According to the decision VII/28 which requested all Parties to expand and integrate its Protected Areas System into a global network in 2006, Thailand, firstly, need to review its national system. Fortunately, DNP has got 10 million Baht from the 2006 budget to conduct the review. The reviewing process with consultations could then be a little later than 2006.

DNP has planned under Joint Management of Protected Areas (JoMPA) Project to conduct a national workshop to identify a comprehensive terms related to protected area management in Thailand within 2005. It could be one of the immediate contributions to both the development of Thailand National Protected Area System and the indicator toward decision VII/28.

37. Has your country taken action to establish or expand protected areas in any large or relatively unfragmented natural area or areas under high threat, including securing threatened species? (decision VII/28)

a) No	
b) No, but relevant programmes are under development	
c) Yes, limited actions taken (please provide details below)	
d) Yes, significant actions taken (please provide details below)	X

Further comments on actions taken to establish or expand protected areas.

Terrestrial forest ecosystem: DNP has identified other 48 unfragmented forest areas to be declared as national parks, and 4 areas to be wildlife sanctuaries. Each area has an area not less than 10sq.km and some of them locate adjacent to the existing declared national park or wildlife sanctuary.

Marine and coastal ecosystem: DMCR has identified 60 sq.km mangrove forests to be declared as Mangrove Protected Forest in which community would participate in management and depend their living from. With the target identify in CBD, the department has also set up its target of 300 sq. km. to be declared and managed as marine protected areas. In addition, DMCR has been working with stakeholder and communities in Koh Pra Thong Island, Phang Nga Province to imply principle of CBD's marine protected areas into practice in order to declare the island as a new marine integrated protected area.

38. Has your country taken any action to address the under representation of marine and inland water ecosystems in the existing national or regional systems of protected areas? (decision VII/28)

a) No	
b) Not applicable	
c) No, but relevant actions are being considered	
d) Yes, limited actions taken (please provide details below)	X
e) Yes, significant actions taken (please provide details below)	

Further comments on actions taken to address the under representation of marine and inland water ecosystems in the existing national or regional systems of protected areas.

Marine ecosystems: Both the Andaman Sea and the Gulf of Thailand, are well covered by the existing protected area system. However, management principles of marine national park which are the major section need to be reviewed. This is because Thai marine national park is base on terrestrial park legislation, the National Park Act B.E. 2504 (1961) (prohibit of gathering of park resources). This regulation is not practical with community livelihood, so management regimes are conflicting with the fact. Thus it is expected that the national system review (mention in Q. 33) to suggest the new management regime which could be in line with what recommended in the decision VII/28.

Inland water ecosystem: A number of natural and artificial rivers, lakes, ponds, swamps have been declared as a part of national park, wildlife sanctuary or non-hunting areas. According to the wetland categories (ONEP 1999), all Thai wetland can be divided into 3 categories: International Importance (61 sites), National Important (48 sites), and Local Important (19,295 sites). Ten of the International Important has been designated as the "Ramsar Site". ONEP has been the leading agencies working with other agencies at national, provincial, and local levels toward expanding and strengthening of wetland conservation refer to Ramsar Convention. Hence, it ONEP is working steadily toward establishment of national system to protect Thai wetlands. Integration of wetland protected areas into national protected areas system can be done at the same with marine protected area. This mean can be achieved later than 2006.

39. Has your country identified and implemented practical steps for improving the integration of protected areas into broader land and seascapes, including policy, planning and other measures? (decision VII/28)

a) No	
b) No, but some programmes are under development	
c) Yes, some steps identified and implemented (please provide details below)	X
d) Yes, many steps identified and implemented (please provide details below)	

Further comments on practical steps for improving integration of protected areas into broader land and seascapes, including policy, planning and other measures.

DNP has informally adopted ecosystem management approach to test its principle in protected area management under the project namely "Joint Management of Protected Areas- (JoMPA)". This project can be compared as a second phase of the Thai-Danida Project on "Western Forest Complex: an Ecosystem Approach". The conceptual framework of JoMPA project is to promote and test the integration of protected area into broader land and seascape mentioned in VII/28. Mechanism and principle of the project referred to 12 Principles of Ecosystem Approach in VII/11. At the first year of the project 2005, JoMPA will work closely with partners: e.g. other government agencies: particular the governor and development sections, NGO and local communities in and around the Western Forest Complex to form up a strategy plan for the whole WEFCOM, which is called "the WEFCOM Integration Conservation Management Strategy". The third years of the JoMPA would replicate the process happening in WEFCOM to imply to other protected areas complex: both terrestrial and coastal ecosystems. Detail of the JoMPA and WEFCOM project can be obtained from www.forest.go.th or e-mail: paiu_jompa@yahoo.com.

In addition to the JoMPA, DNP has proposed to MoNRE to review its structure, roles and functions to emphasize and facilitate administrative mechanism toward forest complex. If this proposal has been adopted, the results will be a new DNP structure that decentralize national responsible on protected area planning and policy to regional levels. According to the current protected areas, Thailand can be classified into 19 forest complexes. Detail can be found at www.mekong-protected-areas.org or www.forest.go.th.

UNESCO's designation of Dong Phrayayen- Khao Yai Forest Complex as the 2nd World Heritage Site in Thailand, June 2006, has positively attracted MoNRE decision makers to be interested in ecosystem approach. DNP is now continuously able to campaign and raise awareness not only the value of world heritage, but also the principles of ecosystem approach to wider stakeholders, in particular the provincial and local government authorities. Next step for DNP would be working toward formation of forest complex planning at others sites, which can be listed as (1) Kaeng Krachan Forest Complex (adjacent to tropical forest in Myanmar, biggest habitat for Bengal tiger), (2) Phu Khieo – Nam Nao Forest Complex, (3) Klong Saeng – Khao Sok Forest Complex and (4) Andaman Sea Marine Complex.

40. Is your country applying environmental impact assessment guidelines to projects or plans for evaluating effects on protected areas? (decision VII/28)

a) No	
b) No, but relevant EIA guidelines are under development	X
c) Yes, EIA guidelines are applied to some projects or plans (please provide details below)	
d) Yes, EIA guidelines are applied to all relevant projects or plans (please provide details below)	

Further comments on application of environmental impact assessment guidelines to projects or plans for evaluating effects on protected areas.

There is a certain development project require EIA study. Detail can be obtained at www.onep.go.th. However, the development projects or plans in Protected Areas which normally small scaled, nature oriented, and government investment, EIA is not applied. However, before any project to be approved, DNP has had review process in order to ensure its low and minimize impact to the protected areas. The reviewing process normally involves technician in engineering, ecologist, and park managers.

41. Has your country identified legislative and institutional gaps and barriers that impede effective establishment and management of protected areas? (decision VII/28)

a) No	
b) No, but relevant work is under way	
c) Yes, some gaps and barriers identified (please provide details below))	X
d) Yes, many gaps and barriers identified (please provide details below)	

Further comments on identification of legislative and institutional gaps and barriers that impede effective establishment and management of protected areas.

As mentioned in Question 31 and 36, there are activities carry on by DNP and MoNRE to review its institution and legislation to remove (reduce) gaps and barriers that impede effective protected areas management. Comprehensive analysis of gaps and barriers can be obtained from the Thailand National Report: The Review of Protected Areas and Development Project or at www.mekong-protected-areas.org.

Effort to remove the weakness and strengthen capability on protected areas management is not only limited to the DNP, but it has been shared and well supported by collaborative partners, such as WWF-Thailand, Sueb Nakasathein Foundation, and Wildlife Fund Thailand. Recently, on 26 July 2005, WWF-Thailand co-hosted by DNP has held a national technical workshop to review a draft paper on **Protected Area Management Guidelines**. The workshop held at Faculty of Forestry, Kasetsart

42. Has your country undertaken national protected-area capacity needs assessments and established capacity building programmes? (decision VII/28)	
a) No	
b) No, but assessments are under way	
c) Yes, a basic assessment undertaken and some programmes established (please provide details below)	
d) Yes, a thorough assessment undertaken and comprehensive programmes established (please provide details below)	X
Further comments on protected-area capacity needs assessment and establishment of capacity building programmes.	
<p>Thai-Danish Joint Management on Protected Areas Project (JoMPA), WWF Thailand conducts a thorough assessment for capacity needs for protected area staff at all levels. This study started in mid 2004 and to be finalized in September 2006. After the recommendation from WWF-Thailand, DNP by the Protected Area Innovation Unit will work closely with the Training Division to develop training and capacity building programs for not only the DNP staff, but also key partners at both site and national levels.</p> <p>Further than that, several NGOs have also supporting DNP on capacity building of staff in protected areas management. Wildlife Conservation Society (WCS) and WWF Thailand are good examples. Their capacity building projects have at site level both for national parks and wildlife sanctuary. Detail can be obtained at www.wsc.org and www.wwfthai.org/news respectively</p>	

43. Is your country implementing country-level sustainable financing plans that support national systems of protected areas? (decision VII/28)	
a) No	
b) No, but relevant plan is under development	X
c) Yes, relevant plan is in place (please provide details below)	
d) Yes, relevant plan is being implemented (please provide details below)	
Further comments on implementation of country-level sustainable financing plans that support national systems of protected areas.	
<p>Finance for protected area management in Thailand has been secured under the government budget through DNP. In 2004 and 2005, total amount of 7,794.72 and 7,947.46 million baht were allocated to DNP, respectively. These budgets include human resources, investment, and management in term of PA protection, biodiversity research, nature education, tourism services and development, and supporting local people investment.</p> <p>With significant value of protected area in term of ecotourism destination and conservation of ecologies, additional budget to PA infrastructure development are coming from local government authorities, such as Provincial Administration Organization (PAO) and Tambon Administration Organization (TAO- Subdistrict level). These PAO and TAO receiving directly budget from national Budget Bureau at almost 35 % of total budget of each year, and they also having their own income generate from local tax system. In addition to these income and budget, TAO also receives five percent of all national park revenue every year. This sharing of park revenue started to force in 1997 and money is transferred to TAO via the Department of Local Administration (Ministry of Interior).</p> <p>In order to improve mechanism of protected areas management, there is an idea to draw tourism development in protected areas to be delivered by special semi-governmental unit. This idea has become an initiative of a public organization calls "Authority of Ecotourism Development in Special Destination" since 2002. The first pilot case was at Koh Chang National Park, Trad Province in 2002. Principle of public organization is to have the organization self-support, but at the starting period budget will be allocated from the government. After a few years of piloting case in Koh Chang, the government add another pilot site which is Phi Phi Island, after the Tsunami in December 2004.</p>	

While this report has been draft, there is not yet a study to review how effective this organization is in term of both reducing a national park responsibilities and increasing visitor satisfaction when visiting those pilot destination.

At regional level, in 2005 ADB supports consultants to conduct sustainable financing plans the Lower Mekong countries, including Thailand, Laos, Cambodia and Vietnam. Report has not yet available.

44. Is your country implementing appropriate methods, standards, criteria and indicators for evaluating the effectiveness of protected areas management and governance? (decision VII/28)

a) No	
b) No, but relevant methods, standards, criteria and indicators are under development	X
c) Yes, some national methods, standards, criteria and indicators developed and in use (please provide details below)	
d) Yes, some national methods, standards, criteria and indicators developed and in use and some international methods, standards, criteria and indicators in use (please provide details below)	

Further comments on methods, standards, criteria and indicators for evaluating the effectiveness of protected areas management and governance.

Thailand has noticed the need for measurement and methods for effective evaluation of protected areas management and governance. It has planned to be discussed and formulated together with the Project to review the national protected areas system plan, mentioned in Q 33.

However, management and governance effectiveness evaluation has been systematically introduced to all government organizations by the Government. DNP as a member of this new system have to reshape and adopt the system into management and governance of protected area as well.

Since 2004, the government requests officially announce to use Warranty of Performance Responsibility (WPR). Starting the at the MoNRE Minister signs WPR to the Prime Minister, then the Director General of DNP signs WPR to the Minister, next the Director of National Parks Division sign WPR to the DNP's Director General, and lastly the chief of a protected area (national park) signs the WPR to the Director. The system is more complicate that at the provincial level, chief of a protected areas have also to sign the WPR with the CEO Governor. In each WPR, targets and indicators of performance, which have to be measurable and time bound, are stated clearly. For the DNP's performance indicators in 2005 are, for example, 178 critical ecosystem sites have been better protected, at least 5 species of rare/endangered and economical sound wild flora and fauna have been captive bred, and 80 % of visitors are satisfied with a park service. However, while drafting this report, there is not yet an evaluation of these WPR.

Box XLV.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Implementation of this article has been practiced in Thailand before the initiation of the CBD. Budget and staff allocated to these implementations also totally depend on national budget, without any relevant to CBD and its decision.

These implementations certainly serve positively to the goals of the Strategic Plan of the convention, progress towards the 2010 target, and toward the NBSAP, and the MDG.

Understanding of staff and stakeholders about CBD and its related articles, program of works, and targets are very limited.

Article 8(h) - Alien species

45. Has your country identified alien species introduced into its territory and established a system for tracking the introduction of alien species?

a) No	
b) Yes, some alien species identified but a tracking system not yet established	X
c) Yes, some alien species identified and tracking system in place	
d) Yes, alien species of major concern identified and tracking system in place	

46. ? Has your country assessed the risks posed to ecosystems, habitats or species by the introduction of these alien species?

a) No	
b) Yes, but only for some alien species of concern (please provide details below)	X
c) Yes, for most alien species (please provide details below)	

Further information on the assessment of the risks posed to ecosystems, habitats or species by the introduction of these alien species.

Thailand established National Working Group on Alien Species in 1996, to compile information on alien species invasive and non-invasive, Thailand, and to provide consultation to formulate measures to invasive alien species (IAS) control and prevent loss of biodiversity derived from the spread of IAS. The outcome from this working group was an inventory of alien species in Thailand, containing approximately 1,500 species mainly of plants and animal origins. The list is available at www.thaialienspecies.com. In addition, the Work Plan on Control and Prevention of Biodiversity Loss Derived from Impacts of Invasive Alien Species was also drafted by the working group in 2002, and awaiting an approval by the National Committee on Conservation and Sustainable Use of Biodiversity.

Furthermore, there are endeavors at the departmental level to test and implemented CBD guidelines. These agencies include DoA, DoF and DoLD. All are under MoAC. From its current legislations, implementing risk assessment can be done at limited levels. For example:

DoA is the competent national authority on plant quarantine. The Waterhyacinth Eradication Act 1913 and the Plant Disease and Plant Pest Prevention Act 1952 were the first two legislations concerning with introductions of plant species into Thailand. Other related acts are Plant Varieties Act 1975 (revised 1992), Plant Quarantine Act 1964 (revised 1999) and Plant Varieties Protection 1999. Plant Quarantine Act has repealed the Plant Disease and Plant Pest Prevention Act 1952. DoA today established 35 Plant Quarantine Stations throughout the country, at the major national borders posts and major seaports and airports. Any importation of alien plant species are to be accompanied with a phytosanitary certificate issued by competent authority of the exporting countries or by other reliable documents.

DoF by the Fisheries Act 1947 revised 1994 regulates the processes for approval of import of aquatic alien species (e.g. white shrimp). The regulation requires importers to register all shipments and its tracking destinations with DoF, and make liable to damage caused by spread of aquatic alien species. Because application for permit requires specific information relevant to particular species. Since alien fishes, including LMO or GMO are popular as aquarium fish and aquaculture and expected to be a highly productive and fast growing species for export industry. While Thailand is a hub for fish breeding experts in Asia, risk assessment has been perceived as an obstacle to economic opportunity of the country. In terms of fisheries industry without adequate information, technology, and arguments, the applications processes are considered to be an obstacle for investors or importers.

DoLD has been in the process to draft an act to promote and conserve native livestock species. In order to maintain and prevent native livestock species, the act would allow DoLD to issue department regulation to permit and prohibit importing of the alien livestock species.

47. ? Has your country undertaken measures to prevent the introduction of, control or eradicate, those alien species which threaten ecosystems, habitats or species?

a) No	
b) No, but potential measures are under consideration	
c) Yes, some measures are in place (please provide details below)	X
d) Yes, comprehensive measures are in place (please provide details below)	

Further information on the measures to prevent the introduction of, control or eradicate those alien species that threaten ecosystems, habitats or species.

Currently, main executing agencies on controlling and tracking of imported alien species to Thailand are DoA and DoF, whose functions are under to the following acts:

- Waterhyacinth Eradication Act B.E. 2456 (1913),
- Plant Quarantine Act B.E. 2507 revised 2542 (1964 revised 1999),
- Plant Varieties Act B.E. 2518 revised 2542 (1975 revised 1992), and
- Fisheries Act B.E. 2490 revised 2537 (1947 revise 1994).

However, the effectiveness of these regulations is limited due to the limited management resources and lack of adequate scientific data and evidence to prove IAS potential negative impacts.

Among 1,500 species, only few are publicly concerned as threatening to the ecosystems and habitats. These species can be listed as, for example, waterhyacinth, giant sensitive plant, south

american beaver, giant african snail, and golden apple snail. In order to control or eradicate these species, some of them are promoted to be used for handicraft, fertilizers, charcoal, souvenir, and animal foods. Another effective measurement is the use of biological control. The National Biological Control Research Center (NBCRC), located at Kasetsart University, Bangkok, introduced several natural enemies (weevils and moths) to reduce the population of waterhyacinth and giant sensitive plants, since 1975 and 1984 respectively. These interventions had been successfully in several reservoirs.

In addition, Thailand has successfully controlled and stopped the spread of nutria or south american beaver into the natural habitat. This beaver was introduced to Thailand for export farming in 1994. With national wide awareness program and lesson learnt among farmers, it is substantially controlled and confined to be only in the farms.

Since 2003, Mahidol University by the Faculty of Veterinary Science has established "Center for Surveillance and Monitoring of Zoonotic Disease from Wildlife and Alien Species" supported by the Government budget. This center invests and monitors on exotic infection agents and infections agents from alien species. It also focuses its work toward awareness raising focus on exotic companion animals through mass media.

Managers of threatened ecosystem, habitats, or species have very limit knowledge and understanding on IAS, and its short and long term impact. Consequently, regulation measures are inadequate or not enforceable. The existing law and regulation on those areas do not mention about how to prevent, manage or eradicate the IAS. In 1990s at Khao Yai National Park, the superintendent successfully eradicated lantana (*Lantana camara*).

48. ? In dealing with the issue of invasive species, has your country developed, or involved itself in, mechanisms for international cooperation, including the exchange of best practices? (decision V/8)

a) No	
b) Yes, bilateral cooperation	
c) Yes, regional and/or subregional cooperation	X
d) Yes, multilateral cooperation	X

49. ? Is your country using the ecosystem approach and precautionary and bio-geographical approaches as appropriate in its work on alien invasive species? (decision V/8)

a) No	
b) Yes (please provide details below)	X

Further comments on the use of the ecosystem approach and precautionary and bio-geographical approaches in work on alien invasive species.

NBCRC applies all scientific investigation and all ecological approaches in its responsibilities to control invasive insect and weed invasive species since 1978.

