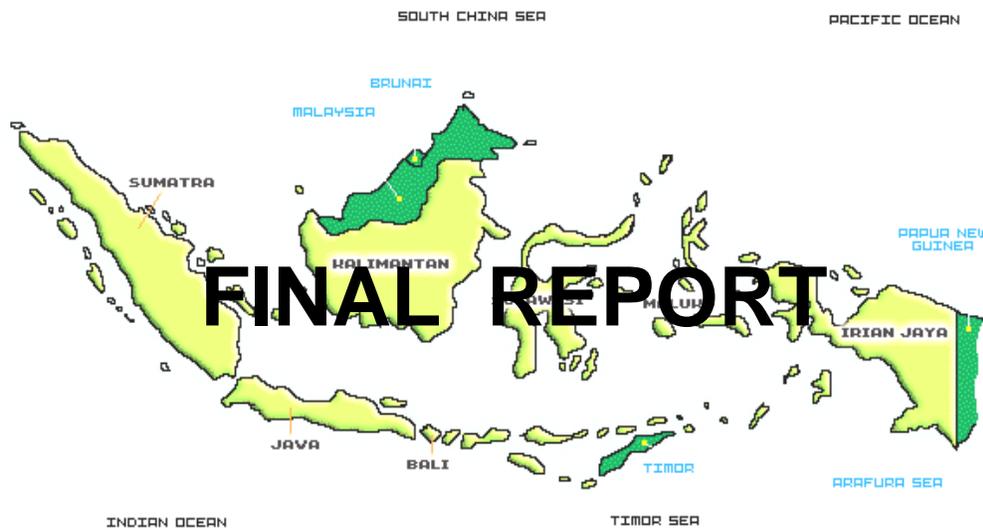




**STATE MINISTRY OF ENVIRONMENT
UNITED NATIONS DEVELOPMENT PROGRAMME**



**NATIONAL CAPACITY SELF-ASSESSMENT
PROJECT 00033093**



**JAKARTA - INDONESIA
December 2005**

EXECUTIVE SUMMARY

On behalf of the commitment to participate in global environmental management and sustainable national development, Indonesia has adopted several international environmental treaties, such as Convention on Biological Diversity (CBD), Convention on Climate Change (CCC), and Convention to Combat Desertification (CCD) through a political commitment written in Laws and in a Presidential Decree, namely Law No. 5 of 1994 on CBD, Law No. 6 of 1994 on CCC and Presidential Decree No. 135 of 1998 on CCD.

Consequently, Indonesia has a huge opportunity to utilize the benefit that the conventions provide, other than merely fulfilling the mandate. The opportunity lies in the possibility to have a technical/operational cooperation of the conventions among the parties, to receive technical and financial assistance when implementing the conventions, to receive the rights over the traditional wisdom, and others. The obligatory mandate lies in its commitment to increase the awareness level of the conventions, to provide education and training, to prepare a supporting legislation, which in turns benefiting Indonesia itself through environmental and natural resource preservation.

Nonetheless, after ten years of commitment, the capacity to implement the three conventions is not optimum, as revealed in the summary of data collection of each convention.

The data collection of the biological diversity convention comprises sixteen issues. Out of these number, only five issues that relatively run well on account of institutional adoption. Those issues are:

- 1) An effective National Plan on biodiversity,
- 2) Ex-situ conservation of components of biological diversity, including for collection of biological resources from natural habitats for ex-situ conservation purposes,
- 3) In-situ conservation of biological diversity,
- 4) Introduce appropriate arrangements to ensure that environmental consequences of relevant programmes and policies are subject of environmental impact assessment and that significant adverse impacts on biological diversity are minimised,

- 5) Establish and operate clearing-house mechanism to promote and facilitate technical and scientific co-operation.

Meanwhile, the implementation of other issues encounters several constraints, such as the inappropriate policy, regulation and law, networking, education and training. Those issues are:

1. Identification and Monitoring of components of biological diversity important for its conservation and sustainable use,
2. Respect for and preservation of knowledge, innovations and practices of indigenous and local communities,
3. Develop and introduce economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity.
4. Establish and maintain programmes for scientific and technical education and training,
5. Promote and encourage understanding of the importance of, and the measures required for, the conservation of biological diversity,
6. Develop and introduce appropriate measures to ensure safety regulations in handling living modified organisms resulting from biotechnology,
7. Develop and introduce measures regulating the access to genetic resources and to provide access for and transfer to other Parties of technologies that are relevant to the conservation and sustainable use of biological diversity.
8. Take legislative, administrative or policy measures, as appropriate, with the aim of sharing in a fair and equitable way the results of research and development and the benefits arising from the commercial and other utilisation of genetic resources.
9. Implement Cartagena Protocol on Biosafety.
10. Access financial resources provided via the financial mechanism of the Convention and/or via other donors.
11. Development of a national legal system, allocating funds received from natural resource exploitation to implement biodiversity conservation and rehabilitation.

Out of the seventeen implementing issues of the convention on climate change, only two issues that has run well, that are:

1. Research and systematic observation, including meteorological, hydrological and climatological services.

2. Education, training and public awareness.

Meanwhile, other issues are not optimally handled and require enhancing capacity building in the matter of institutional support, law and regulation, human resource, funding, integration among central and regional levels, institutional arrangement; those are:

- 1) Institutional capacity-building, including the strengthening or establishment, as appropriate, of national climate change secretariats or national focal points,
- 2) Enhancement and/or creation of an enabling environment,
- 3) National communications,
- 4) National climate change programmes.
- 5) Greenhouse gas inventories, emission database management, and systems for collecting, managing and utilising activity data and emission factors.
- 6) Vulnerability and adaptation assessment.
- 7) Capacity-building for implementation of adaptation measures.
- 8) Assessment for implementation of mitigation options.
- 9) Development and transfer of technology.
- 10) Improved decision-making, including assistance for participation in international negotiations.
- 11) Clean development mechanisms.
- 12) Needs arising out of the implementation of Article 4.8 and 4.9 of the Convention.
- 13) Information and networking, including the establishment of databases.
- 14) Exploration of GEF funding opportunities, especially for adaptation measures and the preparation of Government Regulation on Climate Change.
- 15) Preparation of Presidential Degree on Climate Change.

Pertaining to Convention to combat desertification, there are only three issues that run well, even though they are not specifically addressed to fulfill the convention, such as:

- 1) Technical and scientific cooperation in combating critical land and suitable mitigation efforts on national drought, taking place in the sub regional and international institutions, and,

- 2) Research and development,
- 3) Joint research program in the development and improvement of the technological access in the sustainable development context.

The needs to improve the dissemination efforts, to receive appropriate funding, and to focus on the issue which are not optimally, coherently and integrally implemented, includes these following aspects:

- 1) Education and public awareness,
- 2) Transfer, acquisition, adaptation and development of technology,
- 3) Promotion of an alternative employment, including new expertise training,
- 4) Training and the use of alternative energy, renewable energy resource (reduction of firewood dependency)
- 5) Training for decision makers on the early warning information,
- 6) Collection, analysis and exchange of information informally,
- 7) An effective early warning and an initial planning for several detrimental weather variation periods.

Responding to those issues, the stakeholders attempted to map the implementing capacity of the three conventions through a *National Capacity Self-Assessment* (NCSA). The first attempt was to select five key priorities, of which the implementing capacities were assessed, followed by the selection of the cross thematic issues. Later on, identifying the current needs, opportunities and constraints, the NCSA project formulated the draft of action plan as the implementation basis of the required capacities.

The five prioritized issues which requires capacity improvement for the implementation of the convention the biodiversity are as follows:

- 1) Access to financial resources, provided by the funding mechanism under the convention and the donors;
- 2) Respect and maintenance of knowledge, innovation and local wisdom.
- 3) Development and endorsement of the appropriate measures, which are economically and socially sound, serving as an incentive for the conservation and the sustainable use of biodiversity components;
- 4) Development and endorsement of the appropriate measures to regulate access to genetic resources, and creating the access to and transfer of technology, which are appropriate to the conservation and the sustainable use of biodiversity among the parties, and;

- 5) Development and endorsement of the appropriate measures to ensure the regulatory safety in addressing genetic modified product (transgenic).

Analyzing the convention on climate change, the team identified five prioritized capacities which require improvement, such as the capacities to implement the following issues:

- 1) Development and implementation of the adaptation plans and measures;
- 2) Preparation and management of greenhouse gasses emission inventory, including the data base management;
- 3) Information and networking on data base development;
- 4) Assessment of the vulnerability, regional warming and the adaptation to climate change in every sector, and
- 5) Evaluation to implement the mitigation options.

The convention to combat desertification requires capacity building on these five priorities, as follows:

- 1) Training for decision makers, managers and staffs responsible for the collection and analysis of data, targeted at the dissemination and the use of the early warning information on drought and food production;
- 2) Development of data base, analysis and transfer of data, especially to enhance the surveillance system on the degraded land in the affected area and on data processing, as well as providing an in-depth understanding of the consequences on account of drought and land degradation;
- 3) Early warning system and an effective initial planning to address several drought periods and a detrimental weather variation;
- 4) Transfer, taking over, adaptation and development of environmental technology, which is economically and socially sound, and;
- 5) Promotion of alternative employment, including skill or new expertise enhancement.

The cross-cutting of the thematic issues were selected based on the five capacity building priorities, analyzing the stipulation of the convention, capacity constraints at the system, institutional and individual levels. The cross-cutting issues of the three conventions lies in the following aspects:

- 1) Legislation;
- 2) National and regional action plan,
- 3) Public education and training,
- 4) Public participation; and,
- 5) Information exchange.

Constraints in this regards refer to the key function of the three players of the conventions at the three cross-cutting levels, as follows:

- 1) The system level focusses on the policies, laws and regulations, as well as the implementation;
- 2) The institutional level focusses on (a) institutional mandate, coordination and interactive process, and cooperation among the stakeholders, (b) access to funding resource (c) communication, education, public awareness and information exchange, and
- 3) The individual level focusses on (a) individual expertise and motivation, and (b) awareness building and information exchange.

Based on the capacity building framework, which is required logically to implement the three conventions, the team drafted the action plan as summarized below:

- 1 Target
To improve the capacity at the three levels in implementing the three conventions.
- 2 Goal-1 (Systemic level)
To improve the capacity at the system level in implementing the three conventions
 - a Constraints
Policies, laws and regulatory framework and their implementation.
 - b Activities
 - To review and develop the implementation (CBC, CCC and CCD) specifically, reaffirming authority among central and regional levels.
 - To develop a general regulation on the economic incentive, which are

valid for the three conventions and not only for a single convention

- To develop a dispute settlement procedure, through an out of court settlement for each convention.
- To develop a networking mechanism for the three conventions (including updating, standardization, access to and exchange of information).
- To formulate and develop an environmental court system.
- To formulate and revise the related regulation in implementing the three conventions by taking into account the economic instrument.
- To review, revise and harmonize the regulations and policies related to each convention (such as Law No. 5 of 90, Law No. 31 of 2004)
- To complete Law No. 23 in terms of developing a regulation under Law No. 23 related to the definition of environmental degradation, criteria, conflict settlement mechanism, and compensation.
- To improve the capacity of police investigators, Government Officer Investigator/Environmental Officer Investigator (GOI/EOI) and legal practitioners (attorneys and judges).
- To develop an effective law enforcement system related to the three conventions (example: derivative law No. 41 of 1000 regarding forest protection and the authority of forest rangers and GOI/EOI).
- To develop an effective dissemination system that reaches the entire stakeholders in terms of development of legislation.

3 Goal-2 (Institutional level)

To improve the capacity at the institutional level in implementing the three conventions

a Constraints

Institutional mandate, coordination, interactive process and cooperation among the stakeholders.