50. Has your country identified national needs and priorities for the implementation of the Guiding Principles? (decision VI/23)

a) No	
b) No, but needs and priorities are being identified	X
c) Yes, national needs and priorities have been identified (please provide below a list of needs and priorities identified)	

Further comments on the identification of national needs and priorities for the implementation of the Guiding Principles.

The 15 guiding principles are not officially adopted into national process. However, Thailand has identified its national needs and priorities during the national workshop on alien species conducted on 22-23 May 2001. These include education and public awareness, border control and quarantine

measures, research and monitoring, and controlling of intentional introduction. Affirmation of these needs reflected into the 2nd NBSAP (2003-2007), objective 5.2. Details can be found in www.onep.go.th.

51. Has your country created mechanisms to coordinate national programmes for applying the Guiding Principles? (decision VI/23)

a) No	
b) No, but mechanisms are under development	X
c) Yes, mechanisms are in place (please provide details below)	

Further comments on the mechanisms created to coordinate national programmes for implementing the Guiding Principles.

ONEP, as the CBD national focal point, operates and maintains www.thaialienspecies.com.

52. Has your country reviewed relevant policies, legislation and institutions in the light of the Guiding Principles, and adjusted or developed policies, legislation and institutions? (decision VI/23)

a) No	X
b) No, but review under way	
c) Yes, review completed and adjustment proposed (please provide details below)	
d) Yes, adjustment and development ongoing	
e) Yes, some adjustments and development completed (please provide details below)	

Further information on the review, adjustment or development of policies, legislation and institutions in light of the Guiding Principles.

DoLD has proposed for a new legislation on Indigenous Livestock Species Promotion and Conservation Act (draft), however, it does not refer to the guiding principles.

53. Is your country enhancing cooperation between various sectors in order to improve prevention, early detection, eradication and/or control of invasive alien species? (decision VI/23)

a) No	
b) No, but potential coordination mechanisms are under consideration	X
c) Yes, mechanisms are in place (please provide details below)	

Further comments on cooperation between various sectors.

The cooperation has been under the consideration of the Ministry of Agriculture and Cooperatives (MoAC), in particular DoF, DoLD, DoA and DoAE.

54. Is your country collaborating with trading partners and neighboring countries to address threats of invasive alien species to biodiversity in ecosystems that cross international boundaries? (decision VI/23)

a) No	
b) Yes, relevant collaborative programmes are under development	X
c) Yes, relevant programmes are in place (please specify below the measures taken for this purpose)	

Further comments on collaboration with trading partners and neighboring countries.

Thailand is a member of the Asia-Pacific Plant Protection Organization and parties to the International Plant Protection Convention (IPPC).

55. Is your country developing capacity to use risk assessment to address threats of invasive alien species to biodiversity and incorporate such methodologies in environmental impact assessment (EIA) and strategic environmental assessment (SEA)? (decision VI/23)

a) No	
b) No, but programmes for this purpose are under development	X
c) Yes, some activities for developing capacity in this field are being undertaken (please provide details below)	
d) Yes, comprehensive activities are being undertaken (please provide details below)	

Further information on capacity development to address threats of invasive alien species.

In collaboration with IPPC Secretariat.

56. Has your country developed financial measures and other policies and tools to promote activities to reduce the threats of invasive species? (decision VI/23)

a) No	
b) No, but relevant measures and policies are under development	
c) Yes, some measures, policies and tools are in place (please provide details below)	X
d) Yes, comprehensive measures and tools are in place (please provide details below)	

Further comments on the development of financial measures and other policies and tools for the promotion of activities to reduce the threats of invasive species.

Several tools are in place, for example, border control, Plant Quarantine Stations throughout the country.

Box XLVI.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- outcomes and impacts of actions taken;
- contribution to the achievement of the goals of the Strategic Plan of the Convention;
- contribution to progress towards the 2010 target;
- progress in implementing national biodiversity strategies and action plans;
- contribution to the achievement of the Millennium Development Goals;
- constraints encountered in implementation.

Implementation of this article is not new to Thailand. However, decision makers, farmers, importers, and general public are to be educated on IAS adverse biological impact. Information and scientific evidences are limited and insufficient including records of negative impact on invasive alien species in the natural ecosystem.

With the Risk Assessment Guidelines adopt at international level, implementation of this article in Thailand is already in line. MoAC is a national competent authority on Article 8 (h) and authority to perform risk assessment. Thus, the capacity building for MoAC personnel is needed.

Capacity building of government personnel and appropriate institutional structure are

needed to be strengthened immediately. Knowledge and guidelines on IAS and its impact should be highly publicized.

Article 8(j) - Traditional knowledge and related provisions

GURTS

57. Has your country created and developed capacity-building programmes to involve and enable smallholder farmers, indigenous and local communities, and other relevant stakeholders to effectively participate in decision-making processes related to genetic use restriction technologies?	
a) No	X
b) No, but some programmes are under development	
c) Yes, some programmes are in place (please provide details below)	
d) Yes, comprehensive programmes are in place (please provide details below)	
Further comments on capacity-building programmes to involve and enable smallholder farmers, indigenous and local communities and other relevant stakeholders to effectively participate in decision-making processes related to GURTs.	
-	

Status and Trends

58. Has your country supported indigenous and local communities in undertaking field studies to determine the status, trends and threats related to the knowledge, innovations and practices of indigenous and local communities? (decision VII/16)	
a) No	
b) No, but support to relevant studies is being considered	
c) Yes (please provide information on the studies undertaken)	X
Further information on the studies undertaken to determine the status, trends and threats related to the knowledge, innovations and practices of indigenous and local communities, and priority actions identified.	
<p>Community knowledge and empowerment have been emphasized by many organizations, for example The Thailand Research Fund (www.trf.or.th) Chulalongkorn University Social Research Institute (www.cusri.chula.ac.th), Health Systems Research Institute (www.hsri.or.th), Regional Community Forest Training Centre for Asia and Pacific (RECOFTC), The National Human Right Commission (www.nhrc.co.th) and Community Organization Development Institution (www.codi.or.th). These organizations support community research by letting community, research, or NGO to collect and compile indigenous and local community knowledge. Information then be publicized and promoted to general public.</p> <p>One of the well known community research calls "Thai Baan Research Method". It was the name of the project led by Southeast Asia River Network (SEARIN) at Pak Moon in late 1990s. The research has confirmed capacities of villagers to monitor and assess status of fish stock in the Pak Moon Dam.</p>	

Akwé:Kon Guidelines

59. Has your country initiated a legal and institutional review of matters related to cultural, environmental and social impact assessment, with a view to incorporating the Akwé:Kon Guidelines into national legislation, policies, and procedures?	
a) No	X
b) No, but review is under way	
c) Yes, a review undertaken (please provide details on the review)	
Further information on the review.	
EIA process, operational legislation, procedures is according to the Environmental Quality Promotion Act B.E. 2535 (1992). MoNRE by ONEP, as a competent agency, has been in the process of reviewing the legislation to improve EIA mechanism and procedure. However, the Akwe:Kon Guidelines has not been referred yet.	

60. Has your country used the Akwé:Kon Guidelines in any project proposed to take place on sacred sites and/or land and waters traditionally occupied by indigenous and local communities? (decision VII/16)	
a) No	X
b) No, but a review of the Akwé: Kon guidelines is under way	
c) Yes, to some extent (please provide details below)	
d) Yes, to a significant extent (please provide details below)	
Further information on the projects where the Akwé:Kon Guidelines are applied.	

Capacity Building and Participation of Indigenous and Local Communities

61. Has your country undertaken any measures to enhance and strengthen the capacity of indigenous and local communities to be effectively involved in decision-making related to the use of their traditional knowledge, innovations and practices relevant to the conservation and sustainable use of biodiversity? (decision V/16)	
a) No	
b) No, but some programmes being developed	
c) Yes, some measures taken (please provide details below)	X
d) Yes, comprehensive measures taken (please provide details below)	
Further information on the measures to enhance and strengthen the capacity of indigenous and local communities.	
<p>Community Organization Development Institution (CODI) is the leading agency to promote and mobilize forum to build indigenous and local communities capacities and empowerments. From CODI 10 year experience, it has concluded that one of best tools to strengthen community capacities and participations is "community mapping". Key principles of community mapping is to: have community themselves ability to identify (1) their own status, trends, and threats related to their own livelihood, knowledge, (2) indicate their visions and (3) prioritize activities to achieve those vision by themselves. Since mid of 2002, CODI has targeted its work to 222 sub-districts, in the 4 region, which cover the 15 geological types. Detail can be obtained from www.codi.or.th.</p> <p>Thailand Research Fund (TRF) also plays a great role in building local community capacities. TRF supports and provides small funding to individuals, farmers, and communities to conduct research at their villages, and there are fund also for community to disseminate their experiences with other villages or communities. The researching topics are vary depend on the interest of the funding applicant. In 2000, TRF provided a national forum for farmers from different geological landscapes to</p>	

exchange their experiences on conservation and development plant and animal genetic. At the same time, the forum also allowed to technocrat, government officer and NGO to learn and identify niches to strengthen their capacities. (www.trf.or.th/research/subject)

Population and Community Development Association (PDA) has continually promoted communities participation in afforestation since 1982. Successful stories had included 562 villages, mainly located in the northeastern of Thailand. In each village, community forms a village forest restoration committee and there have been more than 3.5 million tree planted and maintained by villager, covering the area of 32 sq.km. Planted tree species were selected to be native fast growing. In addition, PDA also promotes community networks, experience exchange, community radio program for nature conservation, organic farming, and soil conservation. Main target group for PDA is the village leader, women and youth groups. Environmental education is one of the PDA key working areas as well. Presently, PDA has trained at least 1,030 teachers, and more than 225,197 students from 1,007 schools attending PDA environmental programs, in which protection and conservation of natural resources are the key messages. www.pda.or.th

62. Has your country developed appropriate mechanisms, guidelines, legislation or other initiatives to foster and promote the effective participation of indigenous and local communities in decision making, policy planning and development and implementation of the conservation and sustainable use of biodiversity at international, regional, subregional, national and local levels? (decision V/16)

a) No	
b) No, but relevant mechanisms, guidelines and legislation are under development	
c) Yes, some mechanisms, guidelines and legislation are in place (please provide details below)	X

Further information on the mechanisms, guidelines and legislation developed.

Numbers of national mechanism are in place. Legislations which ensure people right and responsibility to natural resources management is the Constitution of the Kingdom of Thailand B.E. 2540 (1999) along with The National Government Decentralization and Reform Acts B.E. 2541 (1998) and B.E. 2542 (1999). Local government authorities have been set up throughout the country. They are called Tambon Administrative Organization (TAO- elected council at Sub-district) and Provincial Administrative Organization (PAO- elected council at Province).

63. Has your country developed mechanisms for promoting the full and effective participation of indigenous and local communities with specific provisions for the full, active and effective participation of women in all elements of the programme of work? (decision V/16, annex)

a) No	
b) No, but relevant mechanisms are being developed	
c) Yes, mechanisms are in place (please provide details below)	X

Further comments on the mechanisms for promoting the full and effective participation of women of indigenous and local communities in all elements of the programme of work.

Gender is not a critical issue in Thai society. There are a number of women who are not only being very active, but also leading the communities and organizations at national, regional and local level. Interestingly, the National Human Right Commission (an independent organization) requires half of their board member a woman.

Support to implementation

64. Has your country established national, subregional and/or regional indigenous and local community biodiversity advisory committees?	
a) No	
b) No, but relevant work is under way	
c) Yes	X

65. Has your country assisted indigenous and local community organizations to hold regional meetings to discuss the outcomes of the decisions of the Conference of the Parties and to prepare for meetings under the Convention?	
a) No	X
b) Yes (please provide details about the outcome of meetings)	

Further information on the outcome of regional meetings.

These involvements still limited to technical and government officers. NGO and press representatives normally been informed and involved in COP preparation meeting and other types of CBD meetings and conferences. ONEP, as a national focal point keeps updating and translating CBD related documents into Thai, distribute to partners, which include the NGOs, through mailing and the webpage as well. www.onep.go.th.

66. Has your country supported, financially and otherwise, indigenous and local communities in formulating their own community development and biodiversity conservation plans that will enable such communities to adopt a culturally appropriate strategic, integrated and phased approach to their development needs in line with community goals and objectives?	
a) No	
b) Yes, to some extent (please provide details below)	X
c) Yes, to a significant extent (please provide details below)	

Further information on the support provided.

CODI is the leading agency to assist and promote community mapping which explained in Q 61. Community mapping processes are aimed for community to develop their own community development plan, but not aiming to biodiversity conservation as such. However, when the plans developed, concerns and activities of biodiversity conservation always included.

Box XLVII.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Implementation of this article in Thailand has been driven mostly by the needs of people and as a requirement from the Constitution 1997, not the convention. However, since active participations of local and indigenous communities would also support to the Convention, NBSAP, and the MDG, Thai government commits to further promote implementation of this article.

Article 9 - Ex-situ conservation

67. ? On Article 9(a) and (b), has your country adopted measures for the *ex-situ* conservation of components of biological diversity native to your country and originating outside your country?

a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	
d) Yes, comprehensive measures are in place (please provide details below)	X

Further information on the measures adopted for the *ex-situ* conservation of components of biodiversity native to your country and originating outside your country.

Thailand has established and maintained many types of facilities for ex-situ conservation for almost half a decade. They can be grouped as follow:

Type of ex-situ conservation	Operation Authority	For instance (name or location)
Forest/Plant Herbarium:	DNP, RFD, DoA, Botanical Garden Organization, Kasetsart University, Chiang Mai University	<ul style="list-style-type: none"> - Sirindhon Plant Museum, Bangkok. - Queen Sirikit Herbarium - RFD Forest Herbarium
Botanical Garden (include exotic species, living and in-vitro collection):	Botanical Garden Organization RFD, DNP Academic institution.	<ul style="list-style-type: none"> - Queen Sirikit, Chiang Mai - DNP 5 botanical garden, Trang, Ratchburi,
Arboretum (focus local plant species):	RFD, DNP	Throughout the country
Herb, medicinal, horticulture	DoA, DNP, DMSC, Mahidol University, Kasetsart University	<ul style="list-style-type: none"> - Rapee Sakrit Orchid Orchard, Kasetsart University - Siree Rukachart Herb Garden, Mahidol University
Zoo (include exotic species):	Zoo Organization	<ul style="list-style-type: none"> - Dusit, Bangkok - Chiang Mai, Nakornrachasima, etc.
Marine and freshwater aquariums:	DoF, DMCR, Provincial Administration Organisation: Suphan and Roy-Et, King Mongkut Park Science and Museum, Burapha University, Rajmongkol University (Trang), and Private investment	<ul style="list-style-type: none"> - DoF, Bangkok, Rayong, Nakonsawan - DMCR, Phuket - Bung Chawak, Suphanburi - Roy-Et - Waghor Science Park, Prachuab - Bang Sane, Chonburi - Trang - Pattaya, Chonburi - Siam Paragon, Bangkok
Wildlife Museum	Nature Science Museum	<ul style="list-style-type: none"> - Bangkok, - Rangsit, Pathumthani
Wildlife Research and Development Center	DNP, Wildlife Conservation Office	Throughout the country
Insect Museum	DoA, DNP, Chulalongkorn University, Kasetsart University	
Micro-organism Bank	DoA, DNP, TISTR, BIOTEC	
Lichen and mushroom Collection Center	DoA, DNP, Microbiological Resources Center, Thailand Institute of Scientific and Technology Reserch (TISTR)	

Gene Bank (living and specimens)	<p><u>Micro-organism</u></p> <p>BIOTEC: micro-organism DoA: mushroom, microorganism DNP: Forest micro-organism</p> <p><u>Plant Gene</u></p> <p>Royal Projects: Sirindhorn Plant Genetic Conservation Projects DoA: Food and agricultural species. The Rama 9th Royal Garden Foundation: Water Lily DoF: Aquatic Plant Queen Sirikit Botanical Garden: seeds of some selected native plant species Kasetsart University: 50years of KU Anniversary Gene Bank Mahidol University: Siree Rukachart Herb Garden Private Groups: Thai Network for the Conservation and Enhancement of Landraces of Cultivated Plants (Bangkok)</p> <p><u>Animal genes</u></p> <p>DLD: native livestock genebank Private group: native horse, cat and dog clubs Faculty of Veterinary Science, Mahidol University: Wildlife Genome Resource Banking</p>
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68. ? On Article 9(c), has your country adopted measures for the reintroduction of threatened species into their natural habitats under appropriate conditions?

a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	X
d) Yes, comprehensive measures are in place (please provide details below)	

Further comments on the measures for the reintroduction of threatened species into their natural habitats under appropriate conditions.

There were several reintroduce programs of wildlife into natural habitats in the past 30 years. There were for example wild orchids, peacocks, sambar deer, gibbon, pangolin, elephant, scaly giant clam, sarus crane, crocodile and sea turtles. Before the releasing, some treatments were briefly prepared for the species and proper reintroduced sites identified, however the process are normally far behind technical requirement.

In addition, monitoring program has been limited. Only the case of orchid and turtle are well tracked. Satellite tracking is implemented by DMCR into both the Gulf of Thailand and Andaman Sea. Another successful case to be mentioned here was the "Siamese Crocodile Reintroduction Program in Pang Sida National Park" It was the cooperation among the Crocodile Management Association of Thailand (CMAT) and DNP.

69. ? On Article 9(d), has your country taken measures to regulate and manage the collection of biological resources from natural habitats for *ex-situ* conservation purposes so as not to threaten ecosystems and *in-situ* populations of species?

a) No	X
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	
d) Yes, comprehensive measures are in place (please provide details below)	

Further information on the measures to regulate and manage the collection of biological resources from natural habitats for *ex-situ* conservation purposes so as not to threaten ecosystems and *in-situ* populations of species.

DNP, DoA, RFD, DLD, and DOF are the major departments responsible on in-situ conservation, while they are also major departments on ex-situ conservation. Certain regulations have been conducted by RFD and DNP, but they are for overall research purpose, not specific for ex-situ collection purposes.

Box XLVIII .

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

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Article 10 - Sustainable use of components of biological diversity

70. ? On Article 10(a), has your country integrated consideration of the conservation and sustainable use of biological resources into national decision-making?

a) No	
b) No, but steps are being taken	
c) Yes, in some relevant sectors (please provide details below)	X
d) Yes, in most relevant sectors (please provide details below)	

Further information on integrating consideration of conservation and sustainable use of biological resources into national decision-making.

The National Administration Strategic Plan B.E. 2548-2551 (2005-2008), explained in Q 15, has included the sustainable use principle into several strategies. In particular the following: Strategic I the Poverty eradication; Strategic III Improvement for balance and competitiveness economic structure, Strategic IV Strengthen Natural Resources and Environmental Management, Strategic V Enhance international economic affair, Strategic VI Development legal mechanism and promote for good governances, Strategic VIII Ensure national security, and Strategic IX Ensure the competent for change and dynamic of world society.

In summary, Thailand has emphasized sustainable use into all sectors agricultures, traditional medicine, forestry, and fisheries. In addition, the country has declared the Organic Agriculture National Program, which fully implies the principle of sustainable use of biological resources. In 2005, MoAC with MoIn identified to pilot the organic agriculture program at Surin Province.