- Cooperation and networking among the institutions and the regions
- Financial resource and technology transfer
- Awareness building and information exchange.

b Activities

- Reformulation of the job description, accommodating each convention (CBD, CCC and CCD) based on mandate, task, authority and priority of the related institution.

- Formalizing the NFP designation and job description.
- Development of the national committee for each convention.
- Restructuring of the existing unit, allocating NFP in each unit (at least in echelon 2) with a specific task to manage the conventions.
- Establishment and development of a coordinating mechanism at national and regional levels for each convention.
- Improvement of an effective information exchange and access through the establishment of a fast and appropriate mechanism, cutting down the beauracracy, and through the development of clearing houses for the three conventions.
- Optimizing the human resource management (recruitment, placement, career path, sanction and award system) in implementing the three conventions.
- Optimizing the use of financial resources (domestic and foreign) that every stakeholder adopts (central and regional governments, privates and NGOs) --> for your information: the action plan acknowledges two types of fund raising competence; the foreign funding and the domestic funding.
- Maximizing funding access, exploring domestic and foreign non-government financial resources (non loan)
- Dissemination of LAKIP and the national report of each convention to public
- Identification of training needs related to the implementation of each convention
- Development of training strategy related to the implementation of each convention.

Comment [TP1]:

4 Goal-3 (Individual level)

To improve the capacity at the individual level in implementing the three conventions

a Constraints

Individual expertise and motivation

Awareness building and information exchange

b Activities

- Implementation of education and training on how to apply each convention

- Dissemination of the understanding and the implementation of each convention

CHAPTER I

1.1 Background

The Republic of Indonesia is the largest archipelagic country in the world. It consists of 17,508 islands and stretches latitudinally from 06°15'S to 11°1'S, and longitudinally from 94°45' to 141°65'E. It includes 3.1 million km² of water territorial, almost 2 million km² of land, and 81,000 km of coastal line. The country comprises 32 provinces, 243 districts, 62 municipalities, 3,844 sub-districts, 65,852 villages and over 200 million people - the fourth most populous country in the world.

The Indonesian economy is dominated by agriculture, industry and mining, while petroleum and natural gas, textiles, minerals, manufactured goods and timber serve as the main exports. Over the recent decades, the Indonesian economic structure has shifted from primary sector such as agriculture towards the industrial and services sectors. In 1980 the proportion of the agricultural sector in the national income was 25.7 percent. By 1994, agriculture contribution declined to 17.4 percent of the total output and the contribution of manufacturing to GDP rose to 23.9 percent. This rapid change in the economic structure has imposed significant pressures on sustainable management of natural resources and natural environment.

Since 1992 Indonesia has enacted and revised several laws and regulations, providing a sound basis for the sustainable development policy. Amongst others, the Government of Indonesia (GoI) enacted Law No. 23 (1997) on Environmental Management, replacing Law No. 4 (1982) on Basic Provisions for the Environment. The new law provides a stronger public participation in the management of the environment. Decree no. IX/MPR/2001 on Agrarian Reform and Natural Resources Management stipulates that natural resources management is to be undertaken in an optimum, equitable, sustainable and environmentally friendly manner. The Decree also mandates a revision of all relevant legal instruments on natural resources management to enhance human rights, the rule of law and equity.

As part of its on-going process of decentralization of authority and empowerment of local government, the Gol issued Law no.22 (1999) on Regional Autonomy (*Otonomi Daerah* or OTODA), which provides local administrations to assume primary responsibility for management of natural resources (amongst others). It has also enacted various special autonomy regimes for biodiversity conservation and energy production in key provinces (for example Law No. 21 of 2001 on Special Autonomy for Papua). While foreign affairs and international law remain as the central-level functions, many environment-related powers have now been passed to the local level, with special autonomy regimes hosting even greater decentralization. This unprecedented situation in Indonesia poses particular challenges for the monitoring and enforcement of conventions that are still built upon national-level duties and obligations.

ASEAN member countries have established two working groups relevant to environment, in order to promote cooperation in the area of environment. One working group is the ASEAN Working Group on Multilateral Environmental Agreements (AWGMEA), which is working to strengthen regional cooperation in implementing atmosphere related conventions and chemicals related conventions. Another working group is ASEAN Working Group on Nature Conservation and Biodiversity (AWGNCB) which aims to promote regional coordination in implementing biodiversity conservation conventions and activities. Indonesia is a member of both working groups.

Much has happened in Indonesia since the 1992 Earth Summit and the launching of the world's action plan for sustainable development in the 21st century — Agenda 21, and Agenda 21 Indonesia in 1997. Globalization has become a major driver of development, and poverty has become the overriding focus for development assistance. Meanwhile, the environment continues to suffer at alarming rates. In Agenda 21 Indonesia, the need for cross-cutting capacity development took a centre stage. However, the crisis commenced in 1997-98 put a hold on many plans for implementation. This program seeks to re-engage this capacity development platform, linking it firmly to global capacity development strategies, which were affirmed and commenced at WSSD in 2002.

The role of capacity development in finding solutions to poverty and environmental degradation has become one of the highest priorities within the framework adopted at the 2002 World Summit for Sustainable Development (WSSD). WSSD was the landmark of the environmental conference of the decade, constituting a comprehensive review of Agenda 21 implementation at various levels. In Indonesia, a ten-year review of Agenda 21 implementation in Indonesia was also undertaken. A key recommendation therein was to target capacity development in the WSSD follow-up period in areas of biodiversity protection and climate change prevention. As noted by the Chairman of the WSSD Preparatory Committee, Dr. Emil Salim, much remains to be done after the Earth Summit Decade. An implementation gap has been exposed and capacity development has been chosen as a key solution within the WSSD process. Dr. Salim specifically points out to capacity development as a key mechanism to implement post-WSSD frameworks at the national level.

The WSSD plan of implementation calls for the participating parties to implement the convention effectively, especially the Rio Convention. Responding to this calling, there is a need to assess the capacity constraints at three levels, namely the systemic, institutional and individual levels, as the key function of the implementation, as follows:

- 1) Conception and formulation of policies, legislation, strategies and programs,
- 2) Implementation of policies, legislation, strategies and programs,
- 3) Willingness to reach an agreement among the stakeholders
- 4) Information and science mobilization
- 5) Monitoring, evaluation, reporting and lesson learned.

Accommodating those issues, the NCSA report provides the detailed description of the implementing capacity of the three conventions - biodiversity, climate change and combating desertification - as reflected at the systemic, institutional and individual levels, as follows:

- 1) Description of the implementation of the issues contained in the three conventions (basic assessment), that is, the explanation of the implementing status of each issue at each convention.
- 2) Result of each convention's analysis, focusing on the five prioritized issues (assessment of each convention).

- 3) Result of the cross-cutting analysis of the five prioritized issues (cross-cutting assessment of the conventions).
- 4) Development of an action plan, which is an explanation of the obligatory measures to improve the implementing capacity of the three conventions.

1.2 Project Objectives

The primary objective of the National Capacity Self-Assessment is to identify priorities and needs for capacity development in addressing the requirements of global environmental management, in a country-driven manner. This assessment will concentrate on the three thematic areas of biodiversity, climate change and desertification/land degradation, and will place particular emphasis on identifying cross-cutting issues and synergies. The NCSA process will contribute to the creation of a sustainable institutional system and process for continuous assessment and improvement of national capacities for sustainable environmental management.

The NCSA will also support a range of secondary objectives in the field of environmental management in Indonesia, such as:

- 1) To assess the impact of the decentralization of power and regional autonomy (OTODA) and the capacity challenges they will engender in relation to global environmental management,
- 2) To strengthen capacities to understand and manage the impact of trade on environmental management,
- 3) To assess required capacities for awareness-raising and public education, and mobilization in environmental management,

1.3 Activities

The proposed project will be undertaken in series of stages, as outlined below. These stages are not compartmentalized or mutually exclusive, but form a sequence of interlinked steps for the preparation and the implementation of the NCSA Report and Action Plan.

1.3.1 Working Group Meetings

The working group meetings were the forum that intensively discussed the progress of each thematic issue. The activities were aimed at clarifying and perfecting the results prepared by the facilitators. To have an effective and efficient meeting, prior to the meeting, the facilitators usually submitted their inputs via email or sent their hard copies.

1.3.2 Expert Meetings

The expert meeting participating by more than ten persons often encountered hurdles in the decision making process. An expert forum dedicating for each convention was a solution to address this problem. Three experts participated in one forum. If needed, the forum size was made dwindled, in which only two experts participated in each convention's forum.

The goal was to expedite the process of finalizing the discussion materials, the analysis and the report writing of each period, based on the materials the facilitators prepared.

1.3.3 Steering Committee Meetings

The steering committee meeting is an important part of the NCSA decision making process. This forum made a decision and provided some guidelines on issues agreed on at the expert meetings and at the working group meetings.

1.3.4 Consultation

All results obtained in each stage were consulted to all central and regional stakeholders.

1.3.5 National Workshop

This forum served as the highest level of the NCSA processes, in which all results were reported to all central and regional stakeholders. Therefore, the NCSA ownership at the national level could be materialized.

1.3.6 Data Collection

The activity served as the basis for the entire activities, which is the information and data collection process required in the NCSA development

process. The collected data consisted of primary and secondary data obtained through several methods, such as interview, questionnaire, investigation and data searching through internet.

1.3.7 Data Analysis

The collected data were submitted to experts and members of the working group to have their detailed analysis. There were several methods used in this stage, comprising the descriptive, analytical, statistical methods and simulation.

1.3.8 Report Writing

Every final activity of each step was written down in a report writing. The facilitators prepared the report materials, while experts and members of working group worked to finalize them.

CHAPTER II

NCSA IMPLEMENTATION PROCESS

2.1 Implementation Steps

The NCSA process was carried out in stages, starting from the inception process, data collection, data gathering, assessment, cross-cutting assessment, formulation of an action plan and report writing.

a. Inception Process

Key activities undertaken during project inception includes as follows::

- 1) Establishment of the Steering Committee.
- 2) Appointment of the National Project Director.
- 3) Recruitment of the NCSA project staffs (project manager, facilitators, administrators and accountant)
- 4) Establishment of Working Groups and
- 5) Establishment of expert teams

During this inception phase, the Team consulted the NCSA process to all stakeholders, in the expectation of reaching the goals provided all sectors gave their full support. By doing so, all related institutions, non government institutions, and private sectors participated in the NCSA process.

b. Collection of Basic Data of the Conventions

This activity was set to formulate a detailed and comprehensive implementation status of each convention. The assessment focused on the data and the secondary information gathered from the relevant stakeholders as a result of their analysis.

Then the facilitators and members of working groups analyzed the collected data and finalized them based on the existing analytical method written in the GEF-UNITAR & UNDP guidelines.

The end result produced in this process was consulted again to all stakeholders, both at the central and regional levels, producing a final report.

c. Assessment of the Convention

The assessment activity was the third step of the NCSA process, in which the capacity building priorities were determined. Using the UNITAR criteria as the reference, the team selected five priorities. Considering the key function at the system level, institutional level and individual level, the team carried out the assessment of the implementing capacity of each convention.

d. Cross-cutting Assessment of the Convention

Based on the assessment of the convention in the previous step, experts and working groups determined the variables to be included in every part of the cross-cutting issues of the convention.

Experts and working groups reached a consent on a method used in determining the cross-cutting variables of the conventions. This reflected the importance of the cross-cutting variables of the conventions in implementing the three conventions in Indonesia. Those variables are as follows:

- 1) Similar requirement contained in each convention,
- 2) Constraints in capacity building,
- 3) Capacity building needs,
- 4) Opportunities, and
- 5) Natural resource management issues.

e. Formulation of Action Plan

Formulation of action plan was considered as an option in the NCSA process, but experts and working groups believed that the project should encompass the activity as well. The action plan document would smooth the follow up action that the NCSA project generated.