71. ? On Article 10(b), has your country adopted measures relating to the use of biological resources that avoid or minimize adverse impacts on biological diversity?

a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	X
d) Yes, comprehensive measures are in place (please provide details below)	

Further information on the measures adopted relating to the use of biological resources that avoid or minimize adverse impacts on biological diversity.

Utilization of wetland as natural waste water treatments. After several of years of demonstration site at Leam Phak Bia, Petchburi Province, today wetland is officially promoted to install for local water treatment. Detail can be found at <http://www.rdpb.go.th/main.asp?lang=EN>.

Biological control for controlling of pests and invasive species was promoted by National Biological Control Research Center and adopted by MoAC.

The use of effective microorganism (EM) to accelerate the process for producing biological fertilizers was adopted and promoted by MoAC: Department of Agriculture Extension (DoAE), and agencies concerning to community development.

72. ? On Article 10(c), has your country put in place measures that protect and encourage customary use of biological resources that is compatible with conservation or sustainable use requirements?

a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	x
d) Yes, comprehensive measures are in place (please provide details below)	

Further information on the measures that protect and encourage customary use of biological resources that is compatible with conservation or sustainable use requirements.

Since the Giant Catfish is endangered in natural habitat, Mekong River, DoF and Chiangrai Provincial Authorities cooperate with local communities to ensure their local practice to catch the fish will have no harm to its natural stock. Annual catching, however, provides not only the local community practice but also continuous records of number and size of the fishes caught from its natural habitat.

Buddhism practice has been integrated into forest conservation. The most popular and success practice is the ordaining of forest trees. This practice is promoted and supported by RFD, TAO, and NGOs successfully.

Several legislations refer the principles of this article, in particular the following:

- o Plant Varieties Protection Act B.E. 2542 (1999),
- o Protection and Promotion of Traditional Thai Medical Intelligence Act B.E. 2542 (1999),
- o Wildlife Protection and Reservation Act B.E. 2503 revised B.E. 2535 (1960, revised 1992)

73. ? On Article 10(d), has your country put in place measures that help local populations develop and implement remedial action in degraded areas where biological diversity has been reduced?

a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	X
d) Yes, comprehensive measures are in place (please provide details below)	

Further information on the measures that help local populations develop and implement remedial action in degraded areas where biodiversity has been reduced.

Environmental Fund, secretariats by ONEP, established for this particular purpose in 1993. It was amended to add the use of fund as low interest rate loan for local community, NGO or interested authorities to invest in environmental activities, including remedial action in degraded areas.

74. ? Has your country identified indicators and incentive measures for sectors relevant to the conservation and sustainable use of biodiversity? (decision V/24)

a) No	
b) No, but assessment of potential indicators and incentive measures is under way	
c) Yes, indicators and incentive measures identified (please describe below)	X

Further comments on the identification of indicators and incentive measures for sectors relevant to the conservation and sustainable use of biodiversity.

Donations to two specific forest restoration programs and registered non-profitable organization (including NGOs) can deduct from annual income when calculate for tax. The two forest restoration programs are (1) Doi Tung Reforestation and (2) Reforestation celebrating of His Majesty the King's Royal Golden Jubilee. However, among 551 registered organizations for tax deduction, only 19 of them working toward biodiversity conservation and sustainable use.

The Environmental Fund, Plant Varieties Fund, Traditional Thai Medical Intelligence Fund are established according to the relevant acts as an incentive measures for each sectors.

75. ? Has your country implemented sustainable use practices, programmes and policies for the sustainable use of biological diversity, especially in pursuit of poverty alleviation? (decision V/24)

a) No	
b) No, but potential practices, programmes and policies are under review	
c) Yes, some policies and programmes are in place (please provide details below)	X
d) Yes, comprehensive policies and programmes are in place (please provide details below)	

Further information on sustainable use programmes and policies.

Thailand has given importance to the sustainable development by putting the issue on the national agenda, which include sustainable use of biodiversity. The Sustainable Development National Committee has been set up and chaired by the Prime Minister and has its role in formulating policies, follow up and assessment.

Most important program in place is the Royal Development Projects, which demonstrate His Majesty the King's "Sufficiency Economy" and "the New Theory" principles. These principles focus to sustainable use for poverty alleviation. There are more than 3,000 Royal Development Projects as

well as established six Royal Development Study Centres in all the regions of the country to serve as places where studies, researches, experiments and demonstrations of agricultural knowledge are conducted. The Royal Development Study Centres serve as models of development for farmers and the general public to follow and use as guidelines for carrying out proper occupations which will lead to the improvement of their quality of life.

The Royal Development Projects, which are based on the principle of self-reliance in order to solve the poverty crisis of Thai farmers, include the Rice Bank Project, Cattle Bank Project and Hoopkrapong Land Management and Development Project at Cha-Am District, Phetchaburi Province. These projects are aimed at providing farmers with land to live on and cultivate and at encouraging them to congregate in the form of co-operatives in order to solve the occupational as well as other problems in the communities.

Furthermore, the recent Royal Development Projects all are intended to enable the Thai people to be self-reliant since they are supporting projects which allow the people to conduct their occupations productively and effectively. For example, these projects include water resource development, agricultural training and training on supplementary occupation and related techniques.

The six Royal Development Study Centres are similar in that they exist in order to conduct study, research and experimentation on the agricultural knowledge which can be applied by the farmers to upgrade their well-being. However, the Centres are different in terms of the focus of study which varies according to the nature of the particular problems concerned.

Additional information, please see www.sufficiencyeconomy.org/ and www.rdpb.go.th.

76. ? Has your country developed or explored mechanisms to involve the private sector in initiatives on the sustainable use of biodiversity? (decision V/24)

a) No	
b) No, but mechanisms are under development	
c) Yes, mechanisms are in place (please describe below)	X

Further comments on the development of mechanisms to involve the private sector in initiatives on the sustainable use of biodiversity.

Thai Industrial Standard Institution (TISI), Ministry of Industry enacted the Sustainable Forest Management System to have Industrial Product Standard in 2004. The code is TIS 14061 in 2004. This has been acknowledged as one of the primary efforts to develop a national certificate system for sustainable forest management. Detail can be obtained from <http://www.tisi.go.th>

Thailand Business Council for Sustainable Development (TBCSD) secretariats by Thailand Environmental Institute (TEI) established in November 1993 by Mr. Anand Panyarachun, former Prime Minister of Thailand. It is one of the most active bodies to initiate mechanisms for private sector toward sustainable development, which also include sustainable use of biodiversity. Several mechanisms have been in place, for example:

“Greening the Supply Chain” that allows buyer companies to reach out to small- and medium-sized suppliers to improve their environmental management and more efficient use of resources. <http://www.tei.or.th/greenlabel/>

“Thai Green Label Scheme” initiated in 1993 provides an environmental certification to specific products that are shown to have minimum detrimental impact on the environment in comparison with other products serving the same function. Even the Green Label does not include foods, drinks, and pharmaceuticals, but it includes para-rubber products and paper. One of the criteria for Green Label for paper product is 100% use recycle pulp.

“TBCSD Award” provides incentive to Small & Medium Entrepreneur to concern and be aware of environmental issues and practice toward sustainable development. These SME would then be good sample for others.

77. Has your country initiated a process to apply the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity? (decision VII/12)	
a) No	X
b) No, but the principles and guidelines are under review	
c) Yes, a process is being planned	
d) Yes, a process has been initiated (please provide detailed information)	
Further information on the process to apply the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity.	
As the guidelines are relatively new and only recently adopted, they have not yet been incorporated into ongoing work.	

78. Has your country taken any initiative or action to develop and transfer technologies and provide financial resources to assist in the application of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity? (decision VII/12)	
a) No	X
b) No, but relevant programmes are under development	
c) Yes, some technologies developed and transferred and limited financial resources provided (please provide details below)	
d) Yes, many technologies developed and transferred and significant financial resources provided (please provide details below)	
Further comments on the development and transfer of technologies and provision of financial resources to assist in the application of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity.	
As the guidelines are relatively new and only recently adopted, they have not been incorporated into the ongoing work.	

Biodiversity and Tourism

79. ? Has your country established mechanisms to assess, monitor and measure the impact of tourism on biodiversity?	
a) No	
b) No, but mechanisms are under development	
c) Yes, mechanisms are in place (please specify below)	X
d) Yes, existing mechanisms are under review	
Further comments on the establishment of mechanisms to assess, monitor and measure the impact of tourism on biodiversity.	
<p>Beside the Tourism Authority of Thailand (TAT) who focus on tourism promotion and develop national tourism strategic plan. There are two new authorities concerning sustainable tourism development established.</p> <p>Firstly, the Authority for Sustainable Tourism Development in Specific Area was established in 2003 as a public organization. It is supervised by the National Committee on Sustainable Tourism Development in Specific Area who seeks for new management mechanism toward sustainable tourism development.</p> <p>Secondly, the Area-Based Tourism Centre for Sustainable Tourism Development Office established under the Thailand Research Fund (TRF) in 2004. This new office aims to support the development of tourism management knowledge and information system. These information and knowledge will be fed to regional and area base planning mechanism, and to policy making authority at both ministry</p>	

and provincial level. Mechanism to assess, monitor and measure the impact of tourism to biodiversity and community livelihood is also include, but at the study period. <http://www.trf.or.th/default.asp>

In addition to the above institutions, DNP has measurements to assess and monitor impact from tourism activities in a national park. The first measure is the declaration of no-visiting seasons in a national park. These parks are , for example, Phu Kra Dueng National Park in Loei Province, Mu Koh Surin Marine National Park and Mu Koh Similan Marine National Park in Phang Nga Province and Tarutao Marine National Park in Satun Province. This closure season measure is for the restoration of sensitive ecosystem by no tourism disturbance in rainy and monsoon season. Another measure is the assessment and monitor impacts from film making in a national park. The classical cases happened many years ago are the film namely "The Beach" took place on Maya Beach, Haad Nopparat Thara-Mu Koh Pee Pee Marine National Park, Krabi Province and "The Survivor" took place in Tarutao Marine National Park, Satun Province.

80. ? Has your country provided educational and training programmes to the tourism operators so as to increase their awareness of the impacts of tourism on biodiversity and upgrade the technical capacity at the local level to minimize the impacts? (decision V/25)

a) No	
b) No, but programmes are under development	
c) Yes, programmes are in place (please describe below)	X

Further comments on educational and training programmes provided to tourism operators.

Beyond the organizations mentioned in Q.79, many academic institutions, NGO and tourism magazines normally provide such training courses. Some of them also produce guideline and manual of how tourists can minimize their impacts to natural resources. Ecotourism Training Center in Khao Lak, PhangNga Province (www.etcth.org), Wild Watch Thailand (www.wildwatchthailand.com), Wildlife Fund Thailand (www.wildlifefund.or.th), The Institute of Eco-tourism at Srinakharinwirot University (www.eco.swu.ac.th), Department of conservation, Faculty of Forestry, Kasetsart University (www.conservation.forest.ku.ac.th), [Ecotourism Data Centre of Thailand](http://www.ecotourism_data_centre_of_thailand), and [Thai Ecotourism & Adventure Travel Association \(www.treal.com\)](http://www.treal.com).

81. Does your country provide indigenous and local communities with capacity-building and financial resources to support their participation in tourism policy-making, development planning, product development and management? (decision VII/14)

a) No	
b) No, but relevant programmes are being considered	
c) Yes, some programmes are in place (please provide details below)	X
d) Yes, comprehensive programmes are in place (please provide details below)	

Further comments in the capacity-building and financial resources provided to indigenous and local communities to support their participation in tourism policy-making, development planning, product development and management.

Agencies list in Q79 and Q80 also offer opportunities for building capacity of indigenous and local community in sustainable tourism development. Some of these agencies also documenting the process and impact of their interventions, some does not. Good practices on community tourism development in Thailand have been recorded under the Asia-Pacific Environmental Innovation Strategies (APEIS), Research on Innovative and Strategic Policy Options (RISPO), Institute for Global Environmental Strategies (IGES). <http://www.iges.or.jp>

Concerning to the financial support for community to be proactive in tourism plan, development and management, several portion of fund are available at village, Tambon (sub-district), or provincial levels. Government investment through programmes namely: Environmental Fund, Village Fund, Small-Medium-Large Sized (SML) Village Fund, annual budget of Tambon Administration Organization and Provincial Administration Organization are good samples. Beyond these funds, in 2005, DNP with Danish Government has implement the project calls Joint Management of Protected Area Project (DNP) also provide Community Initiative Fund are offer for the community decision, including tourism

development and management in target national park with the project.

Samples of local communities actively participate in management of tourism in protected areas are, for example, Ban Wang Lung Village at Khao Luang National Park, Tambon Krung Ching Tourism Network at Khao Nan National Park, Mae Klang Luang Tourism Alliance at Doi Inthanon National Park, and Ban Khao Lek Village at Chalerm Rattanakosin National Park.

One Tambon One Product (OTOP) also is a significant program that provide opportunity for local community to decide how their tourism product and activities to be. One of the most success villages is Ban Ta-Whay in Chaing Mai Province. The villager in Ban Ta-Whay are original wood carver and excellent carpenter, with supporting from Tourism Authority of Thailand villagers decided to elevate their strength to be a highlight as "Tourism Village" OTOP. Today, Ban Ta-Whay becomes the famous global wood carving and furniture outlet. This also guarantees villagers' awareness and their practices on sustainable use of wood and timber products.

82. Has your country integrated the Guidelines on Biodiversity and Tourism Development in the development or review of national strategies and plans for tourism development, national biodiversity strategies and actions plans, and other related sectoral strategies? (decision VII/14)

a) No, but the guidelines are under review	
b) No, but a plan is under consideration to integrate some principles of the guidelines into relevant strategies	
c) Yes, a few principles of the guidelines are integrated into some sectoral plans and NBSAPs (please specify which principle and sector)	X
d) Yes, many principles of the guidelines are integrated into some sectoral plans and NBSAPs (please specify which principle and sector)	

Further information on the sectors where the principles of the Guidelines on Biodiversity and Tourism Development are integrated.

Both principles of conservation and sustainable use of biodiversity have been generally integrated into Thai National Tourism Strategic Plan. At the same time, sustainable tourism principles are required and mentioned as strategic in the 2nd NBSAP. However, the coverage of both plan are not as comprehend as mentioned in the Guideline.

Both the 2nd NBSAP and National Tourism Strategic Plan have been developed before the Guideline adopted, so it was not applied.

Box XLIX.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

The guidelines are very complicated, required technical process and time, which seem to be too optimistic. Presently, only principle of ecotourism adopted into Thai tourism planner and operators. Recreational Opportunity Spectrum and the Limits of Acceptable Change just been introduced to protected area management regime. However, success cases are still limited.

Since, the guideline is complicated so there is a tremendous need to make them more users friendly.

Article 11 - Incentive measures

83. ? Has your country established programmes to identify and adopt economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity?	
a) No	
b) No, but relevant programmes are under development	
c) Yes, some programmes are in place (please provide details below)	X
d) Yes, comprehensive programmes are in place (please provide details below)	
Further comments on the programmes to identify and adopt incentives for the conservation and sustainable use of biodiversity.	
<p><u>Economic incentive:</u> as explained in Q. 74: can be divided into 2 mechanisms:</p> <ul style="list-style-type: none"> o Tax deduction for donations: two specific forest restoration programs and registered non-profitable organization (including NGOs) o Supporting funds: Environmental Fund, Plant Varieties Fund, and Traditional Thai Medical Intelligence Fund. <p><u>Social incentives:</u></p> <p>Her Majesty the Queen's Forest Protection Flag: The program calls "People Volunteer for Forest Protection". Its abbreviation, normally known in Thai as "Ror Sor Tor Por". The project initiated by Royal Thai Army with RFD, according to Her Majesty the Queen Sirikit statement concerning people participation in forest protection on her visit to Umnajcharoen Province in 1994. After a certain training course provided, villager would set up their mechanism to ensure their forest protected. Not until the village proved to be actively and successfully protected their nearby forest, the village will be given "Protect Forest for Live Saving Flag", directly from Her Majesty the Queen Sirikit. The flags are divided into 3 categories depending on level of achievements. Logo with one, two and three elephants are well known remark for the least to the highest achievement. Criteria for each level include how success the forest protected, size of forest, and level of recognitions whether locally, regionally, or nationally. In 2004, DNP established a fund (donation based: from HM the Queen donations and others) as a welfare for these volunteers, in case they get hurt or die on duty.</p> <p>Forest Good Doers: RFD (together with DNP) annually provide official rewards to forest good doers into 2 categories:</p> <ul style="list-style-type: none"> (a) Good contributors to forest management and conservation. This refers to an individual, independent group, NGO, or private company who has significantly supported the work of the department. In 2005, there were 2 monks, 1 villager, 2 teachers, 4 community leaders, 1 policeman, 1 community club, and 1 company (b) Good practice forest plantation farmers. This refers to a farmer who invests and very well maintains his or her forest plantation. There were 4 farmers who received this award. <p>Green Globe Award: Initiated by Petroleum Thailand (PTT Public Company Limited) for 6 years. It was a national campaign searching for individuals, communities, officers, or author who had been working goods for forest protection. Not only the national recognition, but also small amount of money providing for the award receiver to continue his/hers/theirs good work. Judges are called upon for particular mission and mixing from government staff, private, well known and noble man. Theme of award will be identified year by year. In 2004, recipients of the Green Globe Award consisted of 4 books authors, 9 individuals (3 monks, 4 men and 2 women), 8 community groups, 5 youth groups, and 14 student articles. Total price of the award in 2005 is 3 million baht (from PTT). http://www.pttplc.com.</p>	

84. ? Has your country developed the mechanisms or approaches to ensure adequate incorporation of both market and non-market values of biological diversity into relevant plans, policies and programmes and other relevant areas? (decisions III/18 and IV/10)

a) No	X
b) No, but relevant mechanisms are under development	
c) Yes, mechanisms are in place (please provide details below)	
d) Yes, review of impact of mechanisms available (please provide details below)	
Further comments on the mechanism or approaches to incorporate market and non-market values of biodiversity into relevant plans, policies and programmes.	

85. ? Has your country developed training and capacity-building programmes to implement incentive measures and promote private-sector initiatives? (decision III/18)

a) No	X
b) No, but relevant programmes are under development	
c) Yes, some programmes are in place	
d) Yes, many programmes are in place	

86. Does your country take into consideration the proposals for the design and implementation of incentive measures as contained in Annex I to decision VI/15 when designing and implementing incentive measures for the conservation and sustainable use of biodiversity? (decision VI/15)

a) No	X
b) Yes (please provide details below)	
Further information on the proposals considered when designing and implementing the incentive measures for the conservation and sustainable use of biodiversity.	

87. Has your country made any progress in removing or mitigating policies or practices that generate perverse incentives for the conservation and sustainable use of biological diversity? (decision VII/18)

a) No	
b) No, but identification of such policies and practices is under way	
c) Yes, relevant policies and practices identified but not entirely removed or mitigated (please provide details below)	X
d) Yes, relevant policies and practices identified and removed or mitigated (please provide details below)	
Further information on perverse incentives identified and/or removed or mitigated.	
Land management has been identified as perverse incentives in Thailand. It has been a long desire to review the policy and legislation of land management: land use zoning, land title, taxation, and etc. Due to strong sector management in the past, management of land and other biological resources (in particularly forest resources) were split among Ministry of Interior and MoAC. Not until, the	

reformation of the government in 2002, the National Committee on Land Management has been transferred to ONEP, MoNRE. Today, the committee chairs by Minister of MoNRE and secretariats by ONEP. This transfer is aiming to improve effectiveness of natural resources integrated management. (www.onep.go.th/land).