The action plan provides several mandatory measures to improve the implementing capacity of the three conventions at the system, institutional and individual levels.

2.2 Time Table

The NCSA project was initiated in April 2004 and ended at the end of December 2005, as elaborated below:

No.	Steps	Period	Remarks
1	Inception	April 2004 – July 2004	
2	Data Collection	August 2004 – October 2004	
3	Assessment of the Convention	September 2004-December 2004	
4	Priority Selection	January 2005 – March 2005	
5	Cross-cutting Assessment of the Conventions	April 2005 – June 2005 July 2005 – September	
6	Action Plan Formulation (draft)	October 2005 – December 2005	

2.3 NCSA Project Implementation

a. NCSA Steering Committee

No.	Name	Position	Institution
1	Drs. Sudariyono	Deputy VI, National Focal Point to CBD and CCC	MoE
2	Drs. Effendy A. Sumardja, MSc	GEF National Focal Point	GEF
3	Dr. Ir. Harry Santoso	National Focal Point to CCD	MoF
4	Dr. Ir. Sunaryo, MSc	Assistant to the Minister for Partnership	MoF
5	Dr. Ir. Achmad Suryana	Head of Research and Development	Ministry of Agriculture
6	Dr. M. Hikman Manaf, ME	Assistant to The Minister for Environment and Regional Issues	Ministry of Energy and Mineral Resources
7	Ir. Agus Tjahajana Wirakusumah, SE, MSc	Head of Research and Development Centre for Industry	Ministry of Industry
8	Dr. Ir. Indroyono Soesilo, MSc, APU	Head of Fisheries and Marine Research Institution	Ministry of Marine Affairs and Fisheries
9	Dr. Ir. Roestam	Head of Research and	Public Work

	Sjarief, MNRM	Development	
10	Dra. Liana Brantasida, MS	Assistant to the Minister for Global Environment and International	Ministry of Environment
11	Dr. Ir. Dedi Mansykur Riadi	Deputy Minister for Environment and Natural Resources,	National Development Planning Agency
12	Dr. Ir. H. Abdul Razak Manan, MM, MSi	Assistant to the Minister for Energy and Environment,	Ministry of Transportation
13	Sumarwoto, SH, MPA	Deputy for Minister State Secretary of Supporting Policy	State Secretariat
14	Prof.Dr. Liliek Hendrajaya	Deputy Minister for Research and Technology Development	Ministry of Research and Technology

b. NCSA Team

No.	Name	Position
1	Ir. Arief Yuwono, MA	Executing Agency
2	Drs. Sudariyono	Implementation Agency
3	Inar Ichsana Ishak, SH, LLM	National Project Director (NPD)
4	Dra. Jo Kumala Dewi, MSC	Deputy NPD
5	Ir. Hernowo, MSE	Project Manager
6	Susanti Withaningsih, Ssi, MSi	UNCBD facilitator
7	Ir. Mayadata, Msi	UNFCCC Facilitator
8	Ir. Aries Muzaqkier, Msi	UNCCD Facilitator
9	Muhamad Isradi Alireja, SP	Finance
10	Ratih Prayogiwati, Sp	Administrator
11	Dr.Ir. Subhat Nurhakim / Dr. Ngurah N. Wiadnyana	Working group of CBD
12	Ir. Utami Andayani / Eka Darmayanti	Working group of CBD
13	Dr. Sutrisno / Dr. Ir. Karden Mulya, MSc	Working group of CBD
14	Dr. Ir. Agus Prabowo	Working group of CBD, FCCC, CCD
15	Drs. Widodo Sukohadi Ramono / Dr. Samed	Working group of CBD
16	Prof. Dr. Hadi S. Alikodra	Working group of CBD
17	Ir. Dede Irving Hartoto, APU	Working group of CBD, CCD
18	Dibjo Sartono	Working group of CBD, CCD
19	Helianti Hilman SH, LLM	Working group of CBD
20	Farah Sofa	Working group of CBD
21	Chandra Panjiwibowo	Working group of CBD, CCD

22	Dr. Daniel Murdiyarso	Working group of CBD,FCCC
23	Ir. Broto Hadi Sumandhyo, MM / Dr. Ir. Joko Prihatno, MM	Working group of FCCC
24	Ir. Dedi Darmawan / Prih Galih, ST. MT.	Working group of FCCC
25	Dr. Ir. Ratna Ariati MSc / Ir. Maritje Hutapea	Working group of FCCC
26	DR.Ir. Agus Wahyudi, SE, MM	Working group of FCCC
27	Dr.Ir. Safri Burhanuddin, DEA / Dr. Agus Supangat	Working group of FCCC
28	Ir. Sulistyowati, MM. / M. Natsir, ST.	Working group of FCCC
29	Atrisman Nukman, SKM, MSc	Working group of FCCC
30	Dr. Ir. Chandrawati Cahyani, MS / Drs. Sahat Manaor Panggabean, MSi	Working group of FCCC
31	Dr. Chunaeni Latief	Working group of FCCC
32	Dr. Paulus Agus Winarso	Working group of FCCC,CCD
33	DR. Lolo M. Panggabean	Working group of FCCC
34	Nurhidayati	Working group of FCCC
35	Olivia Tanudjaja	Working group of FCCC
36	Dr. Ir. Harry Santoso	Working group of CCD
37	Dr. Abdurrahman Adimihardja	Working group of CCD
38	Ir. Hermono Sigit	Working group of CCD
39	Ir. Dyah Rahayu Pangesti, Dipl. HE, APU / Dr. Ir. William Marcus Putuhena, Meng	Working group of CCD
40	Dr. B. Paul Naiola	Working group of CCD
41	Prof. Dr. Ir. Naik Sinukaban	Working group of CCD
42	Dr. Kasdi Subagyono	Working group of CCD
43	Dr. Fahmuddin Agus	Working group of CCD
44	Christien Ismuranty, MSc.	Working group of CCD
45	Drs. Odjak Siagian, M.Ph	Working group of CCD
46	Ade Fadli	Working group of CCD

2.4 Financing

Global environmental Facility (GEF) financed the NCSA project disbursed through the *United Nation Development Programme* (UNDP); the total amount was US\$ 199,950,00.00

2.5 Monitoring Activities

To achieve an optimum result, the NCSA manager reported the ongoing result to UNDP-Indonesia *Programme Officer* on a quarterly basis. The

manager also submitted the progress report when needed, smoothing the implementation process.

The report submitted to UNDP Indonesia consisted of substantial and financial matters, as well as other matters concerning the implementation of the NCSA project.

CHAPTER III

NCSA PRODUCTS

NCSA project produces four main products, such as data collection, assessment of the conventions, cross-cutting assessment of the conventions, and action plan, as elaborated below.

3.1 Data collection

Data collection refers to a brief description or “portrait” of the existing condition, consisting of the past and ongoing activities on the capacity building when implementing the three conventions, namely the CBD, CCC and CCD. The basic data collection was perceived as a strategic activity, since the output was used as the input of the assessment process, in which the team analyzed to which degree a convention or the cross-cutting assessment could be applied at the national level. Therefore, a complete set of data would smooth the assessment process of the convention and the cross-cutting assessment.

3.1.1 Collection of UNCBD data

There are sixteen issues analyzed during the data collection, as elaborated below.

1) Effectiveness of the National Plan on biodiversity

The issue is closely related with the implementation of CBD, article 6a regarding the general measures of conservation and the sustainable use, and the Conference of the Parties decisions No. II/7, III/9 and VI/27a. To date, there are several government institutions, such as MoE, National Development Planning Agency, DoF, DoA, DoMF, LIPI and IPB that have carried out activities similar to that mandated under article 6, implemented before and after CBD ratification.

Currently, activities related to article 6 focus mainly on implementing steps of the national plan (the National Biodiversity Action Plan and Strategy), that just newly finalized, even though it requires a sound legal basis, binding all the related stakeholders.

- 2) Identification and evaluation of biodiversity components essential for conservation and its sustainable use.

This issue is closely related with the implementation of CBD, article 7a and b regarding the identification and evaluation, and the decision of COP III/10. To date, there are several government institutions implementing article 7, such as MoE, National Development Planning Agency, DoF, DoA, Birdlife Indonesia and other institutions. To fulfill the need of having the basic data of the national biodiversity potency, LIPI in line with its job description carried out species exploration. Besides, Department of Forestry as an institution dealing with conservation issue, carried out or assisted inventory activities, and ecosystem evaluation. Several constraints encountered during the implementation of activities related to article 7 lie in the information exchange, development capacity, and networking among institutions and individuals. Other constraints include the inventory result, lacking of a complete picture of the existing potency, specification and diversity, and the genetically flora and fauna in Indonesia, as well as the condition and ecosystem representation. Apart from that, the standard method on how to conduct a monitoring on and collecting of the biodiversity inventory is still unavailable.

- 3) The in-situ biodiversity conservation.

This issue is closely related with the implementation of CBD, article 8a-e regarding in-situ conservation. To date, there are several government institutions implementing article 8a-e, such as MoE, National Development Planning Agency, DoF, DoA, DoMR, Kehati Foundation and other institutions. A legal basis supporting the CBD implementation is available, that is, Law No. 5 of 1990. Pertaining to that law, Indonesia has determined an area of 20 million hectares for terrestrial conservation and another 6 million hectares for marine conservation.

Government Regulation No. 1 of 2004 serves as a constraint in implementing article 8a-e, under which the government allows mining activities carried out in the protected forest that has functions not only to protect water cycle system, but also as the in-situ biodiversity

conservation. Therefore, there is a need to evaluate the conservation area, taking into consideration the standardization and mapping analysis of the mining area, the existing forest condition and the environmental impact of mining activities.

- 4) Respect and maintenance of knowledge, innovations and local and traditional practices.

This issue is closely related with the implementation of CBD, article 8j and the decisions of COP III/4 and IV/9, V/16 and VI/10. Pertaining to the traditional knowledge, there are several institutions implementing the issue, such as MoE, MoRT, Dept. of Tourism and other institutions. Therefore, there should be one coordinator formally assigned to protect the traditional knowledge in the respective sector.

- 5) Ex-site conservation of biodiversity components, including the collection of natural resource of local habitate targetting for the ex-situ conservation.

This issue is closely related with the implementation of CBD, article 9 regarding the ex-situ conservation. Several government institutions have implemented activities related to article 9, such as DoF, DoA, LIPI and other institutions. Some of the activities under article 9 include the collection of several types of flora in the national park and botanical park (LIPI), wild flora and fauna reproduction under the Department of Forestry assistance, reducing the pressure imposed on the wild flora and fauna population in the natural habitat, other than designating it as a research of endangered population.

- 6) Development and endorsement of the appropriate measures, which are economically and socially sound, serving as an incentive for the conservation and the sustainable use of biodiversity components (an equitable profit sharing).

This issue is closely related with the implementation of CBD, article 11 regarding the incentive measures, and decisions of COP III/18, IV/10, V/15 and VI/15. Several government institutions have implemented activities related to article 11, such as MoE, DoF, and Kehati Foundation. There are several activities implemented under article 11, such as the Kalpataru Award by MoE and Kehati Award by Kehati

Foundation; those are regarded as instruments of social incentive. Meanwhile, the existing economic incentive has no clear guideline, especially in selecting and applying the appropriate economic instruments to encourage biodiversity conservation. Therefore, government should develop an appropriate legislation supporting the implementation of this article.

7) Strengthening and maintaining education, and scientific and technical training.

This issue is closely related with the implementation of CBD, article 12 regarding research and training. There are several government institution implementing activities under article 12, such as DoF, DoA, National Development Planning Agency, *The Nature Conservancy* (TNC), Klub Indonesia Hijau (KIH), and other institutions.