In addition, the establishment of MoNRE also includes the utilization of land for mining. Mining permission was once under the supervision of Ministry of Industry. Until 2002, Department of Mineral Resources has been transferred to MoNRE, in order to reduce sectoral management at ministry level.

Box L.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

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Article 12 - Research and training

88. ? On Article 12(a), has your country established programmes for scientific and technical education and training in measures for the identification, conservation and sustainable use of biological diversity and its components?

a) No	
b) No, but programmes are under development	
c) Yes, programmes are in place (please provide details below)	X

Further information on the programmes for scientific and technical education and training in the measures for identification, conservation and sustainable use of biodiversity.

Most of the systematic education and training programs are institutionalized into academic curriculum for long time. Due to the agricultural based country, Thailand education system integrated it school curriculum on biodiversity and its components at all levels from primary - high school, and higher educations to doctoral degree.

This was reemphasized in the last decade due to the 8th NESDP (1997-2001). Education system in Thailand has reoriented toward student centered and localized. Consequently, the biological and environmental sciences had been elevated into schools and university at all levels. The concerning issues, however, there are limited on educational material, tools, and guidebook. School teachers normally conduct an outdoor program for student to have first hand experiences on environmental, biological, and agricultural fields, such as environmental camps, agricultural plots, and scout programs. Some schools, particularly in remote areas, produce and maintain their student lunch program by fishing ponds, vegetation plots, and mushroom cultivations.

Thailand has 69 public universities throughout the country. Universities experienced and well known are Chulalongkorn (www.chula.ac.th), Kasetsart (www.ku.ac.th), Mahidol (www.mahidol.ac.th), Chiangmai (www.cmu.ac.th), Khonkaen (www.kku.ac.th), Burapha (www.buu.ac.th), Prince of Songkla (www.psu.ac.th), Ramkhamhaeng (www.ru.ac.th), Srinakharinwirot (www.swu.ac.th), Silpakorn (www.su.ac.th), and Sukhothaihammathirat (www.stou.ac.th). Beside these, there are several new established or upgraded institutions that may not have long experiences in researching, but provide closer opportunity to community studies toward the use and conserve of biodiversity resources. These universities include Maejo (www.mju.ac.th), Ubonratchathani (www.ubu.ac.th), Rajmakala (located in 9 major provinces www.rmut.ac.th), and Rajabhat (locate in 41 provinces www.ripb.ac.th). Most of these universities also provide not only bachelor, master, doctoral degrees, but also short courses training and workshop for interested groups, including local communities and TAOs.

Beside these academic institutions, sectoral departments, such as DoA, DOF, RFD, DNP, DMCR, and ONEP also provide technical training programs for not only its personnel, but partners and general public too. Intra-cooperation among universities and departments found to be very useful and effective mechanism toward the achievement of this article.

89. ? On Article 12(b), does your country promote and encourage research which contributes to the conservation and sustainable use of biological diversity?

a) No

b) Yes (please provide details below)

X

Further information on the research which contributes to the conservation and sustainable use of biodiversity.

Beside academic programs offer by schools, universities, and competent departments in Q.88, there are more semi-governmental organizations to promote and support researches relevant to the conservation and sustainable use of biological diversity. Major institutions are for instance, the Institute for the Promotion of Teaching Science and Technology (www.ipst.ac.th), National Science and Technology Development Agency (www.nstda.or.th) which hosts the BIOTEC and BRT (www.biotec.or.th), National Research Council of Thailand (www.nrct.go.th), National Science Museum (www.nsm.or.th), Thailand Institute of Science and Technological Research (www.tistr.or.th), Geo-informatics and Space Technology Development Agency (www.gistda.or.th), Community Organizations Development Institute (www.codi.or.th), Office of Small and Medium Enterprises Promotion (www.sme.go.th), Agriculture Research Development Agency (www.arda.or.th), Health Systems Research Institute (www.hsri.or.th) and Thailand Research Fund (www.trf.or.th). These organizations receive fund from Thai Government, under special decree to have its independent administration and financial procedures.

Furthermore, NGOs and professional groups or clubs also normally provide such programs and publish journal, booklet, newsletter, and guidebook to educate and enhance knowledge on biodiversity identification, conservation and sustainable use to the general public. For example:

Green World Foundation (GWF): issue a bi-monthly Green World Magazine, biennial review of the State of the Thai Environment, texts and references, manuals and nature guides, and educational Materials. It also provides the following courses:

- Introduction to environmental education
- Effective use of games in training
- Stream Health Investigation
- Bird watching and environmental health for beginners
- Mammal tracks and forest health for beginners
- Urban wildlife and environment health

Mushroom Researchers and Growers Society of Thailand (MRGST): issues Thai Mushroom Journal annually, since 2000.

Thailand Network for the Conservation and Enhancement of Landraces of Cultivated Plants (TNCEL) issues a quarterly publication on native plants and provides training courses and workshops.

Science Society of Thailand under the Patronage of H.M. The King (www.scisoc.or.th) provide forum and networking of schools, teachers, and youths clubs and networks on several topics related to biodiversity, environmental, educational, entomology, botanical and etc. It is provide a network to support and encourage journalists, authors, and publication publishers to enhance their capacities and mobilize their limited resources and data.

90. ? On Article 12(c), does your country promote and cooperate in the use of scientific advances in biological diversity research in developing methods for conservation and sustainable use of biological resources?	
a) No	
b) Yes (please provide details below)	X
Further information on the use of scientific advances in biodiversity research in developing methods for conservation and sustainable use of biodiversity.	
Biotechnology is promoted and supported through the several organizations listed in Q.88 and Q.89. These are, for instance, DoA, IPST, NSTDA, BIOTEC, NRCT, and TISTR.	
Principles for biotechnology are to develop or refine agriculture products, to invent better and saver preservations process, to reduce and prevent negative impact of the biodiversity utilization. Crops, aquaculture s, bio-diesel are the main themes for biotechnology development.	

Box LI.

Please elaborate below on the implementation of this article specifically focusing on:	
<ul style="list-style-type: none"> a) outcomes and impacts of actions taken; b) contribution to the achievement of the goals of the Strategic Plan of the Convention; c) contribution to progress towards the 2010 target; d) progress in implementing national biodiversity strategies and action plans; e) contribution to the achievement of the Millennium Development Goals; f) constraints encountered in implementation. 	

Article 13 - Public education and awareness

91. Is your country implementing a communication, education and public awareness strategy and promoting public participation in support of the Convention? (Goal 4.1 of the Strategic Plan)	
a) No	
b) No, but a CEPA strategy is under development	
c) Yes, a CEPA strategy developed and public participation promoted to a limited extent (please provide details below)	X
d) Yes, a CEPA strategy developed and public participation promoted to a significant extent (please provide details below)	
Further comments on the implementation of a CEPA strategy and the promotion of public participation in support of the Convention.	
With limited resources, ONEP has produced series of Thai publications on CBD and its provision distributing to implementing agencies, and key partners for several years.	
Thailand by ONEP and several partner agencies arrange special activities to celebrate the International Biodiversity Day every year since declared. These activities normally include press conference and technical workshop. Webpage of ONEP has also included information on CBD and its provisions both in Thai and English. Updating information, e.g. meeting, discussion papers are posted at all occasion.	
Significantly, the 2 nd NBSAP has been prioritized implementations of this article as the country first strategy. Implementing agencies concerning this strategy cover all sectors: government authorities, NGO, CEO Governors, and academic institutions.	

92. Is your country undertaking any activities to facilitate the implementation of the programme of work on Communication, Education and Public Awareness as contained in the annex to decision VI/19? (decision VI/19)

a) No	
b) No, but some programmes are under development	
c) Yes, some activities are being undertaken (please provide details below)	X
d) Yes, many activities are being undertaken (please provide details below)	

Further comments on the activities to facilitate the implementation of the programme of work on CEPA.

CEPA Program of Work	Thailand Implementation
Element 1: Clearing House Mechanism	Fully function by ONEP (www.chm-thai.onep.go.th).
Element 2: Knowledge and expertise shared among professional and practitioners	The exchange among the technocrat and researchers are quiet well. There is crucial need to well design and invest more on tools and best practices in order to communicate with practitioners, particular to protected area managers, farmers, community leaders and organizations.
Element 3: Improve communication skill and package to general public	There is limited achievement concerning to this elements. However, as there are many means for outreach activities, it is the question of how and what message to be delivered to wider groups.

93. Is your country strongly and effectively promoting biodiversity-related issues through the press, the various media and public relations and communications networks at national level? (decision VI/19)

a) No	
b) No, but some programmes are under development	
c) Yes, to a limited extent (please provide details below)	X
d) Yes, to a significant extent (please provide details below)	

Further comments on the promotion of biodiversity-related issues through the press, the various media and public relations and communications networks at national level.

At national level, the most effective media in Thai society is through a television. Due to limited budget and expensive investment in TV broadcasting, only a few government authorities can do so. ONEP, as CHM plans to improve its investment in this mass media in the future. Nowadays, publishing medias, newspaper and magazine are concern as the most cost effective media in Thai society. Radio has also found to be a useful media, in particularly the national broadcasting channel, e.g. FM 92.5 mg.hz. Local radio station is popular among local communities and is a key tool to deliver particular message to people in remote areas.

In addition, among the media there is the Thai Society of Environmental Journalists, a volunteer based network established in 1995. This society aims to support and mobilize among the journalists themselves an information and knowledge on environmental issues, and to enhance their networks with active informants. It has also produced an annual document recording critical environmental issues call "when a fish likes to swallow a star". It also conducts training courses for journalists and students on how environmental journalist work and responsible. Sometime, once funding is available, it also trains foreign journalists from the regions, e.g. Lao PDR, Cambodia, Vietnam, etc.

94. Does your country promote the communication, education and public awareness of biodiversity at the local level? (decision VI/19)	
a) No	
b) Yes (please provide details below)	X
Further information on the efforts to promote the communication, education and public awareness of biodiversity at the local level.	
By many means as explained in Q.88 and Q89. Beside those research and educational organizations, NGO also plays substantial role in this issue. These NGOs are for example: WWF-Thailand, WFT, Yadfon Association, Sueb Nakasathein Foundation, and Green World Foundation.	
Supporting from GEF/Small Grant Program has supported NGO and local communities in improving its communications, education, and public awareness program. More detail, please see www.smp.undp.org/index.cfm?module=SGP&page=WhereCountry&CountryID=THA .	

95. Is your country supporting national, regional and international activities prioritized by the Global Initiative on Education and Public Awareness? (decision VI/19)	
a) No	
b) No, but some programmes are under development	
c) Yes, some activities supported (please provide details below)	X
d) Yes, many activities supported (please provide details below)	
Further comments on the support of national, regional and international activities prioritized by the Global Initiative on Education and Public Awareness.	
As explained in Q.92. Most of the budget allocates to conduct these activities are from the Thai government, and small proportion from GEF/Small Grant Program which funds directly to NGO and local communities.	

96. Has your country developed adequate capacity to deliver initiatives on communication, education and public awareness?	
a) No	
b) No, but some programmes are under development	
c) Yes, some programmes are being implemented (please provide details below)	X
d) Yes, comprehensive programmes are being implemented (please provide details below)	
Further comments on the development of adequate capacity to deliver initiatives on communication, education and public awareness.	
Even there were tremendous inputs toward CEPA by many sectors and through many means as explained in above questions. It has been concluded that people awareness on conservation and sustainable use of biodiversity are very limited.	

97. Does your country promote cooperation and exchange programmes for biodiversity education and awareness at the national, regional and international levels? (decisions IV /10 and VI/19)	
a) No	
b) Yes (please provide details below)	X
Further comments on the promotion of cooperation and exchange programmes for biodiversity education and awareness, at the national, regional and international levels.	


Through mechanism of the agencies mention in Q. 88, Q. 89, Q.93 and Q.94.

98. Is your country undertaking some CEPA activities for implementation of cross-cutting issues and thematic programmes of work adopted under the Convention?

a) No (please specify reasons below)	
b) Yes, some activities undertaken for some issues and thematic areas (please provide details below)	X
c) Yes, many activities undertaken for most issues and thematic areas (please provide details below)	
d) Yes, comprehensive activities undertaken for all issues and thematic areas (please provide details below)	

Further comments on the CEPA activities for implementation of cross-cutting issues and thematic programmes of work adopted under the Convention.

In particularly toward thematic areas of agriculture, forest, wetland and marine.

99.  Does your country support initiatives by major groups, key actors and stakeholders that integrate biological diversity conservation matters in their practice and education programmes as well as into their relevant sectoral and cross-sectoral plans, programmes and policies? (decision IV/10 and Goal 4.4 of the Strategic Plan)

a) No	
b) Yes (please provide details below)	X

Further comments on the initiatives by major groups, key actors and stakeholders that integrate biodiversity conservation in their practice and education programmes as well as their relevant sectoral and cross-sectoral plans, programmes and policies.

The cancellation of the Mega Project to construct a new elevated highway across Gulf of Thailand, link Bangkok with Petchburi. After several objections from society and technocrat, the Cabinet cancelled the project in 2005.

Two classical samples is the withheld and cancellation of the two dams inside protected areas. These two dams are Nam Jone Dam (proposed in Thung Yai Wildlife Sanctuary) and Heaw Narok Dam (proposed in Khao Yai National park). Nowadays, these two protected areas are major parts of the two Thailand's Natural World Heritage Site.

100. Is your country communicating the various elements of the 2010 biodiversity target and establishing appropriate linkages to the Decade on Education for Sustainable Development in the implementation of your national CEPA programmes and activities? (decision VII/24)

a) No	X
b) No, but some programmes are under development	
c) Yes, some programmes developed and activities undertaken for this purpose (please provide details below)	
d) Yes, comprehensive programmes developed and many activities undertaken for this purpose (please provide details below)	

Further comments on the communication of the various elements of the 2010 biodiversity target and the establishment of linkages to the Decade on Education for Sustainable Development.

Since the two (2010 Biodiversity Target) and the Decade on Education for Sustainable Development (launched on 1 March 2005), Thailand has not linked them into the communication activities yet.

Box LII .

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

MDG has been well accepted and integrated into national and sectoral plan of government, NGO and academic institutes. Similar to the NBSAP which well aware among technocrats and NGOs. However, general public are still be limited access and accepted these information.

Most of the document on CBD Strategic Plan and 2010 targets are highly technical terminologies and is in English. These publications and information need a huge investment to translate and interpreted into Thai. In order to make them effective communicate, they need to be rearranged in easy language for general public and to be interesting for policy makers.

Article 14 - Impact assessment and minimizing adverse impacts

101. ? On Article 14.1(a), has your country developed legislation requiring an environmental impact assessment of proposed projects likely to have adverse effects on biological diversity?

a) No	
b) No, legislation is still in early stages of development	
c) No, but legislation is in advanced stages of development	
d) Yes, legislation is in place (please provide details below)	X
e) Yes, review of implementation available (please provide details below)	

Further information on the legislation requiring EIA of proposed projects likely to have adverse effects on biodiversity.

Thailand first mandatory provisions for EIA were issued in 1975, by the Enhancement and Conservation of Nation of National Environmental Quality Act 1992. Today, MoNRE with the approval of National Environmental Board (NEB) is notification authority for the type and size of projects or activities requiring EIA. www.onep.go.th

102. ? On Article 14.1(b), has your country developed mechanisms to ensure that due consideration is given to the environmental consequences of national programmes and policies that are likely to have significant adverse impacts on biological diversity?

a) No	
b) No, mechanisms are still in early stages of development	X
c) No, but mechanisms are in advanced stages of development	
d) Yes, mechanisms are in place (please provide details below)	

Further comments on the mechanisms developed to ensure that due consideration is given to the environmental consequences of national programmes and policies that are likely to have significant adverse impacts on biodiversity.

ONEP as secretariat body of National Environmental Board (NEB) is reviewing mechanism of SIA (Strategic Impact Assessment) as an additional tool from EIA.

103. ? On Article 14.1(c), is your country implementing bilateral, regional and/or multilateral agreements on activities likely to significantly affect biological diversity outside your country's jurisdiction?

a) No	
b) No, but assessment of options is in progress	
c) Yes, some completed, others in progress (please provide details below)	
d) Yes (please provide details below)	X

Further information on the bilateral, regional and/or multilateral agreements on activities likely to significantly affect biodiversity outside your country's jurisdiction.

Beyond the ratified MEA, e.g. CITES, Thailand agrees and supports the MRC agreement to maintain water flow of Mekong River which runs through several countries in the region. Furthermore, Thailand also actively implements with risk assessment on alien invasive species and establishes the quarantine stations at the major borders, sea ports and airports throughout the country.

104. ? On Article 14.1(d), has your country put mechanisms in place to prevent or minimize danger or damage originating in your territory to biological diversity in the territory of other Parties or in areas beyond the limits of national jurisdiction?

a) No	
b) No, mechanisms are still in early stages of development	X
c) No, but mechanisms are in advanced stages of development	
d) Yes, mechanisms are in place based on current scientific knowledge	

105. ? On Article 14.1(e), has your country established national mechanisms for emergency response to activities or events which present a grave and imminent danger to biological diversity?

a) No	
b) No, mechanisms are still in early stages of development	
c) No, but mechanisms are in advanced stages of development	X
d) Yes, mechanisms are in place (please provide details below)	

Further information on national mechanisms for emergency response to the activities or events which present a grave and imminent danger to biodiversity.

Tsunami and earthquake warning system and its equipments installed along Andaman Sea. This warning center was launched in August 2005.

DNP also developing a computer modeling using satellite image and local factors to predict forest fire occurrence in dry season.

The Surveillance for Avian Influenza (Bird Flue) have been actively implemented through several government offices relate to avian, e.g. DLD, DNP, and DoA. Intensive education and information programs and prevention manuals distributed to all farms and farmers.

In order to prevent any impact from LMO fluorescence fishes imported to the country. DoF (approver) requires BIOTEC (fish importer for exhibition) that once any fish died BIOTEC needs to submit its dead body (as specimen) to DOF for destroying.

106. Is your country applying the Guidelines for Incorporating Biodiversity-related Issues into Environment-Impact-Assessment Legislation or Processes and in Strategic Impact Assessment as contained in the annex to decision VI/7 in the context of the implementation of paragraph 1 of Article 14? (decision VI/7)

a) No	
b) No, but application of the guidelines under consideration	X
c) Yes, some aspects being applied (please specify below)	
d) Yes, major aspects being applied (please specify below)	
Further comments on application of the guidelines.	
Thai EIA process and guideline was adopted before the decision VI/7 and its guideline declared.	

107. On Article 14 (2), has your country put in place national legislative, administrative or policy measures regarding liability and redress for damage to biological diversity? (decision VI/11)

a) No	
b) Yes (please specify the measures)	X
Further comments on national legislative, administrative or policy measures regarding liability and redress for damage to biological diversity.	
<p>Liability for damage to biodiversity is a debatable issue in Thailand, as well as international. However, the current mechanism that in place is the liability from forest encroachment.</p> <p>The maximum liability for forest encroachment is 400,000 baht/rai, which is about US\$ 62,500 per ha. (6.25 rai = 1 ha and calculated at 40 baht/US\$). This figure has been estimated by DNP researchers by the cost for redressing the damage and calculated from the cost of soil degradation. The figure was adopted by courts, as the maximum charge.</p>	

108. Has your country put in place any measures to prevent damage to biological diversity?

a) No		
b) No, but some measures are being developed		
c) Yes, some measures are in place (please provide details below)	X	
d) Yes, comprehensive measures are in place (please provide details below)		
Further information on the measures in place to prevent damage to biological diversity.		
There are a number of acts and regulations aiming to prevent damage to biological diversity. Numbers of relevant acts are as follow:		
Themes/resources	Number of Effective Acts	Names (refer to key word and year only)
Land, land use for agriculture	7	Immovable Property of State (Ratcha Patsadu Land) Act, B.E. 2518, Dig and Land Reclaim Act B.E. 2543 (2000) The Land Code Amendment Act (NO.8) B.E. 2542 (1999) Agriculture Land Reform Act B.E. 2518 revised B.E. 2532 (1989) Agriculture Land Allocation B.E. 2517 revised B.E. 2534 (1991) Agriculture Land Leasing B.E. 2524 (1981) Livelihood Land Allocation B.E.2511 (1968)

Water, surface and underground	3	Artesian Well Act B.E.2540 revised B.E.2546 (1997 revised 2003) Royal Irrigation System B.E.2485 revised 2530 (1942 revised 1987) Private Irrigation B.E. 2482 revised 2526 (1939 revised 1983)
Forest, wildlife, protected area + chainsaw	5	Forest Act B.E.2484 (1941) National Park Act B.E.2504 (1961) National Reserved Forest B.E. 2507 (1964) Wildlife Protection and Reservation Act B.E. 2503 revised B.E. 2535 (1960, revised 1992) Forest Plantation Act B.E.2535 (1992)
Fisheries	1	Fisheries Act B.E. 2490 revised 2537 (1947 revised 1994)
Plants	6	Fertilizer Act B.E.2518 (1975) Hazardous Material Act B.E.2535 (1992) Plant Varieties Act B.E. 2518 revise 2535 (1975 revised 1992) Plant Varieties Protection Act B.E.2542 (1999) Para-rubber Plant Control Act. B.E.2542 (1999) Plant Quarantine Act B.E. 2507 revised 2542 (1964 revised 1999)
EIA	1	Enhancement and Conservation of National Environmental Quality Act B.E. 2535 (1992)
Livestock	4	Animal Epidemic Act B.E.2499 revised 2542 (1956 revised 1999) Veterinary Hospital Act B.E.2533 (1990) Controlling of Animal Food Quality B.E.2525 (1982) Animal Varieties Maintenance Act B.E.2509 (1966)
Mineral	1	Mineral B.E. 2461 latest revision 2534 (1991)
Medical Plant	1	Protection and Promotion of Thai Traditional Medical Intelligence Act B.E. 2542 (1999)

In addition to these acts, there are several royal decrees, cabinet resolutions, and regulations concerning to prevent damage to biological diversity. There are for example, the Watershed Classification Management Resolutions which identify human activities or development in the watershed areas.

109. Is your country cooperating with other Parties to strengthen capacities at the national level for the prevention of damage to biodiversity, establishment and implementation of national legislative regimes, policy and administrative measures on liability and redress? (decision VI/11)

a) No	X
b) No, but cooperation is under consideration	
c) No, but cooperative programmes are under development	
d) Yes, some cooperative activities being undertaken (please provide details below)	
e) Yes, comprehensive cooperative activities being undertaken (please provide details below)	
Further comments on cooperation with other Parties to strengthen capacities for the prevention of damage to biodiversity.	
-	

Box LIII.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Article 15 - Access to genetic resources

110. ? Has your country endeavored to facilitate access to genetic resources for environmentally sound uses by other Parties, on the basis of prior informed consent and mutually agreed terms, in accordance with paragraphs 2, 4 and 5 of Article 15?

a) No	
b) Yes (please provide details below)	X

Further information on the efforts taken by your country to facilitate access to genetic resources for environmentally sound uses by other Parties, on the basis of prior informed consent and mutually agreed terms.

The National Committee on the Conservation and Use of Biodiversity established according to the "Prime Minister Office Regulation on Conservation and Use of Biodiversity Regulation, 2000 (amended 19 July 2005)". This national committee is secretariat by the **"Biodiversity Bureau"** situated in ONEP. This Bureau has replaced the former Thailand Biodiversity Center. The Bureau now a national focal point on the access and transfer of biological resources, under the National Committee, as a competent national authority.

Under the provision of this regulation and authority of the national committee, there are

- 4 sub-committees concerning on CBD Implementation, Biosafety, Man and Biosphere, and RAMSAR Convention
- 3 ministerial biodiversity committees (MoNRE, MoPH, and MoAC) and
- 6 departmental committees (DoLD, RFD, DNP, DoF, DoA, and DMCR)

These committees are aimed to be mechanism to facilitate access and benefit sharing of relevant sectors. Due to the reformation of government structure the establishment of these committee are delay and a few has not established. These authorities are aimed to be a competent authority on relevant resources.

In addition to the above mechanism, the draft of National Regulation on Criteria and Method for Access and Benefit Sharing of Biological Resources has been finalized and awaiting for approval from the national committee.

However, some mechanisms have been in place without these national regimes. The current departmental mechanisms on access and benefit sharing on biodiversity are as follow:

Plant species: by DoA under the existing Plant Varieties Act B.E. 2518 revised 2535 (1975 revised 1992), Plant Quarantine Act B.E. 2507 revised 2542 (1964 revised 1999), and Plant Varieties Protection Act B.E. 2542 (1999)

Fish species: by DoF under the existing Fisheries Act B.E. 2490 review 2537 (1947 revised 1994),

Medical Plants species: by Ministry of Public Health (MoPH) under the Protection and Promotion of Thai Traditional Medical Intelligence Act B.E. 2542 (1999).

DoLD is in the process to finalize a new act concerning this issue, which is the draft act calls "Indigenous Livestock Species Promotion and Conservation Act" to cover access and benefit sharing of Thai indigenous livestock and animal.

111. ? Has your country taken measures to ensure that any scientific research based on genetic resources provided by other Parties is developed and carried out with the full participation of such Parties, in accordance with Article 15(6)?

a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	X
d) Yes, comprehensive measures are in place (please provide details below)	

Further information on the measures to ensure that any scientific research based on genetic resources provided by other Contracting Parties is developed and carried out with the full participation of such Contracting Parties.

The NRCT is competent authority to do so, under the provision of "National Research Council of Thailand Regulation on the Permission of Foreign Researchers to Conduct Research in Thailand B.E. 2516, 2518 and revised 2525 (1982)." www.nrct.net.

112. ? Has your country taken measures to ensure the fair and equitable sharing of the results of research and development and of the benefits arising from the commercial and other use of genetic resources with any Contracting Party providing such resources, in accordance with Article 15(7)?

a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	X
d) Yes, comprehensive legislation is in place (please provide details below)	
e) Yes, comprehensive statutory policy or subsidiary legislation are in place (please provide details below)	
f) Yes, comprehensive policy and administrative measures are in place (please provide details below)	

Further information on the type of measures taken.

DoA, under provisions of Plant Varieties Protection Act B.E. 2542 (1999) and the Plant Variety Protection Committee Announcement on Criteria and Method to Benefit Sharing 2003, has in the process to adopt regulation to share benefit on plant varieties and patent protecting registered Thai plants.

Similarly to DoA, under the provisions of Protection and Promotion of Thai Traditional Medical Intelligence Act B.E. 2542 (1999) the Ministry of Public Health is in the process to adopt the regulations for the Thai medical plants and intelligence.

However, these mechanisms are very new and tremendous requirement on registration of existing plant varieties and Thai medical intelligence are far to be done.

113. ? In developing national measures to address access to genetic resources and benefit-sharing, has your country taken into account the multilateral system of access and benefit-sharing set out in the International Treaty on Plant Genetic Resources for Food and Agriculture?	
a) No	X
b) Yes (please provide details below)	
Further information on national measures taken which consider the multilateral system of access and benefit-sharing as set out in the International Treaty on Plant Genetic Resources for Food and Agriculture.	
Thailand has signed the Treaty for many years, however due to the Bonn Guideline introduced Thailand has pending the consideration to ratify the Treaty. In the meantime, Thailand supports ASEAN mechanism which require the principle of Prior Inform Consent.	

114. Is your country using the Bonn Guidelines when developing and drafting legislative, administrative or policy measures on access and benefit-sharing and/or when negotiating contracts and other arrangements under mutually agreed terms for access and benefit-sharing? (decision VII/19A)	
a) No	
b) No, but steps being taken to do so (please provide details below)	
c) Yes (please provide details below)	X
Please provide details and specify successes and constraints in the implementation of the Bonn Guidelines.	
DNP, DoLD, DoF, and DoA have taken the guideline to review its administrative measures. For example, use the guideline as a manual considering a request to conduct a research and inventory in a protected area. ONEP organized a national forum debating on ABS in Bangkok August 2005 in order to identify the needs and available information. It is confirmed that training and capacity building on the Bonn guideline are urgently needed to all current and future competent authorities.	

115. Has your country adopted national policies or measures, including legislation, which address the role of intellectual property rights in access and benefit-sharing arrangements (i.e. the issue of disclosure of origin/source/legal provenance of genetic resources in applications for intellectual property rights where the subject matter of the application concerns, or makes use of, genetic resources in its development)?	
a) No	
b) No, but potential policies or measures have been identified (please specify below)	
c) No, but relevant policies or measures are under development (please specify below)	
d) Yes, some policies or measures are in place (please specify below)	X
e) Yes, comprehensive policies or measures adopted (please specify below)	
Further information on policies or measures that address the role of IPR in access and benefit-sharing arrangements.	

The Patent Act B.E. 2526 (1979), the Plant Variety Protection B.E. 2542 (1999), Protection and Promotion of Thai Traditional Medical Intelligence Act B.E. 2542 (1999), The Geological Identity Act B.E. 2546 (2003), The Trade Mark Act B.E.2534 (1991) and the Provision of National Science and Technology Development Board on Intellectual Property and Registration B.E. 2543 (2000) offer such mechanisms.

However, IP on access and benefit-sharing of genetic resources are issue for further discussion. Only the Plant Varieties Act provides such a measurement, but practicing is limited.

116. Has your country been involved in capacity-building activities related to access and benefit-sharing?

a) Yes (please provide details below)	X
b) No	

Please provide further information on capacity-building activities (your involvement as donor or recipient, key actors involved, target audience, time period, goals and objectives of the capacity-building activities, main capacity-building areas covered, nature of activities). Please also specify whether these activities took into account the Action Plan on capacity-building for access and benefit-sharing adopted at COP VII and available in annex to decision VII/19F.

Thailand hosted the meeting on Open-ended Ad Hoc Working Group on Access and Benefit Sharing in February 2005, attended by all parties. Thai experts were involved in regional discussion.

BIOTEC produces an occasional paper on this issue to educate general public and exchanging information with interested groups.

ONEP arranged a national meeting on ABS in August 2005 for sharing information among interested group and technical staff from competence agencies.

Box LIV.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

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Article 16 - Access to and transfer of technology

117. ? On Article 16(1), has your country taken measures to provide or facilitate access for and transfer to other Parties of technologies that are relevant to the conservation and sustainable use of biological diversity or make use of genetic resources and do not cause significant damage to the environment?

a) No	X
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	
d) Yes, comprehensive measures are in place (please provide details below)	

Further information on the measures to provide or facilitate access for and transfer to other Parties of technologies that are relevant to the conservation and sustainable use of biodiversity or make use of genetic resources and do not cause significant damage to the environment.

Sectoral departments, e.g. DoF, DoA, DLD, DNP and independent organizations, e.g. TISTR, NRCT, NSTDA, and BIOTEC are key agencies that share their facilities and experts on this provision with other parties both at region and global level.

118. ? On Article 16(3), has your country taken measures so that Parties which provide genetic resources are provided access to and transfer of technology which make use of those resources, on mutually agreed terms?

a) No	
b) No, but potential measures are under review	X
c) Yes, some measures are in place	
d) Yes, comprehensive legislation is in place	
e) Yes, comprehensive statutory policy or subsidiary legislation are in place	
f) Yes, comprehensive policy and administrative arrangements are in place	
g) Not applicable	

119. ? On Article 16(4), has your country taken measures so that the private sector facilitates access to joint development and transfer of relevant technology for the benefit of Government institutions and the private sector of developing countries?

a) No	
b) No, but potential measures are under review	
c) Yes, some policies and measures are in place (please provide details below)	
d) Yes, comprehensive policies and measures are in place (please provide details below)	X
e) Not applicable	

Further information on the measures taken.

Foreign private investors who aiming to joint development and transfer of technology to Thailand are welcome and would be concerned as eligible group to the national investment promotions defined by the Board of Investment (BOI). Detail of type of promotion scheme (rights and benefits of investor) and type of activities eligible to the promotion can be found in www.boi.go.th.
In addition, BIOTEC and other organizations supports joint research and development with private sector.

Box LV.

Please elaborate below on the implementation of this article specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

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Programme of Work on transfer of technology and technology cooperation

120. Has your country provided financial and technical support and training to assist in the implementation of the programme of work on transfer of technology and technology cooperation? (decision VII/29)

a) No	
b) No, but relevant programmes are under development	
c) Yes, some programmes being implemented (please provide details below)	
d) Yes, comprehensive programmes being implemented (please provide details below)	X

Further comments on the provision of financial and technical support and training to assist in the implementation of the programme of work on transfer of technology and technology cooperation.

As explained earlier, there are several institutes providing these supports. However, the support are limited and dispersed among many sectors. There is a need to find strategic partnerships to improve and strengthen these supports.

121. Is your country taking any measures to remove unnecessary impediments to funding of multi-country initiatives for technology transfer and for scientific and technical cooperation? (decision VII/29)

a) No	X
b) No, but some measures being considered	
c) Yes, some measures are in place (please provide details below)	
d) Yes, comprehensive measures are in place (please provide details below)	

Further comments on the measures to remove unnecessary impediments to funding of multi-country initiatives for technology transfer and for scientific and technical cooperation.

The impediments have not been identified.

122. Has your country made any technology assessments addressing technology needs, opportunities and barriers in relevant sectors as well as related needs in capacity building? (annex to decision VII/29)

a) No	X
b) No, but assessments are under way	
c) Yes, basic assessments undertaken (please provide details below)	
d) Yes, thorough assessments undertaken (please provide details below)	
Further comments on technology assessments addressing technology needs, opportunities and barriers in relevant sectors as well as related needs in capacity building.	

123. Has your country made any assessments and risk analysis of the potential benefits, risks and associated costs with the introduction of new technologies? (annex to decision VII/29)

a) No	
b) No, but assessments are under way	
c) Yes, some assessments undertaken (please provide details below)	X
d) Yes, comprehensive assessments undertaken (please provide details below)	
Further comments on the assessments and risk analysis of the potential benefits, risks and associated costs with the introduction of new technologies.	
This was done under the Cartagena Protocol, in which Thailand has compliance with.	

124. Has your country identified and implemented any measures to develop or strengthen appropriate information systems for technology transfer and cooperation, including assessing capacity building needs? (annex to decision VII/29)

a) No	
b) No, but some programmes are under development	
c) Yes, some programmes are in place and being implemented (please provide details below)	X
d) Yes, comprehensive programmes are being implemented (please provide details below)	
Further comments on measures to develop or strengthen appropriate information systems for technology transfer and cooperation.	
<p>In 2003, the National Working Group on Biosafety Legislation was established. Many meetings formed with fruitful discussion. However, there are more to be done in order to finalize the draft.</p> <p>While the working group is process their discussion, ONEP carries its work as clearing house mechanism to mobilize this function. However, with its resources (budget and staff) and facilities (spaces and equipments) most of the Program element in annex VII/29 operates with limitation. This situation also same with all key sectoral departments and agencies, in particular DoA, DoLD, DoF, DNP and BIOTEC.</p>	

125. Has your country taken any of the measures specified under Target 3.2 of the programme of work as a preparatory phase to the development and implementation of national institutional, administrative, legislative and policy frameworks to facilitate cooperation as well as access to and adaptation of technologies of relevance to the Convention? (annex to decision VII/29)

a) No	X
b) No, but a few measures being considered	
c) Yes, some measures taken (please specify below)	
d) Yes, many measures taken (please specify below)	

Further comments on the measures taken as a preparatory phase to the development and implementation of national institutional, administrative, legislative and policy frameworks to facilitate cooperation as well as access to and adaptation of technologies of relevance to the Convention.

The mandate of the working group in Q.124 are to draft and comment on the national institutional, administrative, legislative and policy frameworks to facilitate cooperation on this technology transfer. Out come of the working group then will be further discussed with relevant stakeholders, including indigenous and local communities. There is no international organizations nor GEF supporting this process in Thailand.

Box LVI.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

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Article 17 - Exchange of information

126. ? On Article 17(1), has your country taken measures to facilitate the exchange of information from publicly available sources with a view to assist with the implementation of the Convention and promote technical and scientific cooperation?

a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place	X
d) Yes, comprehensive measures are in place	

The following question (127) is for DEVELOPED COUNTRIES

127. ? On Article 17(1), do these measures take into account the special needs of developing countries and include the categories of information listed in Article 17(2), such as technical, scientific and socio-economic research, training and surveying programmes, specialized knowledge, repatriation of information and so on?	
a) No	
b) Yes, but they do not include the categories of information listed in Article 17(2), such as technical, scientific and socio-economic research, training and surveying programmes, specialized knowledge, repatriation of information and so on	
c) Yes, and they include categories of information listed in Article 17(2), such as technical, scientific and socio-economic research, training and surveying programmes, specialized knowledge, repatriation of information and so on	

Box LVII .

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:
<ul style="list-style-type: none"> a) outcomes and impacts of actions taken; b) contribution to the achievement of the goals of the Strategic Plan of the Convention; c) contribution to progress towards the 2010 target; d) progress in implementing national biodiversity strategies and action plans; e) contribution to the achievement of the Millennium Development Goals; f) constraints encountered in implementation.

Article 18 - Technical and scientific cooperation

128. ? On Article 18(1), has your country taken measures to promote international technical and scientific cooperation in the field of conservation and sustainable use of biological diversity?	
a) No	
b) No, but potential measures are under review	
c) Yes, some measures are in place (please provide details below)	X
d) Yes, comprehensive measures are in place (please provide details below)	
Further information on the measures to promote international technical and scientific cooperation.	
Thailand locates several regional offices of international institutions working toward this field. These organizations for example are UN, UNEP, UNDP, UNESCO, FAO, IUCN, WWF, and etc. Furthermore, Thailand proactively invites and welcomes international meeting.	