Activities implemented under article 12 include research on forest biodiversity carried out by LIPI and Forest R&D Agency, that carries out research and training on biodiversity. Lack of the appropriate requirements that regulate international research serves as the single constraint when implementing article 12, giving an opportunity for bio-piracy to take place (stealing the biodiversity resource from Indonesia) even though Presidential Decree No. 100 of 1993 exists.

8) Promoting the understanding of the importance and measures needed for biodiversity conservation.

This issue is closely related with the implementation of CBD, article 13 regarding education and public awareness, and the decisions of COP V/17 and VI/9. There are several government institution implementing activities under article 13, such as MoE, DoF, DoA, and other institutions. Activities implemented under article 13 include publishment of 92 information materials on Forest Protection and Natural Conservation in terms of books, bulletins, video and CD that DoF produced, and the development of genetic resource under DoA assistance. Lack of specific training or module on biodiversity targeted at the entire stakeholders serves as the single constraint when implementing article 13.

Biodiversity plays as an important asset and holds the national future; therefore the national development should refer to biodiversity as its

profound basis, integrating biodiversity issue into the national education curriculum.

- 9) Endorsement of an appropriate regulation, ensuring a project impact and an environmental policy are subject to an EIA document resulting in a reduction of the adverse impact on biodiversity.

This issue is closely related with the implementation of CBD, article 14 regarding impact assessment and reduction of an adverse impact, and decision of COP V/18. There are several government institutions implementing activities under article 14, such as MoE, DoF, DoA, and other institutions. Activities implemented under article 14 include guideline procedure on the implementation of the risk assessment published by MoE, reduction of impact logging, EIA documents imposed for any company holding a forest concession and forest fire impact by DoF.

- 10) Development and endorsement of the appropriate measures, ensuring the regulatory safety in addressing biotechnology modified living organism (transgenic).

This issue is closely related with the implementation of CBD, article 8g and article 19 (1, 2 and 4). There are several institutions, including government and non government institutions, implementing activities on modified living organism, such as endorsement of a Joint Decree of four ministers regulating genetic modified agricultural products. Finalizing the Joint Decree of the four ministers and following up the endorsement of the Law on Cartagena Protocol, MoE and MoA in cooperation with other institutions formulated Presidential Decree No. 21 of 2005 regarding Bio Safety and Food Safety of the Genetic Modified Product.

- 11) Development and endorsement of the appropriate measures to regulate access to genetic resources, and creating the access to and transfer of technology, which are appropriate to the conservation and the sustainable use of biodiversity among the parties

This issue is closely related with the implementation of CBD, article 8g and article 16(1) regarding technology access and technology transfer. There are several government institutions implementing activities

under article 16, such as MoE, DoA, and other institutions. Activities implemented under article 16 include development of bilateral and multilateral cooperation on characterization of agricultural genetic resource, including access to and exchange of the conservation technology.

- 12) Endorsement of legislative and administrative measures, and an appropriate policy, suited to the goal of distributing research and development results, as well as the equal benefit generated from the commercial use of genetic resource (environmental ethic).

This issue is closely related with the implementation of CBD, article 15 (7) regarding access to genetic resource and decisions of COP II/11, III/15, V/26 and VI/24. There are several government institutions implementing activities under article 15, such as MoE, DoA, and Kehati Foundation. The government has formulated the draft Law on the Genetic Resource Management under MoE coordination and has formulated the draft Law on Vegetation Variety under DoA coordination. In 2004, a regional agreement on the ASEAN level was achieved, targeting at the improvement of biodiversity access. The agreement serves as the legal reference when endorsing the access to genetic resource at the national level.

- 13) Development and operationalization of a clearing house mechanism promoting, facilitating technical and scientific cooperation (data base).

This issue is closely related with the implementation of CBD, article 18 (3) regarding technical and scientific cooperation, and decisions of COP II/3, III/4, IV/2 and V/14. There are several government institutions implementing the activities, such as MoE, DoA, DoF and Kehati Foundation. Activity implemented under article 18 includes the development of the National Biodiversity Information Network, NBIN, under LIPI coordination. International cooperation on the conservation issue is carried out under bilateral and multilateral cooperation scheme, as well as inviting participation of NGO and other international conservation agencies.

14) Implementation of the Cartagena Protocol.

This issue is closely related with the implementation of CBD, article 19 (3) regarding the biotechnology management and profit sharing. There are several government institutions implementing activities under article 19, such as MoE, DoA, Kehati Foundation, and other institutions. Activities implemented under article 19 include the ratification of Cartagena protocol through Law No. 21 of 2004, and the establishment of discussion forum on transgenic issue, as well as increasing public awareness and capacity in addressing issues on genetic modified products .

15) Access to financial resources, provided through funding mechanisms under the convention and the donors.

This issue is closely related with the implementation of CBD, articles 20 & 21 regarding funding mechanism. Almost all institutions addressing biodiversity issue have implemented activities on funding mechanism. The National Development Planning Agency produced an environmental funding resource directory in 2004. Besides, in 2005 MoE in cooperation with GET formulated Global Environmental Facility Guideline in Indonesia. The two documents assist the stakeholders in accessing the financial resource for implementing biodiversity activities. Lack of the ability to develop a proposal and the ability to access the financial resource serve as the main constraints of the articles 20 and 21 implementation. Besides, the GEF scheme implies any grantee to provide an complementary funding, whereas the amount provided is equal to the grant itself. Given this requirement, the government shows its reluctance in accessing the fund, especially when the complementary funding is required not as an "in-nature" funding.

16) Development of a national legal system, allocating the natural product fund to finance conservation and rehabilitation of biodiversity activities.

Based on the stakeholders agreement, the issue is considered as an additional concern, which should be taken into account as one prioritized issue in implementing the biodiversity convention.

3.1.2 Collection of UNFCCC data

There are seventeen issues analyzed during the data collection, as

elaborated below.

- 1) Development of the institutional capacity, related to the strengthening or establishment of the national secretariat or the national focal point to climate change.

This issue is closely related with the implementation of CCC, article 4 regarding the Commitment on Climate Change Convention and decisions of COP-1/11, 4/2, 5/10 and 7/2 and 3. The institutional capacity pertinent to the commitment as elaborated in this article is still inadequate, as reflected in the non optimum function of the National Committee and the Technical Team on Climate Change, which were endorsed through a Minister of Environment Decree No. 53 of 2003. Actually it is considerably insufficient if MoE addresses climate change issue alone. Therefore, a National Committee and a Technical Team on Climate Change were set up based on a high level political decision.

- 2) Improvement and/or setting up a conducive environment.

This issue is closely related with the implementation of CCC, article 4 regarding the Commitment of the Convention on Climate Change. The institutional capacity pertinent to the issue, especially the NFP capacity and other related institutions, the availability and expertise of human resource, facility and infrastructure (information system, coordination, etc), and funding are partially available. On the other hand, climate change issue receives less sectoral attention and has not been accommodated into a respective legislation, resulting in a non-conducive environment to support the implementation of the convention.

- 3) National Communication.

This issue is closely related with the implementation of CCC, article 4 and decision of COP 9/9, implying the need to encourage countries in economic transition in developing a National Communication. The first national communication was produced in 1998 and currently Indonesia is preparing the second national communication. In general, the capacity to implement the issue is considerably low due to lack of data and information, coordination, and funding.

- 4) National program on climate change in each sector.
This issue is closely related with the implementation of CCC, article 4. Development of a national communication on climate change is one type of commitment that a party should carry out once ratifying the Convention on Climate Change. The capacity to implement the issue is still inadequate, as reflected in the existing policy, which is not specific; the role and participation of the related sector, which are not optimum either; programs and funding at sectoral level, which do not meet the requirements under the convention.

- 5) Preparation and management of greenhouse gasses emission inventory, including the data base management.
This issue is closely related with the implementation of CCC, article 4 regarding the Commitment and article 5 regarding the Systematic Research and Evaluation of CCC. The capacity to implement the issue is still inadequate, as indicated in lack of a clear mandate imposed on an institution to implement the issue that meets requirements of the conventions and in lack of a national standard method on GHG calculation published by the Intergovernmental Panel on Climate Change (IPCC). However, actually several sectors have implemented activities related to this issue, but they do not use IPCC method. The activity also does not run continuously due to budget limitation, resulting in non optimum utilization of the produced outputs in fulfilling the implementation of the issue.

- 6) Assessment of the vulnerability, regional warming and the adaptation to climate change in every sector.
This issue is closely related with the implementation of CCC, article 4 regarding the Commitment. Assessment of the vulnerability, regional warming and the adaptation to climate change in every sector is considerably low, resulting in a difficulty when making the decision of the next action plan, even though the national strategy and policy on climate change has been available since 1993 and was reviewed in 1995. The issue receives insufficient publication since the strategy has not been implemented optimally, thus resulting in small number of people who understand the essence of climate change. Several constraints emerge from the low capacity of the institution, lack of

appropriate human resources who understand the issue, facility and infrastructure limitation, that impede management measures.

- 7) Development and implementation of the adaptation plans and measures.

This issue is closely related with the implementation of CCC, article 4 regarding the Commitment. Every related sector has not recognized the need to implement the adaptation measures; consequently the capacity building on this issue is not available. The constraint lies in the lack of dissemination of the strategy adopted by each sector. Referring to the obligation of the Convention on Climate Change, which Indonesia ratified on 23 August 1994 through Law No. 6 of 1994 regarding the CCC ratification, the required capacity building in Indonesia should have been set as the utmost priority. In meeting this obligation, Indonesia should revise and revitalize the required human resource capacity, improving the existing human resource capacity.

- 8) Evaluation of the mitigation options implementation.

This issue is closely related with the implementation of CCC, article 4 regarding the Commitment. Evaluation of the mitigation options implementation has not been carried out, because the existing mitigation options have not been specifically designed to meet the CCC mandate. There are several mitigation measures that sectors have adopted, but the social, economic, and environmental perspectives had not been taken into account when they selected the options.

- 9) Systematic research and observation, including meteorological, hydrological and climatological services.

This issue is closely related with the implementation of CCC, article 5 regarding the systematic research and observation on CCC, which has not been implemented specifically to meet the CCC target due to budget limitation. However, some research activities are available, but unfortunately their location are scattered. If the central and regional governments take the opportunity that the developed countries provide as their commitment to assist developing countries in addressing climate change issue, then the governments will find no budget constraint anymore.

- 10) Development and transfer of environmentally sound technology, especially development of local technology.

This issue is closely related with the implementation of CCC, article 4 regarding the Commitment. The capacity to develop and transfer the environmentally sound technology is still inadequate; even the program is not directed to meet the CCC requirements. Even if available, the existing industry program only includes activities in meeting ISO 14000 requirements regarding the environmental management.

- 11) The perfected decision making process, including participation in international negotiation.

This issue is closely related with the implementation of CCC, article 7 regarding the Conference of the Party of CCC. The decision making capacity is still low, since the existing policy and strategy have not been directed to meet CCC requirements. The capacity to participate in the international negotiation is fairly low due to lack of preparation of the Indonesian delegates when participating in the negotiation forum. The condition is a result of lack of support from the related departments in providing the required information and data, and budget limitation that the Indonesian delegates experience when participating in climate change meetings.

- 12) Clean Development Mechanism (CDM).

This issue is closely related with the implementation of CCC, article 4 regarding the Commitment. Several activities undertaken by the related sectors have been directed to meet the Clean Development Mechanism, even though they are not specifically designed since CDM is still in infancy and receives inadequate dissemination. Consequently, the supporting human resources, regulation and funding aspects are still insufficient.

- 13) The increase need of implementing article 4.8 and article 4.9 of the Convention on Climate Change.