129. ? On Article 18(4), has your country encouraged and developed methods of cooperation for the development and use of technologies, including indigenous and traditional technologies, in pursuance of the objectives of this Convention?	
a) No	
b) No, but relevant methods are under development	
c) Yes, methods are in place	X

130. ? On Article 18(5), has your country promoted the establishment of joint research programmes and joint ventures for the development of technologies relevant to the objectives of the Convention?	
a) No	
b) Yes (please provide some examples below)	X
Examples for the establishment of joint research programmes and joint ventures for the development of technologies relevant to the objectives of the Convention.	
Joint research program have been well established in Thailand. The National Research Council of Thailand and TISTR are the two competent agencies on this. (www.nrct.net and www.tistr.or.th)	

131. Has your country established links to non-governmental organizations, private sector and other institutions holding important databases or undertaking significant work on biological diversity through the CHM? (decision V/14)	
a) No	
b) No, but coordination with relevant NGOs, private sector and other institutions under way	
c) Yes, links established with relevant NGOs, private sector and institutions	X

The following question (132) is for DEVELOPED COUNTRIES

132. Has your country further developed the CHM to assist developing countries and countries with economies in transition to gain access to information in the field of scientific and technical cooperation? (decision V/14)	
a) No	
b) Yes, by using funding opportunities	
c) Yes, by means of access to, and transfer of technology	
d) Yes, by using research cooperation facilities	
e) Yes, by using repatriation of information	
f) Yes, by using training opportunities	
g) Yes, by using promotion of contacts with relevant institutions, organizations and the private sector	
h) Yes, by using other means (please specify below)	
Further comments on CHM developments to assist developing countries and countries with economies in transition to gain access to information in the field of scientific and technical cooperation.	

133. Has your country used CHM to make information available more useful for researchers and decision-makers? (decision V/14)	
a) No	
b) No, but relevant initiatives under consideration	
c) Yes (please provide details below)	X

Further comments on development of relevant initiatives.

The CHM has been effectively useful for researchers and technocrats.

134. Has your country developed, provided and shared services and tools to enhance and facilitate the implementation of the CHM and further improve synergies among biodiversity-related Conventions? (decision V/14)

a) No

b) Yes (please specify services and tools below)

X

Further comments on services and tools to enhance and facilitate the implementation of CHM and further improve synergies among biodiversity-related Conventions.

As ONEP is a national focal point for several conventions, e.g. CBD, RAMSAR, World Heritage, and UNCCC. It is an internal mechanism to pool resources and expertise to synergies those conventions.

Box LVIII.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Article 19 - Handling of biotechnology and distribution of its benefits

135. ? On Article 19(1), has your country taken measures to provide for the effective participation in biotechnological research activities by those Contracting Parties which provide the genetic resources for such research?

a) No

b) No, but potential measures are under review

c) Yes, some measures are in place

d) Yes, comprehensive legislation are in place

X

e) Yes, comprehensive statutory policy and subsidiary legislation are in place

X

f) Yes, comprehensive policy and administrative measures are in place

X

136. ? On Article 19(2), has your country taken all practicable measures to promote and advance priority access by Parties, on a fair and equitable basis, to the results and benefits arising from biotechnologies based upon genetic resources provided by those Parties?

a) No	
b) No, but potential measures are under review	X
c) Yes, some measures are in place	
d) Yes, comprehensive measures are in place	

Box LIX.

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

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Article 20 – Financial resources

Box LX.

Please describe for each of the following items the quantity of financial resources, both internal and external, that have been utilized, received or provided, as applicable, to implement the Convention on Biological Diversity, on an annual basis, since your country became a Party to the Convention.

a) Budgetary allocations by national and local Governments as well as different sectoral ministries	No significant change in term of quantity of financial resources after officially ratified the Convention. The 2 nd NBSAP has not been referred for budget allocation.
b) Extra-budgetary resources (identified by donor agencies)	-
c) Bilateral channels (identified by donor agencies)	-
d) Regional channels (identified by donor agencies)	-
e) Multilateral channels (identified by donor agencies)	-
f) Private sources (identified by donor agencies)	-

g) Resources generated through financial instruments, such as charges for use of biodiversity	-
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Box LXI.

Please describe in detail below any major financing programmes, such as biodiversity trust funds or specific programmes that have been established in your country.

There are Environmental Fund, Plant Varieties Fund, and Traditional Thai Medical Intelligence Fund. Explained in Q. 74

137. ? On Article 20(1), has your country provided financial support and incentives to those national activities that are intended to achieve the objectives of the Convention?	
a) No	
b) Yes, incentives only (please provide a list of such incentives below)	
c) Yes, financial support only	
d) Yes, financial support and incentives (please provide details below)	X
Further comments on financial support and incentives provided.	
Detail explained in article 11.	

The next question (138) is for DEVELOPED COUNTRIES

138. ? On Article 20(2), has your country provided new and additional financial resources to enable developing country Parties to meet the agreed incremental costs to them of implementing measures which fulfill the obligations of the Convention?	
a) No	
b) Yes (please indicate the amount, on an annual basis, of new and additional financial resources your country has provided)	
Further comments on new and additional financial resources provided.	

The next question (139) is for DEVELOPING COUNTRIES OR COUNTRIES WITH ECONOMIES IN TRANSITION

139. ? On Article 20(2), has your country received new and additional financial resources to enable it to meet the agreed full incremental costs of implementing measures which fulfill the obligations of the Convention?	
a) No	X
b) Yes	

140. ? Has your country established a process to monitor financial support to biodiversity, including support provided by the private sector? (decision V/11)	
a) No	
b) No, but procedures being established	
c) Yes (please provide details below)	X
Further comments on processes to monitor financial support to biodiversity, including support provided by the private sector.	
Since almost all budgets for implementation are funded by the Royal Thai Government, the Office of the Auditor General of Thailand, an independent organization is responsible for auditing. More detail, please see www.oag.go.th . Each governmental department, there is the Internal Auditor Division situated, but being independent, inside to ensure the financial procedure are proper.	

141. ? Has your country considered any measures like tax exemptions in national taxation systems to encourage financial support to biodiversity? (decision V/11)	
a) No	
b) No, but exemptions are under development (please provide details below)	
c) Yes, exemptions are in place (please provide details below)	X
Further comments on tax exemptions for biodiversity-related donations.	
As explained in article 11.	

142. Has your country reviewed national budgets and monetary policies, including the effectiveness of official development assistance allocated to biodiversity, with particular attention paid to positive incentives and their performance as well as perverse incentives and ways and means for their removal or mitigation? (decision VI/16)	
a) No	X
b) No, but review is under way	
c) Yes (please provide results of review below)	
Further comments on review of national budgets and monetary policies, including the effectiveness of official development assistance.	

143. Is your country taking concrete actions to review and further integrate biodiversity considerations in the development and implementation of major international development initiatives, as well as in national sustainable development plans and relevant sectoral policies and plans? (decisions VI/16 and VII/21)	
a) No	
b) No, but review is under way	
c) Yes, in some initiatives and plans (please provide details below)	X
d) Yes, in major initiatives and plans (please provide details below)	
Further comments on review and integration of biodiversity considerations in relevant initiatives, policies and plans.	

As explain in article 5 and article 10.

144. Is your country enhancing the integration of biological diversity into the sectoral development and assistance programmes? (decision VII/21)	
a) No	
b) No, but relevant programmes are under development	
c) Yes, into some sectoral development and assistance programmes (please provide details below)	X
d) Yes, into major sectoral development and assistance programmes (please provide details below)	
Further comments on the integration of biodiversity into sectoral development and assistance programmes	
As explained in Q.15.	

The next question (145) is for DEVELOPED COUNTRIES

145. Please indicate with an "X" in the table below in which area your country has provided financial support to developing countries and/or countries with economies in transition. Please elaborate in the space below if necessary.	
A r e a s	Support provided
a) Undertaking national or regional assessments within the framework of MEA (decision VI/8)	
b) <i>In-situ</i> conservation (decision V/16)	
c) Enhance national capacity to establish and maintain the mechanisms to protect traditional knowledge (decision VI/10)	
d) <i>Ex-situ</i> conservation (decision V/26)	
e) Implementation of the Global Strategy for Plant Conservation (decision VI/9)	
f) Implementation of the Bonn Guidelines (decision VI/24)	
g) Implementation of programme of work on agricultural biodiversity (decision V/5)	
h) Preparation of first report on the State of World's Animal Genetic Resources (decision VI/17)	
i) Support to work of existing regional coordination mechanisms and development of regional and sub regional networks or processes (decision VI/27)	
j) Development of partnerships and other means to provide the necessary support for the implementation of the programme of work on dry and subhumid lands biological diversity (decision VII/2)	
k) Financial support for the operations of the Coordination Mechanism of the Global Taxonomy Initiative (decision VII/9)	
l) Support to the implementation of the Action Plan on Capacity Building as contained in the annex to decision VII/19 (decision VII/19)	

m) Support to the implementation of the programme of work on mountain biological diversity (decision VII/27)	
n) Support to the implementation of the programme of work on protected areas (decision VII/28)	
o) Support to the development of national indicators (decision VII/30)	
p) Others (please specify)	
Further information on financial support provided to developing countries and countries with economies in transition.	

The next question (146) is for DEVELOPING COUNTRIES OR COUNTRIES WITH ECONOMIES IN TRANSITION

146. Please indicate with an "X" in the table below in which areas your country has applied for funds from the Global Environment Facility (GEF), from developed countries and/or from other sources. The same area may have more than one source of financial support. Please elaborate in the space below if necessary.			
Areas	Applied for funds from		
	GEF	Bilateral	Other
a) Preparation of national biodiversity strategies or action plans			
b) National capacity self-assessment for implementation of Convention (decision VI/27)			
c) Priority actions to implement the Global Taxonomy Initiative (decision V/9)			
d) <i>In-situ</i> conservation (decision V/16)		X	ITTO, ADB, EU
e) Development of national strategies or action plans to deal with alien species (decision VI/23)			
f) <i>Ex-situ</i> conservation, establishment and maintenance of <i>Ex-situ</i> conservation facilities (decision V/26)		X	
g) Projects that promote measures for implementing Article 13 (Education and Public Awareness) (decision VI/19)	Small Grant	X	
h) Preparation of national reports (decisions III/9, V/19 and VI/25)			
i) Projects for conservation and sustainable use of inland water biological diversity (decision IV/4)		X	
j) Activities for conservation and sustainable use of agricultural biological diversity (decision V/5)			X
k) Implementation of the Cartagena Protocol on Biosafety (decision VI/26)			

l) Implementation of the Global Taxonomy Initiative		X	
m) Implementation of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity			
n) Others (please specify)			
Further information on application for financial support.			
Excluding funding concerning Tsunami, most of the bilateral funds are from Denmark, Japan and the European Union.			

Box LXII .

Please elaborate below on the implementation of this article and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

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D. THEMATIC AREAS

147. Please use the scale indicated below to reflect the level of challenges faced by your country in implementing the thematic programmes of work of the Convention (marine and coastal biodiversity, agricultural biodiversity, forest biodiversity, inland waters biodiversity, dry and sub-humid lands and mountain biodiversity).

3 = High Challenge	1 = Low Challenge					
2 = Medium Challenge	0 = Challenge has been successfully overcome					
N/A = Not applicable						
Challenges	Programme of Work					
	Agricultural	Forest	Marine and coastal	Inland water ecosystem	Dry and subhumid lands	Mountain
(a) Lack of political will and support	3	1	1	3	N/A	1
(b) Limited public participation and stakeholder involvement	1	2	2	2	N/A	2
(c) Lack of main-streaming and integration of biodiversity issues into other sectors	3	2	1	1	N/A	2
(d) Lack of precautionary and proactive measures	3	2	1	2	N/A	3
(e) Inadequate capacity to act, caused by institutional weakness	2	2	1	3	N/A	2

(f) Lack of transfer of technology and expertise	2	1	1	2	N/A	1
(g) Loss of traditional knowledge	3	2	1	1	N/A	2
(h) Lack of adequate scientific research capacities to support all the objectives	2	2	1	2	N/A	2
(i) Lack of accessible knowledge and information	2	2	1	2	N/A	2
(j) Lack of public education and awareness at all levels	2	2	3	3	N/A	2
(k) Existing scientific and traditional knowledge not fully utilized	3	2	2	2	N/A	2
(l) Loss of biodiversity and the corresponding goods and services it provides not properly understood and documented	3	3	3	3	N/A	3
(m) Lack of financial, human, technical resources	1	2	1	2	N/A	2
(n) Lack of economic incentive measures	3	3	1	2	N/A	3
(o) Lack of benefit-sharing	3	3	3	2	N/A	3
(p) Lack of synergies at national and international levels	2	1	1	2	N/A	2
(q) Lack of horizontal cooperation among stakeholders	2	2	1	2	N/A	2
(r) Lack of effective partnerships	2	2	3	2	N/A	2
(s) Lack of engagement of scientific community	3	1	1	2	N/A	1
(t) Lack of appropriate policies and laws	3	2	2	1	N/A	2
(u) Poverty	2	2	2	3	N/A	2
(v) Population pressure	3	3	2	3	N/A	3
(w) Unsustainable consumption and production patterns	3	2	3	3	N/A	2
(x) Lack of capacities for local communities	2	2	1	2	N/A	2
(y) Lack of knowledge and practice of ecosystem-based approaches to management	3	2	1	2	N/A	2
(z) Weak law enforcement capacity	3	3	1	3	N/A	3
(aa) Natural disasters and environmental change	2	2	2	1	N/A	2
(bb) Others (please specify)	N/A	N/A	N/A	N/A	N/A	N/A

Inland water ecosystems

148. Has your country incorporated the objectives and relevant activities of the programme of work into the following and implemented them? (decision VII/4)				
Strategies, policies, plans and activities	No	Yes, partially, integrated but not implemented	Yes, fully integrated and implemented	N/A
a) Your biodiversity strategies and action plans		X		
b) Wetland policies and strategies		X		
c) Integrated water resources management and water efficiency plans being developed in line with paragraph 25 of the Plan of Implementation of the World Summit on Sustainable Development		X		
d) Enhanced coordination and cooperation between national actors responsible for inland water ecosystems and biological diversity			X	
<p>Further comments on incorporation of the objectives and activities of the programme of work</p> <p>Most of objectives and activities in decision VII/4 are in accordance with plan and implementation works of government sectors, independent organizations, academic institutes and NGO partners mentioned in Q. 67, Q.88, and Q.89. However, most of these implementing authorities and partners may not aware of the program of work, as such. Thus, answering this question the X mean "yes, partially integrated and implemented, but not fully."</p>				

149. Has your country identified priorities for each activity in the programme of work, including timescales, in relation to outcome oriented targets? (decision VII/4)	
a) No	X
b) Outcome oriented targets developed but priority activities not developed	
c) Priority activities developed but not outcome oriented targets	
d) Yes, comprehensive outcome oriented targets and priority activities developed	
<p>Further comments on the adoption of outcome oriented targets and priorities for activities, including providing a list of targets (if developed).</p> <p>The program of work has not been promoted into implementing process.</p>	

150. Is your country promoting synergies between this programme of work and related activities under the Ramsar Convention as well as the implementation of the Joint Work Plan (CBD-Ramsar) at the national level? (decision VII/4)

a) Not applicable (not Party to Ramsar Convention)	
b) No	
c) No, but potential measures were identified for synergy and joint implementation	
d) Yes, some measures taken for joint implementation (please specify below)	X
e) Yes, comprehensive measures taken for joint implementation (please specify below)	

Further comments on the promotion of synergies between the programme of work and related activities under the Ramsar Convention as well as the implementation of the Joint Work Plan (CBD-Ramsar) at the national level.

The implementations of the two conventions have been closely synergies in Thailand. These good synergies due to the national focal of both conventions are ONEP, and are situated in the same office. This was reconfirmed in the revision of the Prime Minister Regulation (explained in Q.110), that National Biodiversity Board (secretariat by Biodiversity Bureau which to be situated in ONEP) will supervise the two conventions.

151. Has your country taken steps to improve national data on: (decision VII/4)

Issues	Yes	No	No, but development is under way
a) Goods and services provided by inland water ecosystems?	X		
b) The uses and related socioeconomic variables of such goods and services?	X		
c) Basic hydrological aspects of water supply as they relate to maintaining ecosystem function?	X		
d) Species and all taxonomic levels?	X		
e) On threats to which inland water ecosystems are subjected?	X		

Further comments on the development of data sets, in particular a list of data sets developed in case you have replied "YES" above.

Please find detail explanations in the Thailand National Planning Tool for the Implementation of the Ramsar Convention on Wetlands. Please see detail in www.onep.go.th.

152. Has your country promoted the application of the guidelines on the rapid assessment of the biological diversity of inland water ecosystems? (decision VII/4)	
a) No, the guidelines have not been reviewed	X
b) No, the guidelines have been reviewed and found inappropriate	
c) Yes, the guidelines have been reviewed and application/promotion is pending	
d) Yes, the guidelines promoted and applied	
Further comments on the promotion and application of the guidelines on the rapid assessment of the biological diversity of inland water ecosystems.	
Implementation of rapid assessment of the biodiversity of inland water ecosystem conducted in several wetlands, with national technician and researchers. For example, the study for Nong Bong Khai Wetland in Chaing Rai Province was assessed ecological and biodiversity resources by Kasetsart University in 2003.	
However, it is found that SBSTTA Guideline should be wider introduced to the parties. Thailand welcomes if training or testing of the guideline to be conducted in Asia, if funding is possible.	

Box LXIII.

Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:
<ul style="list-style-type: none"> a) outcomes and impacts of actions taken; b) contribution to the achievement of the goals of the Strategic Plan of the Convention; c) contribution to progress towards the 2010 target; d) progress in implementing national biodiversity strategies and action plans; e) contribution to the achievement of the Millennium Development Goals; f) constraints encountered in implementation.