This issue is closely related with the implementation of CCC, article 4 (points 8 and 9) regarding the Commitment. Several sectors have implemented activities related to the need of the convention, even though they did not set the programs specifically to meet the CCC

requirements. The problem emerges due to lack of CCC dissemination to the related stakeholders. In terms of documentation and regulation, there is no clear indicator of the increased need of the convention in implementing article 4.8 and article 4.9 concerning the mandate of article 4 of the CCC. The condition indicates the low of concern of the related institutions in implementing the obligation, as a country that ratified the Convention on Climate Change.

- 14) Education, training and public awareness (agricultural multi function and oceanograph multi function).

This issue is closely related with the implementation of CCC, article 6 regarding Education, Training and Public Awareness. Activities on education, training and public awareness building on climate change have been widely implemented, but those activities are not meant to fulfill the CCC requirement. The reason of why sectors do not accommodate the program lies in the imperfect CCC dissemination effort, human resource limitation, improper facility and infrastructure. Therefore, institutional capacity building is a prerequisite if the government would like to implement education, training and public awareness on climate change.

- 15) Information and networking on data base development.

This issue is closely related with the implementation of CCC, article 4 regarding the Commitment. The government has not set the cooperation and data base development on climate change as the utmost priority, resulting in an inadequate information and network limitation. Therefore, institutional capacity building is a prerequisite if the government would like to implement data base development supported by an adequate information and networking system.

- 16) Taking an advantage of GEF funding opportunities, especially to finance the adaptation measures.

This issue is closely related with the implementation of CCC, article 7 regarding the Conference of the Party. Funding disbursement provided by the international donors is still limited. The issue is not disseminated widely to the related departments nor to regions. There is also a lack

of supporting documents containing lessons learned on how to produce a funding proposal to be submitted to GEF regarding climate change adaptation measures. Therefore, the government needs to improve the institutional capacity, clarifying the existence of the respective institution as soon as possible and maximizing the GEF funding disbursement designated to finance the adaptation measures.

17) Preparation of Presidential Decree on climate change.

This issue is closely related with the implementation of CCC, article 4 regarding the Commitment and article 12 regarding the Communication Information to Implement CCC. Currently, a Ministerial Decree No. 53 of 2003 regarding the establishment of the National Committee and Technical Team on Climate Change is in place. The committee is expected to produce a specific legislation supporting CCC implementation. The NFP secretariat should make a preparation to formulate a government regulation on climate change. Responding to this condition, the government needs to make an improvement and to prepare a draft of a Presidential Decree on climate change, smoothing every activity in addressing climate change issue, which will expand in the future.

3.1.3 Collection of UNCCD data

There are ten issues analyzed during the data collection, as elaborated below.

1) Education and public awareness building.

This issue is closely related with the implementation of CCD, article 19. Several institutions have taken an initiative to implement activities related to the issue, but they have not put the activities into specific programs in meeting the requirements of the conventions. Several institutions have attempted efforts to improve the capacity of their workers/staffs through a scholarship program in several countries. However, not all institutions have a good understanding on CCD, so that an intensive dissemination should be encouraged.

2) Transfer, taking over, adaptation and development of environmental technology, which is economically and socially sound.

This issue is closely related with the implementation of CCD, article 18. Several institutions have implemented activities related to the issue. Since the issue is not systematically accommodated into a program, its continuity is still under question. The condition takes place because of the limitation on human resource capacity, coupled with the limited number of environmentally sound technologies availability and budget limitation.

- 3) Training and use of alternative energy, renewable energy resource (reduction on fire wood dependency).

This issue is closely related with the implementation of CCD, article 19. There are only limited numbers of activities on this issue, resulting in a continuous dependency on fire wood as an energy resource. The condition is a result of an inadequate capacity in providing an alternative energy information apart from fire wood. The stakeholders admit the importance of capacity building, such as institutional development, training and development of local and national capacity in terms of energy alternative provision.

- 4) Promotion of alternative employment, including new expertise.

This issue is closely related with the implementation of CCD, article 19. Several institutions have undertaken sea grass cultivation and development of home industries. However, the activities are still limited and have not specifically designed to meet the requirements of the conventions, resulting in an excessive natural resource exploitation.

- 5) Training for decision makers, managers and staffs responsible for the collection and analysis of data, targeted at the dissemination and the use of the early warning information on drought and food production.

This issue is closely related with the implementation of CCD, article 19. The activities have been put into practice but they are not systematically designed to meet the requirements of the conventions, due to lack of intensive dissemination, inadequate human resource, and lack of supporting facility and infrastructure.

- 6) Information collection, analysis and exchange (short term and long term data, information, especially to strengthen surveillance system on land

degradation in the affected area and to process data, as well as providing better understanding of drought and land degradation impacts).

This issue is closely related with the implementation of CCD, article 16. There are some activities implemented under this article, but the practices are fairly limited and have not been designed to meet the requirements of the convention specifically. Incomplete data on land degradation, lack coordination on data collection, and lack of data exchange among the institutions are held responsible for this unfavorable condition.

- 7) Early warning system and an effective initial planning to address several drought periods and a detrimental weather variation.

This issue is closely related with the implementation of CCD, article 10. There is no activity on this issue, as reflected in the high death toll, famine, and harvest failure due to knowledge limitation on the issue, lack of data, expertise, facility and infrastructure, as well as funding resource limitation.

- 8) Research and development

This issue is closely related with the implementation of CCD, article 17. There are some activities implemented under this article, but the practices are not integrated well nor designed to meet the requirements of the convention systematically. Several institutions have undertaken research activities, such as:

- Research and Development Center on Eco-Technology to Conserve Water Resource (R&D Center for Water Conservation - Dept. of Public Work)
- Research and Development Center on Drought Mitigation (R&D Center for Water Conservation - Dept. of Public Work).
- Research and Development Center for Soil and Agroclimate; the center is a national research institute under the Research and Development for Agriculture Agency, Department of Agriculture.

Lack of integration and lack of a systematic program are reflected in the scattered data deposited in several sectors and in lack of national

standard on land degradation. These conditions are the results of low coordination and the fact that CCD is not set as a national priority.

- 9) Suitable technical and scientific cooperation, at sub regional and international levels to combat critical land and to mitigate national drought impacts.

This issue is closely related with the implementation of CCD, article 17. There are some activities implemented under this article, but the practices are not integrated well nor designed to meet the requirements of the conventions systematically. There are limited number of institutions that have implemented a long term cooperation with international institutions, such as: *International Water Management Institute* (IWMI) on sloping land management, *International Centre for Research Agroforestry* (ICRAF) on land and water conservation, *National Association of State Departments of Agriculture* (NASDA), Japan on the implementation of distance radar technology, *Centre de coopération internationale en recherche agronomique pour le développement* (CIRAD), France on agroclimate research.

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Lack of implementation and lack of a systematic program are reflected in the limited number of the cooperation program compared to the immense needs identified at the national, regional and international levels on CCD. Limitation on the technical and scientific cooperation arises from the low capacity in developing a proposal to finance international and regional activities, and from the national budget limitation.

- 10) Joint research program in developing and improving technology access to ensure sustainable development.

This issue is closely related with the implementation of CCD, article 17. There are some activities implemented under this article, but the practices are fairly limited and have not been designed to meet the requirements of the conventions systematically, such as:

- Research and Development Center for Soil and Agroclimate (or usually shortened as *Puslitbangtanak*) in cooperation with the *International Water Management Institute* (IWMI) and *World*

Assosiation Soil and Water Conservation (WASWC) carried out a training on land and water conservation (even though the topic was expanded). Puslitbangtanak also carried out training activities (agroecological zoning, commodity suitability), attended by central and regional participants.

- Forest Research Institute in Kupang carried out research activities on forest, including land rehabilitation and land conservation in East Nusa Tenggara, West Nusa Tenggara, Mallucas, and Bali.
- Center on environmental study and natural resource of Tadulako University in Palu (South East Celebes) carried out several studies to support land conservation and land rehabilitation in dry areas, such as greening technology, land conservation technology with agri-silvopasture and development of cultivation valley. The institute has determined species and an agricultural model system suitable for a dry area.

Unfortunately, the training activities did not support the implementation activities in the real practice, and thus requiring further enlightenment through a capacity building.

Lack of implementation and lack of a systematic program are reflected in the limited number of private sectors participating in the joint research on sustainable agriculture in the degraded land. The condition was a result of a low dissemination activities, low understanding on CCD, and budget limitation.

3.2 Assessment of Each Convention

Assesment of each convention refers to an analysis of the implementation of the three convetions, comprising the implementing capacity at the system, institutional and individual levels. Assessment of each convention consists of these following steps:

- 1) Selection of the proritized issue
- 2) Determination of common constraints
- 3) Description of the implementing capacity of each convention.

3.2.1 Selection of the prioritized issue

Assessing the entire issues of the conventions, the team decided to prioritize these following issues:

a. UNCBD

Five prioritized issues of UNCBD are elaborated below:

- 1) Access to financial resources, provided by the funding mechanism under the convention and the donors;
- 2) Respect and maintenance of knowledge, innovation and local wisdom.
- 3) Development and endorsement of the appropriate measures, which are economically and socially sound, serving as an incentive for the conservation and the sustainable use of biodiversity components;
- 4) Development and endorsement of the appropriate measures to regulate access to genetic resources, as well as creating the access to and transfer of technology, which are appropriate to the conservation and the sustainable use of biodiversity among the parties, and;
- 5) Development and endorsement of the appropriate measures to ensure the regulatory safety in addressing genetic modified product, such as the transgenic.

b. UNFCCC

Five prioritized issues of UNFCCC are elaborated below:

- 1) Development and implementation of the adaptation plans and measures;
- 2) Preparation and management of greenhouse gasses emission inventory, including the data base management;
- 3) Information and networking on data base development;
- 4) Assessment of the vulnerability, regional warming and the adaptation to climate change in every sector, and
- 5) Evaluation of the mitigation options implementation.

c. UNCCD

Five prioritized issues of UNCCD are elaborated below:

- 1) Training for decision makers, managers and staffs responsible for the collection and analysis of data, targeted at the dissemination

and the use of the early warning information on drought and food production;

- 2) Development of data base, analysis and transfer of data, especially to enhance the surveillance system on the degraded land in the affected area and on data processing, as well as providing an in-depth understanding of the consequences on account of drought and land degradation;
- 3) Early warning system and an effective initial planning to address several drought periods and a detrimental weather variation;
- 4) Transfer, taking over, adaptation and development of environmental technology, which is economically and socially sound, and;
- 5) Promotion of alternative employment, including skill or new expertise enhancement.

3.2.2 Determination of Common Constraint

Common constraint in the implementation of the three conventions at the system level lies in the inappropriate regulatory scheme; at the institutional level lies in the weak resource and operational management; at the individual level lies in the low expertise development. Apart from the common constraints, the team also discovered several constraints in each convention, as follows:

- **UNCBD**

Common constraints in the implementation of the five prioritized issues of CBD at the system level are:

- (1) Contextual framework, and;
- (2) Participation, accountability and transparency.

- **UNFCCC**

Common constraints in the implementation of the five prioritized issues of CCC at the system level are:

- (1) Contextual Framework;
- (2) Authority level, and;
- (3) Science and risk.

Constraints at the institutional level are:

- (1) Corporate management;
- (2) Corporate strategy, and;
- (3) Human resource quality.

Common constraint at the individual level is:

- (1) Job requirement.

- **UNCCD**

Common constraints in the implementation of the five prioritized issues of UNCCD at the institutional level are:

- 1) Corporate management;
- 2) Corporate strategy;
- 3) Assurance quality, and;
- 4) Human resource quality.

Common constraints at the individual level are:

- (1) Job requirement;
- (2) Performance evaluation, and;
- (3) Incentive.

3.2.3 Description of the implementing capacity of each convention

Assessment of the implementing capacity of each convention comprises assessment at the three levels, that is, systemic level, institutional level and individual level, as described below:

A. UNCBD Assessment

Assessing the five CBD issues, the implementing capacity at every level is described as follows.

1. Access to financial resources, provided through funding mechanisms under the conventions and donors.

The implementation of policies, regulations, strategies and programs is the key function of the issue.

- Capacity at the system level

A regulation on access to financial resource is available, such as the Joint Decree of Ministry of Finance and the Ministry of the National Development Planning Agency/Head of BAPPENAS No.

409/KMK.03/1999 dan No.Kep.264/Ket/9/1999 dated on 29 September 1999 regarding the Management Plan and Loan/Grant Monitoring Procedure in implementing the National Revenue and Expenditure Budget; but it does not specifically regulate CBD issue. Besides, the existing policy only regulates financial access of the government institution, and excludes that of the non government institution, such as private sector and NGO. To date, several guidelines on financial access of CBD implementation are available, but they need wider dissemination to the stakeholders.

- Capacity at the institutional level

There is no clear strategy to address this issue at the institutional level. Currently, the government institutions such as BAPPENAS as the holder of planning authority in Indonesia and the MoE (the National focal point to CBD) are the only entities equipped with the appropriate information on global financial resources, so that they hold the privilege to access the information from the donors. However, they use this resource only for their interest and disregards others' interest in implementing the convention. Besides, there is a need to improve the capacity of the National Focal Point (NFP) to CBD in providing opportunity for other related sectors, so that they have an equal opportunity in accessing global funding.

- Capacity at the individual level

The country is lacking of sufficient individual to address the issue at the national level, both in terms of quantity and quality. Training and expertise improvement to access financial resources are still required. Besides, a holistic information dissemination is also a prerequisite, which can facilitate any individual to attempt access to global funding.

2. Respect and maintenance of knowledge, innovation and local wisdom.

The implementation of policies, regulations, strategies and programs is the key function of the issue.

- Capacity at the system level

The current policy has not accommodated protection towards traditional society rights and the diverse traditional knowledge in detail. At present, an academic paper draft regulating specifically the traditional knowledge, including the equitable profit sharing and

the local wisdom enhancement is available.

- Capacity at the institutional level
There is no institution assigned specifically to coordinate the protection and development of local wisdom and traditional knowledge. However, there are some institutions carrying out the assessment of local knowledge and wisdom; but this practice lacks of coordination, since the activity is carried out only to fulfill the interest of the institutions themselves. Besides, wider dissemination on the importance of protection towards the traditional knowledge is essential, when attempting to achieve the goal of the convention.
- Capacity at the individual level
The individual capacity at the national level remains unidentified due to lack of expert on traditional knowledge. The individual capacity needs to be improved through training, incentive improvement, and a clear career path, so that he/she is able to carry out research, assessment and development, as well as formulating the regulation and the dissemination model.

3. Development and endorsement of the appropriate measures, which are economically and socially sound, serving as an incentive for the conservation and the sustainable use of biodiversity components (an equitable profit sharing).

The implementation of policies, regulations, strategies and programs is the key function of the issue.

- Capacity at the system level
Regulation on economic and social incentive from and for the conservation and the sustainable use of biodiversity components has just been initiated, even though the Indonesia has put the regulation in practice some times ago. However, the problem that Indonesia is encountering lies in the non existence of the economic instrument policy regulating biodiversity conservation. Besides, law enforcement and the sustainable use of biodiversity as a prerequisite of an effective implementation of an economic instrument is still inappropriate.
- Capacity at the institutional level
The social incentive has a clear management, corporate strategy, operational management, quality assurance and human resource

quality, but the economic incentive does not so. However, both of the social and economic incentives require some improvement in the context of sustainable use of biodiversity.

- Capacity at the individual level
Some individuals have actively addressed the issue at the national level, but they are also required to improve their capacity to analyze, formulate and implement the economic and social incentive policy through training, incentive improvement and a clear career path, so that they can apply the social and economic instruments into the ecological aspects.

4. Development and endorsement of the appropriate measures to regulate access to genetic resources, as well as creating the access to and transfer of technology, which are appropriate to the conservation and the sustainable use of biodiversity among the parties.

The development and implementation policies, regulations, strategies and programs are the key functions of this issue.

- Capacity at the system level
A policy on the issue is available, but it does not regulate the implementation in detail, such as the access to, profit sharing of the genetic resource utilization, and technology transfer of genetic resource.
- Capacity at the institutional level
The management, corporate strategy, resource management, operational management, quality assurance and human resource management to address the issue in several institutions in terms of genetic resource have been well integrated. However, the technology transfer and profit sharing programs stumble.
- Capacity at the individual level
The capacity of those addressing the issue is still insufficient, impeding them to implement the specification of the convention regarding the access to genetic resource, technology transfer and profit sharing. Therefore, training and expertise improvement with regards to formulation and implementation of a policy on access to genetic resource, technology transfer and profit sharing on account of genetic resource for CBD implementation are substantially important.

5. Development and endorsement of the appropriate measures to ensure the regulatory safety in addressing genetic modified product, such as the transgenic.

The development and implementation of policies, regulations, strategies and programs are the key functions of this issue.

- Capacity at the system level

A regulatory framework on this issue is available, but a detailed implementing guideline specifically on the environmental and human safety aspects of the genetic modified product is still incomplete.

- Capacity at the institutional level

The management, corporate strategy, resource management, operational management, quality assurance and human resource management on the safety of the genetic modified product are still inappropriate.

- Capacity at the individual level

Indonesia have individuals, who are genetic modified experts, capable to address the issue at the national level. However, they are also required to improve their capacity to develop and implement policy on the safety of genetic modified product. Therefore, training and expertise improvement to develop and implement policy on the safety of genetic modified product is essential.

B. UNFCCC Assessment

The implementing capacity of the five CCC major issues is described as follows:

1. Development and implementation of the adaptation plans and measures.

The development of policies, regulations, strategies and programs are the key functions of this issue.

- Capacity at the system level

A strategy on the issue is available, but it is not elaborated into sectoral programs and plans when sectors implement their activities.

- Capacity at the institutional level
Asdep 3/VI, the Atmosphere and Climate Change unit served as the National Focal Point to UNFCCC and got involved specifically in addressing the issue. However, the unit was not dedicated to implement the adaptation measures, but merely to act as a coordinator. Consequently, the capacity to implement the issue at the institutional level is far from optimum. Besides, the unit did not implement the function to disseminate the strategy systematically, slowing down adoption of the adaptation measures.
 - Capacity at the individual level
Assessing the individual level, experts in developing the associated program is fairly limited, compared to the vast area of Indonesia. Besides, weakness at the institutional level results in the low capacity of personnel when implementing the adaptation measures.
2. Preparation and management of greenhouse gasses emission inventory, including the data base management.
- The implementation of policies, regulations, strategies and programs are the key functions on this issue.
- Capacity at the system level
There is no agency at the system level appointed to coordinate the preparation and the implementation of green house gasses emission inventory for the development of an accountable data base.
 - Capacity at the institutional level
There are some institutions who are players on the issue (LAPAN, BMG and MoEMR), but they often encounter some hurdles due to lack of a good data base. Lack of an appropriate method in carrying out greenhouse gasses inventory in Indonesia as IPCC requires is responsible for this unfavourable condition.
 - Capacity at the individual level
The individual level shows insufficient capacity to carry out an appropriate greenhouse gasses inventory as IPCC requires. So far, Indonesia receives expertise and funding assistance from the Multilateral Fund when addressing the issue.

3. Information and networking, related to data base development.
Science and information mobilization is the key function in addressing the issue.
 - Capacity at the system level
There is a regulation at the system level that supports the implementation of the issue, that is, the right to have an information access. Another support comes from the government, who holds a mandate to increase public awareness and to provide an opportunity for public participation.
 - Capacity at the institutional level
There is a unit that specifically gets involved in the implementation of the issue at the institutional level (BMG, R&D Unit). However, the unit does not work efficiently due to lack of infrastructure and facility; and thus requires a re-assessment of the current lay out of the measuring devices in the regions. Besides, the capacity of the related institutions are considerably low in developing programs to implement the issue.
 - Capacity at the individual level
A need to have communication and information technology experts is identified at the individual level, who will develop an information and networking system.

4. Assessment of the vulnerability, regional warming and the adaptation to climate change in every sector.
Science and information mobilization is the key function in addressing the issue.
 - Capacity at the system level
In general, Law No. 18 of 2002 regarding the National Science and Technology System is sufficient to implement the issue. However, the law needs to be further elaborated into programs and activities in each related sector.
 - Capacity at the institutional level
An institution that specifically gets involved in the implementation of the issue is available at the institutional level (LAPAN, which is located in the PUSFATSATKLIM). However, in reality the institution has not run optimally due to lack of supporting data from the

related sectors, lack of facility and infrastructure, lack of funding in formulating and implementing the program.

- Capacity at the individual level
Experts who can evaluate problems on the vulnerability, regional warming and adaptation of climate change are still inadequate in number, given the vast and diversity of weather condition in Indonesia.

5. Evaluation to implement the mitigation options.

Science and information mobilization is the key function in addressing the issue.

- Capacity at the system level
There is a concept pertaining to this issue at the system level. However, there is no formal decision mandating a certain institution, that has an authority, to determine the mitigation options.
- Capacity at the institutional level
At the institutional level, MoE has a unit that specifically gets involved in the implementation of the issue. Eventhough MoE has a function to coordinate policy on climate change, but the lack of formal decision leads to difficulty in determining the mitigation options.
- Capacity at the individual level
The expertise needed in this matter refers to expertise that can generate data and information supporting the decision to select the scientific based and accountable mitigation options.

C. UNCCD Assessment

The implementing capacity of the five UNCCD major issues at every level is described as follows:

1. Training for decision makers, managers and staffs responsible for the collection and analysis of data, targeted at the dissemination and the use of the early warning information on drought and food production.
The implementation of policies, legislations, strategies and programs is the key function of this issue.

- Capacity at the system level
At the system level, activities to implement policies, legislations, strategies and programs regarding training for decision makers, managers and staffs responsible for the collection and analysis of data, targeted at the dissemination and the use of the early warning information on drought and food production are considerably inadequate. The condition takes place due to the non inclusion of the issue in the national priority program.
 - Capacity at the institutional level
The institutional capacity in its function to implement policies, legislations, strategies and programs regarding training for decision makers, managers and staffs responsible for the collection and analysis of data, targeted at the dissemination and the use of the early warning information on drought and food production is limited. The condition takes place on account of the management, corporate strategy, human resource capacity and funding resource, which are fairly limited.
 - Capacity at the individual level
The individual capacity in its function to implement policies, regulations, strategies and programs regarding training for decision makers, managers and staffs responsible for the collection and analysis of data, targeted at the dissemination and the use of the early warning information on drought and food production is limited. The condition takes place due to the limitation of these several aspects: science, expertise, career path and the provided incentive. Therefore, it is a necessity to improve the existing training, so that it includes the specific issue.
2. Development of data base, analysis and transfer of data, especially to enhance the surveillance system on the degraded land in the affected area and on data processing, as well as providing an in-depth understanding of the consequences on account of drought and land degradation.
- Science and information mobilization is the key function to address the issue.