**Marine and coastal biological diversity
General**

153. Do your country's strategies and action plans include the following? Please use an "X" to indicate your response. (decisions II/10 and IV/15)	
a) Developing new marine and coastal protected areas	X
b) Improving the management of existing marine and coastal protected areas	X
c) Building capacity within the country for management of marine and coastal resources, including through educational programmes and targeted research initiatives (if yes, please elaborate on types of initiatives in the box below)	X
d) Instituting improved integrated marine and coastal area management (including catchments management) in order to reduce sediment and nutrient loads into the marine environment	X
e) Protection of areas important for reproduction, such as spawning and nursery areas	X

f) Improving sewage and other waste treatment	X
g) Controlling excessive fishing and destructive fishing practices	X
h) Developing a comprehensive oceans policy (if yes, please indicate current stage of development in the box below)	
i) Incorporation of local and traditional knowledge into management of marine and coastal resources (if yes, please elaborate on types of management arrangements in the box below)	X
j) Others (please specify below)	
k) Not applicable	
Please elaborate on the above activities and list any other priority actions relating to conservation and sustainable use of marine and coastal biodiversity.	
<p>a) DMCR aims to enhance the network of Thai marine protected areas to cover the area of 300 sq.km.</p> <p>b) MoNRE (by DMCR and DNP) aims to develop an appropriate and systematic mechanism of a marine protected area to balance sustainable use and no-take principles and aims</p> <p>c) DNP is implementing the Thai-Danish Sub-component for Joint Management of Protected Areas (JOMPA), which four marine national parks are target sites. Capacity building of park managers at all levels, key stakeholders both NGOs, local communities, tour operators, and concerning TAOs are aimed to have intensive training and exchanging of their experiences to find the best solution of marine protected areas management in Thailand.</p> <p>d) The creation of MoNRE, which integrated sectoral departments into one ministry and reorient the ministry function to area based approach. Many committee setted up to link and promote ecosystem approach. This also happens in the JoMPA project.</p> <p>e) Declaration of the closing Gulf of Thailand during spawning period by DoF.</p> <p>f) Wastewater Management Authority, under MoNRE, established as an independent authority, to ensure the local authorities (PAO, TAO, and municipalities) operates and installs proper sewage and wastewater treatment plants. DNP required all accommodations inside a protected area to install sewage and wastewater treatments. Environmental Fund provides fund to support local authorities to loan with small interest rate for install, operate, and maintain theirs sewage and wastewater treatment plants.</p> <p>g) DoF enforces the Fisheries Act, and DMCR promotes communities participatory fisheries management</p> <p>i) By product of the implementation of JoMPA Project (item c) and of the DMCR effort (item g)</p>	

Implementation of Integrated Marine and Coastal Area Management

154. Has your country established and/or strengthened institutional, administrative and legislative arrangements for the development of integrated management of marine and coastal ecosystems?	
a) No	
b) Early stages of development	
c) Advanced stages of development	X
d) Arrangements in place (please provide details below)	
e) Not applicable	
Further comments on the current status of implementation of integrated marine and coastal area management.	
Through the JoMPA project, mentioned in Q.7, Q.36, Q.39, and Q.153, new institutional, administrative and legislative arrangements for marine and coastal protected areas tested by DNP	

and key stakeholders propose to the government in late 2006.

DMCR was established in 2002 and focus its management toward local communities participation for marine and coastal area management.

155. Has your country implemented ecosystem-based management of marine and coastal resources, for example through integration of coastal management and watershed management, or through integrated multidisciplinary coastal and ocean management?

a) No	
b) Early stages of development	
c) Advanced stages of development	X
d) Arrangements in place (please provide details below)	
e) Not applicable	

Further comments on the current status of application of the ecosystem to management of marine and coastal resources.

DMCR, by government funding, is implementing the Ao Phang Nga Bay Conservation and Restoration Project (2004-2007) which implies directly the ecosystem based management into its planning and implementing process.

DoF, DMCR, DNP, and several local authorities is implementing the Thai-EU Coastal Habitat and Resource Management (CHARM) in the Andaman Sea. This project emphasizes on integration of multidisciplinary approach into marine resources in order to restore and enhances fisheries product, tourism, and environmental quality of the seas.

The Yadfon Foundation has mobilized the ecosystem based management of Palien River which links mountain watershed communities, to flat land communities, and to coastal fisheries communities. The project does not only working with communities but also local and provincial government in order to allow lesson learned at the same time.

Marine and Coastal Living Resources

156. Has your country identified components of your marine and coastal ecosystems, which are critical for their functioning, as well as key threats to those ecosystems?

a) No	
b) Plans for a comprehensive assessment of marine and coastal ecosystems are in place (please provide details below)	
c) A comprehensive assessment is currently in progress	
d) Critical ecosystem components have been identified, and management plans for them are being developed (please provide details below)	X
e) Management plans for important components of marine and coastal ecosystems are in place (please provide details below)	
f) Not applicable	

Further comments on the current status of assessment, monitoring and research relating to marine and coastal ecosystems, as well as key threats to them

In general, the Ao Phang Nga Bay, the Surin, Similan and Tarutao Archipelago, and Gulf of Thailand have been identified as critical habitats for marine and coastal living resources. Sites for marine aquatic hatcheries, spawning areas, coral reefs, mangroves, seagrass beds, sea turtle beaches, and etc. have been identified scientifically. The Ao Phang Nga and CHARM projects, mentioned in Q.154 and Q.155, are also aimed to develop a management plan for some of those sites, by participatory planning and monitoring approach.

After the tsunami in December 2004, both Thai and international agencies along with local communities have focused their inputs to community livelihoods and ecological assessment. This includes impact from land and fisheries use of the areas. A number of researches on coastal and

coral reefs conduct and are installed as long term program. Hence today, in Andaman Sea at least at the six provinces affected by tsunami, baseline information and intense researches for monitoring proposes is equipped with political and public supports.

157. Is your country undertaking the following activities to implement the Convention's work plan on coral reefs? Please use an "X" to indicate your response.

Activities	Not implemented nor a priority	Not implemented but a priority	Currently implemented	Not applicable
a) Ecological assessment and monitoring of reefs			X	
b) Socio-economic assessment and monitoring of communities and stakeholders			X	
c) Management, particularly through application of integrated coastal management and marine and coastal protected areas in coral reef environments			X	
d) Identification and implementation of additional and alternative measures for securing livelihoods of people who directly depend on coral reef services			X	
e) Stakeholder partnerships, community participation programmes and public education campaigns			X	
f) Provision of training and career opportunities for marine taxonomists and ecologists			X	
g) Development of early warning systems of coral bleaching			X	
h) Development of a rapid response capability to document coral bleaching and mortality			X	
i) Restoration and rehabilitation of degraded coral reef habitats			X	
j) Others (please specify below)				

Please elaborate on ongoing activities.

Thailand had continuously invested in reef and its components inventory, management, research, and restoration for more than thirty years. Many of international support programs were initiated and by products many Thai reef experts generated. While diving become more and more popular, ecotourism has generates direct income to local communities, publications and medias emphasize on how beautiful and sensitive the reefs are, today public awareness and interest in reef conservation and management are very high. In particularly, the affected from tsunami have increased political and general public interest in marine and coastal ecology. Many of the above statements were well

covered.

Marine and Coastal Protected Areas

158. Which of the following statements can best describe the current status of marine and coastal protected areas in your country? Please use an "X" to indicate your response.

a) Marine and coastal protected areas have been declared and gazetted (please indicate below how many)	X
b) Management plans for these marine and coastal protected areas have been developed with involvement of all stakeholders	
c) Effective management with enforcement and monitoring has been put in place	
d) A national system or network of marine and coastal protected areas is under development	X
e) A national system or network of marine and coastal protected areas has been put in place	
f) The national system of marine and coastal protected areas includes areas managed for purpose of sustainable use, which may allow extractive activities	X
g) The national system of marine and coastal protected areas includes areas which exclude extractive uses	
h) The national system of marine and coastal protected areas is surrounded by sustainable management practices over the wider marine and coastal environment.	
i) Other (please describe below)	
j) Not applicable	

Further comments on the current status of marine and coastal protected areas.

The definition of protected area in Thailand is still debatable issue, as explained in Q.36.

Number of marine national park gazetted presented in Q.36 is 27 parks, declared by National Parks Act B.E.2504 (1961). These are areas where legally is no-take zone. However, in practice the no-take zone on all water areas of the parks are impractical to enforce and not suitable for people livelihoods. MoNRE by DNP is in the process to review the principle of marine national parks management in order to provide manageable regime and serve people needs.

There are 1 wildlife non-hunting area, 1 biosphere reserve, several Ramsar Sites, a few forest parks and environmentally protected areas established cover islands, coasts and estuaries. In addition, all existing mangroves are protected by the Cabinet Resolution. However, these protected areas are declared for particular purposes, and with some degree of take and no-take zone.

According to the Fisheries Act, 3,000 m. along the coast line are protected for commercial fishing gears, and there are some small patches of coastline declared to be marine flora and fauna conservation areas. However, normally these fisheries conservation areas are not counted into a marine protected area.

Among the current mechanism, DMCR also aims to establish new approach of marine and coastal protected areas that allow some degree of extractive activities.

This can be summarized that Thailand has marine protected area network on both Andaman and Gulf of Thailand, but this network is not systematically planned and designed. It is a need to revisit these management regimes in order to improve its effectiveness for both protection and sustainable use, allow proper people participation, and apply ecosystem management approach in wider zone.

Mariculture

159. Is your country applying the following techniques aimed at minimizing adverse impacts of mariculture on marine and coastal biodiversity? Please check all that apply.	
a) Application of environmental impact assessments for mariculture developments	
b) Development and application of effective site selection methods in the framework of integrated marine and coastal area management	
c) Development of effective methods for effluent and waste control	x
d) Development of appropriate genetic resource management plans at the hatchery level	x
e) Development of controlled hatchery and genetically sound reproduction methods in order to avoid seed collection from nature.	x
f) If seed collection from nature cannot be avoided, development of environmentally sound practices for spat collecting operations, including use of selective fishing gear to avoid by-catch	x
g) Use of native species and subspecies in mariculture	x
h) Implementation of effective measures to prevent the inadvertent release of mariculture species and fertile polypoids.	x
i) Use of proper methods of breeding and proper places of releasing in order to protect genetic diversity	x
j) Minimizing the use of antibiotics through better husbandry techniques	x
k) Use of selective methods in commercial fishing to avoid or minimize by-catch	x
l) Considering traditional knowledge, where applicable, as a source to develop sustainable mariculture techniques	x
m) Not applicable	
Further comments on techniques that aim at minimizing adverse impacts of mariculture on marine and coastal biodiversity.	
<p>Mariculture promotes and technical supports by DOF, at the same regulate some practices that harm or potential destructive methods and gears, seasons, and prohibit of some invasive species. However, private sectors and individual farmers make their own decisions on technique, types of fish, and places to conduct their farms.</p> <p>Under the national sustainable development strategic plan, DoF developed Organic Aquaculture Strategy starting from 2003-2005. This strategy aimed to promote, demonstrate and strengthen aquaculture both in freshwater and marine system to rely on organic farm pattern which prohibit the use of antibiotic and GMO.</p> <p>In addition, DoF functions not only toward research for knowledge and technique on captive and breeding, but also toward strengthen local governments (TAO and PAO) to function as maricultural permission and enforce for good practice unit. Taxation and permission fee pay to local government are potential economic incentives for these units to effectively ensure good and sustainable farms.</p>	

Alien Species and Genotypes

160. Has your country put in place mechanisms to control pathways of introduction of alien species in the marine and coastal environment? Please check all that apply and elaborate on types of measures in the space below.

a) No	x
b) Mechanisms to control potential invasions from ballast water have been put in place (please provide details below)	
c) Mechanisms to control potential invasions from hull fouling have been put in place (please provide details below)	
d) Mechanisms to control potential invasions from aquaculture have been put in place (please provide details below)	
e) Mechanisms to control potential invasions from accidental releases, such as aquarium releases, have been put in place (please provide details below)	
f) Not applicable	

Further comments on the current status of activities relating to prevention of introductions of alien species in the marine and coastal environment, as well as any eradication activities.

These mechanisms are under discussion.

Box LXIV.

Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Agricultural biological diversity

161. ? Has your country developed national strategies, programmes and plans that ensure the development and successful implementation of policies and actions that lead to the conservation and sustainable use of agrobiodiversity components? (decisions III/11 and IV/6)	
a) No	
b) No, but strategies, programmes and plans are under development	
c) Yes, some strategies, programmes and plans are in place (please provide details below)	X
d) Yes, comprehensive strategies, programmes and plans are in place (please provide details below)	
Further comments on agrobiodiversity components in national strategies, programmes and plans.	
As explained in Q.15 and Q. 70. The strategies were at both national (National Administration Strategic Plan 2005-2008) declared by H.E. Prime Minister and at the ministry level (MoAC).	

162. ? Has your country identified ways and means to address the potential impacts of genetic use restriction technologies on the <i>In-situ</i> and <i>Ex-situ</i> conservation and sustainable use, including food security, of agricultural biological diversity? (decision V/5)	
a) No	
b) No, but potential measures are under review	
c) Yes, some measures identified (please provide details below)	X
d) Yes, comprehensive measures identified (please provide details below)	
Further information on ways and means to address the potential impacts of genetic use restriction technologies on the <i>In-situ</i> and <i>Ex-situ</i> conservation and sustainable use of agricultural biodiversity.	
According to the Plant Quarantine Act B.E. 2507 revised 2542 (1964 revised 1999) the genetic modified crop and its part or seed are prohibited for commercial cultivation, permission allows for research only. Any crops, its parts, and seeds to be imported, need have certification of non-GMO product from its origins.	

Annex to decision V/5 - Programme of work on agricultural biodiversity

Programme element 1 – Assessment	
163. Has your country undertaken specific assessments of components of agricultural biodiversity such as on plant genetic resources, animal genetic resources, pollinators, pest management and nutrient cycling?	
a) No	
b) Yes, assessments are in progress (please specify components below)	X
c) Yes, assessments completed (please specify components and results of assessments below)	
Further comments on specific assessments of components of agricultural biodiversity.	
To some extent, DoLD, DoA and private club (mentions in Q.67) has assessed diversity of some particular agriculture species. They are for example, rice, mango, corn, mango, orchid, banana, hen, cow, buffalo, cat, and dog.	

164. Is your country undertaking assessments of the interactions between agricultural practices and the conservation and sustainable use of the components of biodiversity referred to in Annex I of the Convention (e.g. ecosystems and habitats; species and communities; genomes and genes of social, scientific or economic importance)?

a) No	X
b) Yes, assessments are under way	
c) Yes, some assessments completed (please provide details below)	
d) Yes, comprehensive assessments completed (please provide details below)	
Further comments on assessment of biodiversity components (e.g. ecosystems and habitats; species and communities; genomes and genes of social, scientific or economic importance).	

165. Has your country carried out an assessment of the knowledge, innovations and practices of farmers and indigenous and local communities in sustaining agricultural biodiversity and agro-ecosystem services for food production and food security?

a) No	
b) Yes, assessment is under way	X
c) Yes, assessment completed (please specify where information can be retrieved below)	
Further comments on assessment of the knowledge, innovations and practices of farmers and indigenous and local communities.	
Many of the practices have been assessed, e.g. rotation cultivations of Karen tribe.	

166. Has your country been monitoring an overall degradation, status quo or restoration/rehabilitation of agricultural biodiversity since 1993 when the Convention entered into force?

a) No	x
b) Yes, no change found (status quo)	
c) Yes, overall degradation found (please provide details below)	
d) Yes, overall restoration or rehabilitation observed (please provide details below)	
Further comments on observations.	

Programme element 2 - Adaptive management	
167. Has your country identified management practices, technologies and policies that promote the positive, and mitigate the negative, impacts of agriculture on biodiversity, and enhance productivity and the capacity to sustain livelihoods?	
a) No	
b) No, but potential practices, technologies and policies being identified	
c) Yes, some practices, technologies and policies identified (please provide details below)	X
d) Yes, comprehensive practices, technologies and policies identified (please provide details below)	
Further comments on identified management practices, technologies and policies.	
Introduce natural predator as biological control, Zero burning, Promote the use of bio-fertilizer and effective micro-organism, Nesting for crops, Closed farm system, Non-chemical pesticide and insecticide.	

Programme element 3 - Capacity-building	
168. Has your country increased the capacities of farmers, indigenous and local communities, and their organizations and other stakeholders, to manage sustainable agricultural biodiversity and to develop strategies and methodologies for <i>In-situ</i> conservation, sustainable use and management of agricultural biological diversity?	
a) No	
b) Yes (please specify area/component and target groups with increased capacity)	X
Further comments on increased capacities of farmers, indigenous and local communities, and their organizations and other stakeholders.	
Changing pattern of cash crop in highland to be more soil conservation. Assist villagers with irrigation system, including check dam in the hilly area.	

169. Has your country put in place operational mechanisms for participation by a wide range of stakeholder groups to develop genuine partnerships contributing to the implementation of the programme of work on agricultural biodiversity?	
a) No	X
b) No, but potential mechanisms being identified	
c) No, but mechanisms are under development	
d) Yes, mechanisms are in place	

170. Has your country improved the policy environment, including benefit-sharing arrangements and incentive measures, to support local-level management of agricultural biodiversity?	
a) No	X
b) No, but some measures and arrangements being identified	
c) No, but measures and arrangements are under development	
d) Yes, measures and arrangements are being implemented (please specify below)	

Further comments on the measures taken to improve the policy environment.

Programme element 4 – Mainstreaming

171. Is your country mainstreaming or integrating national plans or strategies for the conservation and sustainable use of agricultural biodiversity in sectoral and cross-sectoral plans and programmes?

a) No	
b) No, but review is under way	
c) No, but potential frameworks and mechanisms are being identified	
d) Yes, some national plans or strategies mainstreamed and integrated into some sectoral plans and programmes (please provide details below)	X
e) Yes, some national plans or strategies mainstreamed into major sectoral plans and programmes (please provide details below)	

Further comments on mainstreaming and integrating national plans or strategies for the conservation and sustainable use of agricultural biodiversity in sectoral and cross-sectoral plans and programmes.

There are two main national strategic plans, which are the 9th NESDP and the National Administration Strategic Plan B.E. 2005-2008. Please see Q.15 and Q.80.

172. Is your country supporting the institutional framework and policy and planning mechanisms for the mainstreaming of agricultural biodiversity in agricultural strategies and action plans, and its integration into wider strategies and action plans for biodiversity?

a) No	
b) Yes, by supporting institutions in undertaking relevant assessments	X
c) Yes, by developing policy and planning guidelines	X
d) Yes, by developing training material	X
e) Yes, by supporting capacity-building at policy, technical and local levels	X
f) Yes, by promoting synergy in the implementation of agreed plans of action and between ongoing assessment and intergovernmental processes.	X

Further comments on support for institutional framework and policy and planning mechanisms.

Since Thailand is agricultural based country, one of the national agenda is to be "World Kitchen". In order to achieve its position of "World Kitchen" the government emphasizes agriculture strategies need to be safe, clean, qualified to market needs, e.g. cultivation, collection, production, and packing process need to match the world market criteria and no-harm to the environments.

173. In the case of centers of origin in your country, is your country promoting activities for the conservation, on farm, *In-situ*, and *Ex-situ*, of the variability of genetic resources for food and agriculture, including their wild relatives?

a) No

b) Yes (please provide details below)

X

Further comments on of the conservation of the variability of genetic resources for food and agriculture in their center of origin.

DoA and DoLD have initiated the in-situ conservation of indigenous plant and animal species. Indigenous rice conservation plots, Thai buffalo villages are good samples.

In addition, a contest of quality of agricultural products, livestock and pets prove to be one of the best methods to promote and assess diversity at genetic level. This also allows researchers accessibility to private and local stock of genetic diversity. One of the most famous contest on agriculture product arranges every years for more than 50 years is called "Kaset Fair". This fair is organized mainly by Kasetsart University with co-organized by many sectoral departments (such as DoA, DoF, DoAE, DNP, RFD, and private companies and interest groups.

Nowadays, there are several fairs and exhibitions for the same purpose, for example the BIOTECH Fair, Thai Herb Fair, etc.

Box LXV.

Please provide information concerning the actions taken by your country to implement the Plan of Action for the International Initiative for the Conservation and Sustainable Use of Pollinators.

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Box LXVI.

Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Forest Biological Diversity

General

174. Has your country incorporated relevant parts of the work programme into your national biodiversity strategies and action plans and national forest programmes?	
a) No	X
b) Yes, please describe the process used	
c) Yes, please describe constraints/obstacles encountered in the process	
d) Yes, please describe lessons learned	
e) Yes, please describe targets for priority actions in the programme of work	
Further comments on the incorporation of relevant parts of the work programme into your NBSAP and forest programmes	
-	

Box LXVII.