- Capacity at the system level
The capacity to implement the function to mobilize science and information at the system level in the context of the collection of basic data, analysis and data processing, especially for enhancing the surveillance system on the degraded land in the affected area and on data processing, as well as providing an in-depth understanding of the consequences on account of drought and land degradation is fairly low. The condition takes place due to lack of regulation and policy regarding the collection of basic data, analysis and transfer of those data.
- Capacity at the institutional level
The capacity to implement the function to mobilize science and information at the institutional level in the context of collecting basic data, analyzing and processing data, especially for enhancing the surveillance system on the degraded land in the affected area and on data processing, as well as providing an in-depth understanding of the consequences on account of drought and land degradation is still limited. The condition takes place due to the limitation of these several aspects: management, corporate strategy, human resource capacity and funding resource.
- Capacity at the individual level
The individual capacity to implement the function to mobilize science and information in the context of the collection of basic data, analysis and data processing, especially for enhancing the surveillance system on the degraded land in the affected area and on data processing, as well as providing an in-depth understanding of the consequences on account of drought and land degradation is still limited. The condition takes place due to the limitation of these several aspects: science, expertise, career path and the provided incentive.. Therefore, it is a necessity to improve the existing training, so that it includes the specific issue.

3. Early warning system and an effective initial planning to address several drought periods and a detrimental weather variation.

The development of policies, legislations, strategies and programs is the key function to address the issue.

- Capacity at the system level
The capacity to implement the function to develop policies, regulations, strategies and programs at the system level in the context of an early warning system and an effective initial planning to address several drought periods and a detrimental weather variation is low. The condition takes place due to lack of regulation and policy on the early warning system and the effective initial planning to address several drought periods and a detrimental weather variation.
 - Capacity at the institutional level
The institutional capacity to implement the function to develop policies, regulations, strategies and programs in the context of an early warning system and an effective initial planning to address several drought periods and a detrimental weather variation is limited, even though several sectoral institutions have implemented the early warning program, but they have not implemented the issue specifically. The condition takes place due to the limited capacity of the management, corporate strategy, human resource capacity and funding resource.
 - Capacity at the individual level
The individual capacity to implement the function to develop policies, regulations, strategies and programs in the context of an early warning system and an effective initial planning to address several drought periods and a detrimental weather variation is still limited. The condition takes place due to the limitation of these several aspects: science, expertise, career path and the provided incentive. Therefore, it is a necessity to improve the existing training, so that it includes the specific issue.
4. Transfer, taking over, adaptation and development of environmental technology, which is economically and socially sound.
The implementation of policies, legislations, strategies and programs is the key function to address the issue.
- Capacity at the system level
The capacity to implement the function to apply policies, regulations, strategies and programs at the system level in the context of transfer, taking over, adaptation and development of

environmental technology, which is economically and socially sound, is fairly low. The condition takes place due to lack of regulation or policy on transfer, taking over, adaptation and development of environmental technology, which is economically and socially sound.

- Capacity at the institutional level

The institutional capacity to implement the function to apply policies, regulations, strategies and programs in the context of transfer, taking over, adaptation and development of environmental technology, which is economically and socially sound, is still limited. The condition takes place due to the limited capacity of the management, corporate strategy, human resource capacity and funding resource.

- Capacity at the individual level

The individual capacity to implement the function to develop policies, regulations, strategies and programs in the context of transfer, taking over, adaptation and development of environmental technology, which is economically and socially sound, is still limited. The condition takes place due to the limitation of these several aspects: science, expertise, career path and the provided incentive. Therefore, it is a necessity to improve the existing training, so that it includes the specific issue.

5. Promotion of alternative employment, including skill or new expertise enhancement.

Science and information mobilization is the key function to address this issue.

- Capacity at the system level

The capacity to implement the function to mobilize science and information at the system level in the context of promoting the alternative employment nationally, including skill or new expertise enhancement is considerably low, even though several regions and sectors already produced several regulations on this promotion issue.

- Capacity at the institutional level

The institutional capacity to implement the function to mobilize science and information in the context of promoting the alternative

employment nationally, including skill or new expertise enhancement is considerably low. The condition takes place due to the limited capacity of the management, corporate strategy and human resource capacity, as well as funding resource limitation.

- Capacity at the individual level

The individual capacity to implement the function to mobilize science and information in the context of promoting the alternative employment nationally, including skill or new expertise enhancement is considerably limited. The condition takes place due to the limitation of these several aspects: science, expertise, career path and the provided incentive. Therefore, it is a necessity to improve trainings and facilities.

3.3 Cross-cutting Assessment of the Conventions

The assessment of the cross-cutting issues of the conventions refers to a holistic review of the implementation of the three conventions. In general, there are eight Technical Departments, three non-technical Department/non Department agencies, and Non Governmental Organizations that have implemented the three conventions in Indonesia.

Tabel.3.1. Cross-cutting Programs in 2001-2004

No.	Programs	Organization
1	Development and Improvement of Access to Information of Natural Resources and Environment	LIPI
2	Prevention of Environmental Damage and Pollution	LIPI
3	National Program on Biodiversity Network	LIPI
4	HKI empowerment and Standardization	MRT
5	Forest Conservation and Safety	MoF
6	Forest and Land Rehabilitation	MoF
7	Capacity Building Improvement for Regions in Implementing Environmental Governance	MoE
8	Civil Society	MoE
9	Environmental Conservation	MoE

Source: Several LAKIP of the Related Institution, 2004

Comment [TP3]: LAKIP

The implementation nature that those institutions are carrying out is elaborated into programs. There are three coordinating types of cross-cutting programs or activities, called normative type, job mutation, internship and voluntary work. In general, the program and activity description that the related institutions have carried out are elaborated in Table 3.1 and Table 3.2.

Analyzing the capacity map drawn in Table 1.1 and Table 1.2, we conclude that there are several institutions in Indonesia that have set up cross-cutting programs/activities of the conventions.

Table 3.2: Organizations Carrying Out Cross Thematic Program or Activity

No.	Organization	Cross Thematic Activity
1.	Ministry of Environment (MoE)	UNCBD, UNFCCC, UNCCD
2.	Ministry of Forestry (MoF)	UNCBD, UNFCCC, UNCCD
3.	BAPPENAS	UNCBD, UNFCCC, UNCCD
4.	Ministry of Agriculture (MoA)	UNCBD, UNFCCC, UNCCD
5.	Ministry of Industry (MoI)	UNFCCC, UNCCD
6.	Ministry of Trade (MoT)	UNCBD, UNCCD
7.	Ministry of Energy and Mining (MoEM)	UNCBD, UNFCCC, UNCCD
8.	Ministry of Research and Technology (MoRT)	UNCBD, UNFCCC, UNCCD
9.	Ministry of Transportation (MoT)	UNFCCC
10.	Ministry of Sea and Fishery (MoS&F)	UNCBD, UNFCCC, UNCCD
11.	Wetland International – Indonesia Programme (WI-IP)	UNCBD, UNCCD
12.	Pelangi	UNFCCC, UNCCD

Source: Several LAKIP of the related institutions, 2004; and Related Report

3.3.1 Assessment of Cross-cutting Requirements

There are eight cross-cutting requirements identified in the assessment result produced by UNITAR; they are national and regional action plan, legislation, research, public education, public participation, information exchange, training and preparation prior to attending the Conference of

the Parties. Given this issue, Indonesia has chosen five main priorities as displayed in Table 3.3.

Table 3.3. Priority of Cross-cutting Requirements of the Conventions

	CBD	CCC	CCD
(1) Legislation	Article 8(k)	Preamble	Article 16(g)
(2) National & regional action plans	Article 6(a); (b)	Article 4.1(b)	Article 9,10
(3) Public education + training	Article 13, 12(a)	Article 6.a(i)	Article 5(d),6,19
(4) Public participation	Article 9	Article 6.1(iii)	Article 19(4)
(5) Information Exchange	Article 17	Article 7	Article 16

Source: UNITAR guideline, 2001

The capacity to implement the cross-cutting issues of the conventions at the system level, institutional level and individual level is displayed in the following discussion.

1) Legislation

In general, Indonesia needs to develop national legislation supporting the implementation of the conventions; not only to implement the explicit obligatory articles, but also the entire convention, guaranteeing an effective national implementation.

a. Capacity at the system level

The government has not executed its function effectively in developing the legislation related to these three conventions. The area of concerns remains on the development of appropriate policies, regulations, strategies and programs in the system level. In the contextual framework, the three conventions have not received an appropriate attention that set them as a priority, since the current legislation gives no room for an effective implementation of the conventions. The identification result of the situational analysis in formulating legislation for the three conventions is still incomplete.

Whether a legislation exists or not, the fulfillment of the requirements of the conventions is reported in the national report of CBD, in the national communication of CCC and in the national action program of CCD. The identification results show that the implementation of each

convention at the national level is still superficial and is not soundly basis; a basis that can provide an effective implementation of the conventions.

The current environmental regulations are not in contrary with the implementation of the three conventions; however they are not sufficient to regulate the implementation of the three conventions optimally. However, the law enforcement activities are still ineffective. Low in sanctions, low in awareness of the materials and the contents of the laws, and low of political willingness to punish those going astray from the environmental compliance are the reasons of this ineffectiveness. Not only that, lack of a good governance, such as a high rate in corruption, collusion and nepotism at every government level has exacerbated the law enforcement measures at the entire activity levels.

The current environmental laws have regulated climate and land issues indirectly, since they are ones of environmental components. However, Indonesia is still lacking of a regulation regarding climate change; regulating the impacts generated from the use of greenhouse gases at the global level, as well as the impacts inflicted on Indonesia and how Indonesia mitigates these problems.

In general, any policy development should go through public participation and decision making process; however public accountability carried out so far is still limited. The Performance Accountability Report of the Government institution, national report, private or NGO reports are not publicized optimally and only few people read them.

The constitution provides an authority to formulate legislation, whereas the Central Government holds the authority to produce Laws, Government Regulations and technical/sectoral regulations. The regional government then follows them up by endorsing regional regulations when needed. The authority to endorse the implementing regulation of the conventions, related to foreign affairs, also lies in the central government. To implement the conventions, the central

government has a mandate to develop the national legislation and guidelines that the regional government needs to follow up by producing similar regulations at the regional level.

From the property rights variable, the team identified lack of regulation on property rights and the utilization of natural resource. Property rights of the genetic resource or technology and the traditional or local knowledge related to the three conventions should receive more attention, especially in the formulation of the related requirements.

The implementation of the three conventions only runs effectively when market mechanism is in place normally; where scarcity has an inverse relationship with price. Based on this mechanism, the scarcer is a resource, the more expensive is the price. In reality, not all requirements related to financial and market flow run according to the appropriate market mechanism.

Several regulations to support the implementation of the three conventions were formulated based on scientific judgment. However, there are some that do not fully accommodate the scientific aspect, such as regulation on the economic valuation, which does not run optimally.

b. Capacity at the institutional level

The government institutions have a strategy in developing legislation related to each convention, even though they do not carry it out consistently. Besides, even though public consultation is in place, effort to develop legislation is only based on a vested interest of a certain group and does not include a wider public participation, leaving the risk management behind.

Most of the government strategy is not based upon authority when producing legislation related to each convention at the institutional level. At the sectoral level, the formally or legally appointed sectors do not think they have a mandate to follow the requirements under the conventions nor have a specific strategy to develop policy and legislation to implement the convention.

The limited government budget results in a non-optimum resource allocation; the government budget is often insufficient to fulfill the predetermined plan.

Human resource is not adequately allocated in producing a policy, since their expertise is inadequate with the subject. In general, human resource allocation in the government institution is not in line with the need the institution is requiring, whereas not only legal experts who are involved in producing a policy, but also other experts, subject to the issue.

To date, the available financial controlling mechanism is fairly rigorous and adequate, but the implementation often goes astray from the existing mechanism due to lack of governing principle.

Several government institutions, that have a mandate to produce legislation related to the three conventions, already have an operational procedure in place. Producing legislation in Indonesia consumes a lot of time and money, resulting in an ineffective and inefficient implementation. In the law making process, the operational target is not defined appropriately, resulting in a time frame that goes beyond schedule.

In the government institutions that have developed legislation, sufficient guidelines and internal assessment are available, even though the implementation is not intentionally driven for the sake of the conventions. The internal audit process runs well, but the follow up action is not promptly implemented nor included in the future planning system.