Please indicate what recently applied tools (policy, planning, management, assessment and measurement) and measures, if any, your country is using to implement and assess the programme of work. Please indicate what tools and measures would assist the implementation.
-

Box LXVIII.

Please indicate to what extent and how your country has involved indigenous and local communities, and respected their rights and interests, in implementing the programme of work.
-

Box LXIX.

Please indicate what efforts your country has made towards capacity building in human and capital resources for the implementation of the programme of work.
-

Box LXX.

Please indicate how your country has collaborated and cooperated (e.g., south-south, north-south, south-north, north-north) with other governments, regional or international organizations in implementing the programme of work. Please also indicate what are the constraints and/or needs identified.
-

Expanded programme of work on forest biological diversity

Programme element 1 – Conservation, sustainable use and benefit-sharing	
175. Is your country applying the ecosystem approach to the management of all types of forests?	
a) No (please provide reasons below)	X
b) No, but potential measures being identified (please provide details below)	
c) Yes (please provide details below)	
Comments on application of the ecosystem approach to management of forests (including effectiveness of actions taken, lessons learned, impact on forest management, constraints, needs, tools, and targets).	
As explained in Q. 6 and Q7. Not all the principle of EA has been applied in forest management in Thailand. It is applied into protected areas management, does not focus on type of forest.	

176. Has your country undertaken measures to reduce the threats to, and mitigate its impacts on forest biodiversity?		
Options	X	Details
a) Yes	X	<p>Please specify below the major threats identified in relation to each objective of goal 2 and the measures undertaken to address priority actions</p> <p>Obj 4: Fire and fire suppression: Cause: fire for agriculture, Mitigate: by promotion for zero burning agriculture.</p> <p>Obj 6: Fragmentation and Conversion land use: Cause: expansion of agricultural area, unclear and complicate land tenure, absent of political will: Mitigate: Improve land management (transfer National Land Committee to MoNRE), Clarification of land occupation at site and regional level, monitoring land use changes by satellite image and using GIS technology.</p>
b) No		Please provide reasons below
Further comments on measures to reduce threats to, and mitigate the impacts of threatening processes on forest biodiversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).		
Awareness raising on fire prevention and decentralization of fire management to local government are the two most success measures to reduce threats.		

177. Is your country undertaking any measures to protect recover and restore forest biological diversity?		
Options	X	Details
a) Yes	X	<p>Please identify priority actions in relation to each objective of goal 3 and describe measures undertaken to address these priorities</p> <p>Obj. 3: Ensure adequate and effective protected forest: declare and manage protected areas</p> <p>Obj. 1: Restore degraded secondary forests: Restoration with ecosystem approach and watershed conservation</p> <p>Obj. 2: Promote forest management for endemic and threatened species: Habitat conservation</p>
b) No		<p>Please provide reasons below</p>
<p>Further comments on measures to protect, recover and restore forest biological diversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).</p>		

178. Is your country undertaking any measures to promote the sustainable use of forest biological diversity?		
Options	X	Details
a) Yes	X	<p>Please specify priority actions in relation to each objective of goal 4 and describe measures undertaken to address these priorities</p> <p>Obj 2: Prevent losses caused by unsustainable harvesting of timber Logging ban since 1992</p> <p>Obj 1: Promote sustainable use of forest to enhance forest conservation Improve wood product, expand life time of wood,</p> <p>Obj 3: Enable local communities to implement support community forest in a national forest reserve support community forest to collaborat in protected area management</p>
b) No		<p>Please provide reasons below</p>
<p>Further comments on the promotion of the sustainable use of forest biological diversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).</p>		

179. Is your country undertaking any measures to promote access and benefit-sharing of forest genetic resources?		
Options	X	Details
a) Yes	X	Please specify priority actions in relation to each objective of goal 5 and describe measures undertaken
		Promote fair and equitable sharing (Bonn Guideline) Using the guideline to approve proposal to conduct research in forest resource
b) No		Please provide reasons below
Further comments on the promotion of access and benefit-sharing of forest genetic resources. (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets)		
-		

Programme element 2 – Institutional and socio-economic enabling environment		
180. Is your country undertaking any measures to enhance the institutional enabling environment for the conservation and sustainable use of forest biological diversity, including access and benefit-sharing?		
Options	X	Details
a) Yes		Please identify priority actions in relation to each objective of Goal 1 and describe measures undertaken to address these priorities
		Obj 3: Develop good governance Resolve land tenure, review of forest legislation
		Obj 1: Improve understanding of forest loss causes Socio-economic causes
		Obj 2: Integrate biodiversity conservation into forest and sector policies Forest become base resources for poverty eradication
b) No		Please provide reasons below
Further comments on the enhancement of the institutional enabling environment for the conservation and sustainable use of forest biological diversity, including access and benefit-sharing (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).		

181. Is your country undertaking any measures to address socio-economic failures and distortions that lead to decisions that result in loss of forest biological diversity?		
Options	X	Details
a) Yes	X	Please identify priority actions in relation to each objective of Goal 2 and describe measures undertaken to address these priorities Obj 1: Mitigate economic failure Ensure non-monetary cost and benefit shared to communities Study economic evaluation of forest area
b) No		Please provide reasons below
Further comments on review of socio-economic failures and distortions that lead to decisions that result in loss of forest biological diversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets). 		

182. Is your country undertaking any measures to increase public education, participation and awareness in relation to forest biological diversity?		
Options	X	Details
a) Yes	X	Please identify priority actions in relation to each objective of goal 3 and describe measures undertaken to address these priorities Obj 1: Increase public support & understanding of forest value and services Promote ecological services of forest resource to general public Inform public through mass media cause for forest loss
b) No		Please provide reasons below
Further comments on measures to increase public education, participation and awareness in relation to forest biological diversity (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets). 		

Programme element 3 – Knowledge, assessment and monitoring		
183. Is your country undertaking any measures to characterize forest ecosystems at various scales in order to improve the assessment of the status and trends of forest biological diversity?		
Options	X	Details
a) Yes	X	Please identify priority actions in relation to each objective of Goal 1 and describe measures undertaken to address these priorities Obj 2: Classify national forest system and maps Using Landsat and IRS satellite image and ground check forest type Using GIS Obj 3: Survey of forest resources in priority areas for conservation Western forest complex, Dong Phrayayen-Khao Yai Forest Complex
b) No		Please provide reasons below
Further comments on characterization of forest ecosystems at various scales (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).		

184. Is your country undertaking any measures to improve knowledge on, and methods for, the assessment of the status and trends of forest biological diversity?		
Options	X	Details
a) Yes	X	Please identify priority actions in relation to each objective of goal 2 and describe measures undertaken to address these priorities Obj 1 development of international, region, and national criteria and indicators - Develop national criteria and indicator for sustainable forest management - Ministry of Industry adopt the criteria for sustainable forest management as national standard, but certification system need to be identified
b) No		Please provide reasons below
Further comments on improvement of knowledge on and methods for the assessment of the status and trends (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).		

185. Is your country undertaking any measures to improve the understanding of the role of forest biodiversity and ecosystem functioning?

Options	X	Details
a) Yes	X	<p>Please identify priority actions in relation to each objective of goal 3 and describe measures undertaken to address these priorities</p> <p>Obj 1: Conduct key research on role of forest biodiversity - conduct long term permanent plots to monitor its ecological - improve and research on forest restoration program</p>
b) No		<p>Please provide reasons below</p>
<p>Further comments on the improvement of the understanding of the role of forest biodiversity and ecosystem functioning (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).</p>		

186. Is your country undertaking any measures at national level to improve the infrastructure for data and information management for accurate assessment and monitoring of global forest biodiversity?

Options	X	Details
a) Yes	X	<p>Please identify priority actions in relation to each objective of goal 4 and describe measures undertaken to address these priorities</p> <p>Obj 1: Improve CBD-CHM to monitor forest biological diversity - RFD has been national focal point concerning forest resources, and well coordinate with CBD-CHM (ONEP).</p>
b) No		<p>Please provide reasons below</p>
<p>Further comments on the improvement of the infrastructure for data and information management (including effectiveness of actions taken, lessons learned, impacts on forest biodiversity, constraints, needs, tools and targets).</p>		

Box LXXI.

Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

Biological diversity of dry and sub-humid lands

187. Is your country supporting scientifically, technically and financially, at the national and regional levels, the activities identified in the programme of work? (decisions V/23 and VII/2)

- | | |
|---------------------------------------|---|
| a) No | X |
| b) Yes (please provide details below) | |

Further comments on scientific, technical and financial support, at the national and regional levels, to the activities identified in the programme of work.

188. Has your country integrated actions under the programme of work of dry and sub-humid lands into its national biodiversity strategies and action plans or the National Action Programme (NAP) of the UNCCD? (decisions V/23, VI/4 and VII/2)

- | | |
|---------------------------------------|---|
| a) No | X |
| b) Yes (please provide details below) | |

Further comments on actions under the programme of work of dry and sub-humid lands integrated into national biodiversity strategies and action plans or the National Action Programme (NAP) of the UNCCD.

189. Has your country undertaken measures to ensure synergistic/collaborative implementation of the programme of work between the national UNCCD process and other processes under related environmental conventions? (decisions V/23, VI/4 and VII/2)

- | | |
|---|---|
| a) No | X |
| b) Yes, some linkages established (please provide details below) | |
| c) Yes, extensive linkages established (please provide details below) | |

Further comments on the measures to ensure the synergistic/collaborative implementation of the programme of work between the national UNCCD processes and other processes under related environmental conventions.

Programme Part A: Assessment	
190. Has your country assessed and analyzed information on the state of dryland biological diversity and the pressures on it, disseminated existing knowledge and best practices, and filled knowledge gaps in order to determine adequate activities? (Decision V/23, Part A: Assessment, Operational objective, activities 1 to 6)	
a) No	X
b) No, but assessment is ongoing	
c) Yes, some assessments undertaken (please provide details below)	
d) Yes, comprehensive assessment undertaken (please provide details below)	
Further comments on the relevant information on assessments of the status and trends and dissemination of existing knowledge and best practices.	

Programme Part B: Targeted Actions	
191. Has your country taken measures to promote the conservation and sustainable use of the biological diversity of dry and sub-humid lands and the fair and equitable sharing of the benefits arising out of the utilization of its genetic resources, and to combat the loss of biological diversity in dry and sub-humid lands and its socio-economic consequences? (part B of annex I of decision V/23, activities 7 to 9)	
a) No	X
b) Yes, some measures taken (please provide details below)	
c) Yes, many measures taken (please provide details below)	
Further comments on the measures taken to promote the conservation and sustainable use of the biological diversity of dry and sub-humid lands and the fair and equitable sharing of the benefits arising out of the utilization of its genetic resources, and to combat the loss of biological diversity in dry and sub-humid lands and its socio-economic consequences.	

192. Has your country taken measures to strengthen national capacities, including local capacities, to enhance the implementation of the programme of work?	
a) No	X
b) Yes, some measures taken (please provide details below)	
c) Yes, comprehensive measures taken (please provide details below)	
d) Yes, all identified capacity needs met (please provide details below)	
Further comments on measures taken to strengthen national capacities, including local capacities, to enhance the implementation of the programme of work.	

Box LXXII.

Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

-

Mountain Biodiversity

Programme Element 1. Direct actions for conservation, sustainable use and benefit sharing

193. Has your country taken any measures to prevent and mitigate the negative impacts of key threats to mountain biodiversity?

a) No	
b) No, but relevant measures are being considered	
c) Yes, some measures taken (please provide details below)	
d) Yes, many measures taken (please provide details below)	X

Further comments on the measures taken to prevent and mitigate the negative impacts of key threats to mountain biodiversity

H.M. the King and his mother have been well known on their contributions to supported living condition of and reduce negative impacts from settlements and population increased of hill tribes who reside on highland of Thailand. Doi Tung, Aang Khang Royal Projects become the main attractions for visitor in Chiang Rai and Chiang Mai Provinces, respectively.

Many sectoral departments, e.g. RFD, DNP, DLD, DoA, and the Border Patrol Police have operated several measures to elevate living conditions of hill tribes reside in the highland areas. These measures are for example reforestation, provide education, schooling, health care, agricultural extension and check dam development.

One of the most effective measure conducts by Department of Agriculture Extension is the recruitment of a villager themselves to be "Hill tribe farmer volunteer". This volunteer program helps solving problem on communication with hill tribes whose Thai are limited, scattered settlements, poor road condition, and limited staff of government staff.

194. Has your country taken any measures to protect, recover and restore mountain biodiversity?	
a) No	
b) No, but some measures are being considered	
c) Yes, some measures taken (please provide details below)	X
d) Yes, many measures taken (please provide details below)	
Further comments on the measures taken to protect, recover and restore mountain biodiversity	
Declarations of watershed classifications, protected areas. Elevate living condition of tribes and indigenous communities on mountain area. Reforestation of degraded forest. Promotion ecotourism and cultural based tourism in high land Promote for prevention of soil erosion Installation of check dams	

195. Has your country taken any measures to promote the sustainable use of mountain biological resources and to maintain genetic diversity in mountain ecosystems?	
a) No	
b) No, but some measures are being considered	
c) Yes, some measures taken (please provide details below)	X
d) Yes, many measures taken (please provide details below)	
Further comments on the measures to promote the sustainable use of mountain biological resources and to maintain genetic diversity in mountain ecosystems	
Sustainable uses of soil and water resource are the key measurements.	

196. Has your country taken any measures for sharing the benefits arising from the utilization of mountain genetic resources, including preservation and maintenance of traditional knowledge?	
a) No	X
b) No, but some measures are being considered	
c) Yes, some measures taken (please provide details below)	
d) Yes, many measures taken (please provide details below)	
Further comments on the measures for sharing the benefits arising from the utilization of mountain genetic resources	

Programme Element 2. Means of implementation for conservation, sustainable use and benefit sharing

197. Has your country developed any legal, policy and institutional framework for conservation and sustainable use of mountain biodiversity and for implementing this programme of work?

a) No	X
b) No, but relevant frameworks are being developed	
c) Yes, some frameworks are in place (please provide details below)	
d) Yes, comprehensive frameworks are in place (please provide details below)	

Further comments on the legal, policy and institutional frameworks for conservation and sustainable use of mountain biodiversity and for implementing the programme of work on mountain biodiversity.

198. Has your country been involved in regional and/or transboundary cooperative agreements on mountain ecosystems for conservation and sustainable use of mountain biodiversity?

a) No	X
b) No, but some cooperation frameworks are being considered	
c) Yes (please provide details below)	

Further information on the regional and/or transboundary cooperative agreements on mountain ecosystems for conservation and sustainable use of mountain biodiversity

Programme Element 3. Supporting actions for conservation, sustainable use and benefit sharing

199. Has your country taken any measures for identification, monitoring and assessment of mountain biological diversity?

a) No	
b) No, but relevant programmes are under development	
c) Yes, some measures are in place (please provide details below)	X
d) Yes, comprehensive measures are in place (please provide details below)	

Further comments on the measures for identification, monitoring and assessment of mountain biodiversity

Same effort explained in article 7. Doi Chiang Dao which is the second highest peak in Thailand, locates in Chiang Rai Province has been a target for mountainous ecological and diversity study and identification for decades. Information on species diversity of Doi Chiang Dao are quiet comprehensive and well shared among researchers and visitors.

200. Has your country taken any measures for improving research, technical and scientific cooperation and capacity building for conservation and sustainable use of mountain biodiversity?

a) No	
b) No, but relevant programmes are under development	
c) Yes, some measures are in place (please provide details below)	X
d) Yes, comprehensive measures are in place (please provide details below)	

Further comments on the measures for improving research, technical and scientific cooperation and capacity building for conservation and sustainable use of mountain biodiversity

Same efforts and agencies explained in article 12.

201. Has your country taken any measures to develop, promote, validate and transfer appropriate technologies for the conservation of mountain ecosystems?

a) No	
b) No, but relevant programmes are under development	
c) Yes, some measures are in place (please provide details below)	X
d) Yes, comprehensive measures are in place (please provide details below)	

Further comments on the measures to develop, promote, validate and transfer appropriate technologies for the conservation of mountain ecosystems

The royal development projects is a key focus areas to promote and validate appropriate technologies among the concerned agencies and communities.

Box LXXIII .

Please elaborate below on the implementation of this programme of work and associated decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

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E. OPERATIONS OF THE CONVENTION

202. Has your country actively participated in subregional and regional activities in order to prepare for Convention meetings and enhance implementation of the Convention? (decision V/20)	
a) No	
b) Yes (please provide details below)	X
Further comments on the regional and subregional activities in which your country has been involved.	
<p>Since Thailand just ratified the CBD in 2004, it has limited involvement in preparing for Convention meetings and implementing in sub-region and the region. In 2004, Thailand hosted the Ad-hoc Open-end Working Group on ABS meeting in Bangkok.</p> <p>Thailand, however, has been actively participated with other parties and international organizations in the region and sub-region toward objective of CBD. Especially on taxonomy (aquatic, livestock, and forest species), bio-technology, and sustainable use of biodiversity. Many projects or programs have provided Thai specialists and researchers to provide technical supports to other countries. Key government organizations have also offered study trips or exchange studies of other countries in the region and sub-region.</p>	

203. Is your country strengthening regional and subregional cooperation, enhancing integration and promoting synergies with relevant regional and subregional processes? (decision VI/27 B)	
a) No	
b) Yes (please provide details below)	X
Further comments on regional and subregional cooperation and processes.	
Same as explained in Article 5.	

The following question (204) is for DEVELOPED COUNTRIES

204. Is your country supporting the work of existing regional coordination mechanisms and the development of regional and subregional networks or processes? (decision VI/27 B)	
a) No	
b) No, but programmes are under development	
c) Yes, included in existing cooperation frameworks (please provide details below)	
d) Yes, some cooperative activities ongoing (please provide details below)	
Further comments on support for the work of existing regional coordination mechanisms and the development of regional and subregional networks or processes.	

205. Is your country working with other Parties to strengthen the existing regional and subregional mechanisms and initiatives for capacity-building? (decision VI/27 B)	
a) No	
b) Yes	X

206. Has your country contributed to the assessment of the regional and subregional mechanisms for implementation of the Convention? (decision VI/27 B)

a) No

X

b) Yes (please provide details below)

Further comments on contribution to the assessment of the regional and subregional mechanisms.

Same as in Q. 10.

Box LXXIV.

Please elaborate below on the implementation of the above decisions specifically focusing on:

- a) outcomes and impacts of actions taken;
- b) contribution to the achievement of the goals of the Strategic Plan of the Convention;
- c) contribution to progress towards the 2010 target;
- d) progress in implementing national biodiversity strategies and action plans;
- e) contribution to the achievement of the Millennium Development Goals;
- f) constraints encountered in implementation.

F. COMMENTS ON THE FORMAT

Box LXXV.

Please provide below recommendations on how to improve this reporting format.

- **Several questions were similar but referred to the different decision.**
- **The design seems to be eased for evaluator, but not for the Parties to fill.**
- **Length and thickness of questionnaire, total of 206 questions and 75 boxes distracted the Parties to fill the form.**