A specific organization for evaluation and reporting is available in every part of technical department. It is suffice to say that the evaluation mechanism is sufficient, even though legislation expenditure is non transparent.

To date, there is a transparent recruitment and promotion system for a staff, however the implementation often goes astray from the existing

system (in regions staffs' recruitment is associated with compromise or CCN). A transparent promotion mechanism is available, but it has not run well. The same condition takes place for the existing performance system.

c. Capacity at the individual level

With regards to a function to develop policies, regulations, strategies and programs at the individual level, there are several government institutions holding a policy making mandate related to the conventions that have a clear job requirement for their policy makers.

The wages and incentives of the policy makers of the government institutions related to the convention follow the wages and incentives set for the government employees. Notwithstanding, this current standard seems insufficient. With regards to career development, the government has adopted a career development mechanism for those holding the functional position. The system is considerably clear, but when confronting with the load of work, the quantity and its relevancy are not optimal.

The government institutions have built a training facility to improve the expertise in developing policy related to the conventions; however the effort is still lacking of its effectiveness and its sustainability. The current practice indicates that the contents or the requirements of the conventions are not specifically included in the training package, but they are by chance included on account of their correlation with the sector's issue.

2) National Action Plan

The three conventions suggest that a national action plan integrates all programs to ensure the operational nature of their implementation.

a. Capacity in the systemic system

It is perceived that the regulation related to the national action plan is considerably adequate, but the problem lies in the non legally binding nature of the national action plan of the three conventions.

Public participation mechanism in producing a national action plan is already available and runs well, even though the participation is partially found.

Public accountability is very limited, as written in LAKIP and in a hearing report of the parliament. Therefore, public have limited access to this information. Other type of accountability report in the national action plan is the national report of CBD, the national communication of CCC, and the action program of CCD.

To date, the authority of producing strategy and action plan of the three conventions lies in the central government, even though the process includes inputs generation from the regional stakeholders (related sector).

The national action plan explicitly spells out the delegation of authority among the central and regional governments. However, a clarified authority delegation among central and regional governments in implementing the three conventions is necessary. The action plan implementation is insufficient in several sectors. Nonetheless, several action plan programs have paid attention to intellectual property rights.

Market and financial flow aspects are included in the national action plan of the three conventions, but they are not elaborated in detail. Besides, the national action plan also includes science and risk, that serve as the basis. Academics, practitioners, bureaucrats, non governmental organizations and scientist participate in the development of the national action plan of the three conventions.

b. Capacity at the institutional level

Several related sectors (the stakeholders) participated in the action plan making process, such as in the Strategy and National Action Plan of Biodiversity and National Action Plan of CCD, but the National Communication of CCC is still sectoral in nature. Managerial structure is available and is currently running well, as reflected from the completion of the action plan on biodiversity, climate change and land degradation.

The development of an action plan is a project-based activity that received participation from many institutions. The entire action plans of the three conventions are merely documents of planning which sectors and regions are not legally bound to implement or use them as the basis for the development of sectoral and regional planning. At present, it is crucial to have those planning documents endorsed as legally binding ones, used by sectors and regions as their legally binding reference.

In the development of an action plan, the participating institutions did not hold a specific mandate, as specifically mandated in each convention. Participation of an institution was limited to its appointment as the National Focal Point (NFP), while other participating institutions other than NFP had no specific plan to develop an action plan for the three conventions. However, the implementation of the action plan practically is related to the task and function of the respective institution. There is no harmony between the goals and targets and its indicators, since the indicators are still vague and lack of common commitment or coordination or synergy among the institutions.

In the sectoral and regional levels, the action plan can be developed in harmony with the plan produced at the national level (even though it is not legally binding).

The government (the institutions pertaining to the development of an action plan) did not allocate resources or management plan in the development of an action plan. It was the donors or the secretariat of the respective conventions who allocated their resources in developing the action plan. Budget control management goes along with the mechanism that the donors require.

There is no operational procedure or guideline for the implementation of an action plan for each convention. For example, CCD has not set up agreed criteria for critical land, resulting in lack of operational guidelines. However, there is a clear operational target in some

programs, such as CBD has a clear operational target for its endangered species recovery (tigers, elephants, rhinos, orang utans).

In terms of information, bureaucracy issues and the worthiness value of information that people consider block the information flows.

In general, the delegation of an employee in terms of implementing the action plan is not based on a Ministerial Decree. However, every government institution has adopted and implemented such a mechanism - regulated in the existing program- even though it is lacking of its transparency.

The organizing team of each convention has set up a reporting and accountability system when developing an action plan. The report is called LAKIP, which is reported quarterly. The monitoring performance of the members of the organizing team is considerably sufficient but the implementation goes beyond the expectation

c. Capacity at the individual level

An institution holding the authority to coordinate the development of an action plan set up an organizing team whose job was to facilitate activities in developing an action plan. The institution also recruited members of the organizing team with respect to his or her position, expertise and experience in the three conventions. There was no specific requirement for those who got involved in the development of an action plan, since the recruitment was merely based on expertise of the proposed candidate.

The wage and incentive standard for the individual who participated in the development of the action plan was not compatible with those of a foreign expert.

There has never been any training for developing an action plan. Therefore, any individual whose job is to develop an action plan, needs an in-depth understanding in performing an analysis with regard to the proposed method. As an addition, he or she needs to improve his or her expertise in utilizing several methods appropriate for the

development of the action plan of each convention. The available information is considerably sufficient for the development of an action plan.

3) Public education and training

Public education and training refers to any activity to increase the awareness and understanding to implement the three conventions. Besides, there is a need to enhance the networking and to disseminate data and information of the related convention.

a. Capacity at the system level

With regards to public education and training for the three conventions, the government has developed sufficient policies, regulations, strategies and programs at the system level.

In general, public education and training are regulated in several environmental regulations, but the regulations do not specify public education and training of the three conventions.

The data indicates that education and training are already in practice and public participation for the three conventions is already adequate, especially from the NGOs. But this participation has not reached a wider range of private participation especially from private sectors, schools, academics and public in general. Currently, public accountability is fairly limited.

With regards to public education and training, it is suffice to say that science and risk were taken into consideration in the implementing methodology.

b. Capacity at the institutional level

The government has produced several strategies to support the implementation of public education and training of the three conventions as written in the strategic plan, but the implementation is considerably inconsistent due to several specific hurdles. NGOs participate in public education and training activities consistently, but the program goes beyond what the government is expecting. Therefore, there is a need to synchronize these activities.

With regards to risk management of public education and training, the government has accommodated the risk, but unfortunately it is inadequate. From the corporate strategy perspective, every institution has developed a mandate-based strategy to carry out public education and training activities. However the activities are not in harmony with the management plan, nor have clear or sustainable criteria and indicators for evaluating their success measures.

Resource management goes along with the management plan, but unfortunately every institution does not set public education and training activities as its priority, except NGO. A budget controlling mechanism is available, but it does not run optimally.

Several institutions have set up an operational procedure regarding public education and training. Information flow on public education and training runs well and the information is accessible.

There is a formal reporting and accountability system for any activity at the government level. One of them is LAKIP that has a clear reporting system, but unfortunately it is lacking of its sound implementation.

c. Capacity at the individual level

A job requirement is considerably clear in the implementation of public education and trainings, especially for the training providers for whom specific requirements are set.

The standard wage and incentive for any individual involved in public education and training activities is insufficient. An instructor's (widyaiswara) career path is well structured especially when it is associated with the existing functional and structural positions.

A sufficient training facility with the goal to improve expertise in public education and training for the three conventions is available.

It is perceived that NGOs have carried out a lot of public education and training activities. A government employee receives his/her skill development through undertaking series of trainings, workshops, seminars, and national and international trainings. Information on public and training for an individual is considerably sufficient.

4) Public participation

Any public participating activities of the three conventions is expected to be able to harmonize programs and to smooth experience exchange among them. This networking will closely work together with governmental and non-governmental organizations to optimize the implementation of the three conventions.

a. Capacity at the system level

Executing the situational analysis of the three conventions on account of public participation, we have found that among the three conventions, only CBD that has a complete situational analysis with regards to public participation.

In general, there is no correlation between public participation of the three conventions and the national report, but the national report of CBD has accommodated public participation activities in the protected area. As for CCC, the National Committee of Climate Change holds the responsibility for dissemination activities.

The government has a mandate to regulate and to develop policy on environmental management, including the environmental planning, utilization, management and recycling of natural resource, among other is the genetic resource.

In the field of law enforcement, the government has not developed a sanction scheme when violation occurs. Dispute settlement mechanism, especially on CBD activities, has gone through a clear legal procedure mechanism. But when a conflict takes place, disputing the traditional rights in a conservation area, the settlement mechanism can be carried out through a legal process and through setting up an enclave in that area, after series of meeting and agreements at every level is achieved.

The government of Indonesia has put in place a mechanism of public participation in a policy making and in the decision making process. The delegation of job and mandate with regards to public participation is clear and is in accordance with its job and function. However, an overlapping occurs during the implementation phase due to several vested interests.

Public participation and tenure, especially in CCD and CBD application, is acknowledged especially in the implementation of property rights on the natural resource diversity. Meanwhile, CCC has not acknowledged property rights and tenure, since lack of society awareness and the infancy nature of the issue, as well as the condition which is still subject to debate.

The intellectual right in terms of CBD refers to the local or traditional knowledge and the issue has been discussed several times in the discussion forums. However, there is still a need to elaborate the issue into an appropriate legislation, in order to protect the property rights of the knowledge.

Any activity requiring public participation has considered science and risk into its analysis. The analysis mainly focuses on the delivery method, on how a society participates in an activity. Academics participation to increase public participation in an activity related the convention exists.

b. Capacity at the institutional level

Only two conventions, CBD and CCD, that have included public participation in their strategies implementation, while CCC failed to do so subject to lack of dissemination of CCC itself.

NGOs have contributed to the implementation of risk management with regards to public participation; and it is well managed. The activity refers only to CBD. As for CCC, even though a National Disaster Coordination Agency is appointed as the responsible unit, the program

still stumbles. Public participation in the CCD implementation do not include risk management.

In the structure management of CBD and CCD, a clear structure, which is an output oriented one, is available. CCC has set up a management structure but it fails to run accordingly.

The existing strategy that supports public participation for the three conventions is based upon mandate. The related institutions have set up only limited programs related to the implementation of the conventions, associated with the management plan for the three conventions.

The government institution requires any resource allocation to follow the management plan. Nonetheless, public participation activities for the three conventions do not conform to the management plan, since the government does not set it as the priority, except at the NGO level. As for the budget controlling mechanism for the public participation activities, the three conventions share a similar condition and the mechanism must conform to that the government sets up.

Most of the government institutions have adopted an operational standard procedure to carry out public participation activities for the three conventions.

The current monitoring performance is qualitatively and quantitatively adequate, but its continuity is not optimum, so that it is difficult to measure the success measures of public participation activities.

c. Capacity at the individual level

There is no specific job requirement for the implementation of public participation activities. Every responsible individual receives less guidance to achieve his or her goal. To reach a desirable implementation of public participation activities, the government usually invites other player's participation (NGO).

The existing wage and incentive standard for any individual working as a government employee in the field of public participation conforms to the standard that the government sets. An international NGO has a wage system with a specific standard, while the local NGO has not adopted that kind of system. In the career development, the government has set up a career path for its employees but the implementation does not conform to the existing standard, especially for those engaged in public participation activities.

In general, we can say that the human resource related to public participation (especially for CBD and CCD) is sufficient and is supported with appropriate trainings, even though in several aspects the trainings are not appropriate to the existing condition. Meanwhile, CCC receives inadequate human resource support.

The information on public participation is considerably sufficient, but there is also a need to improve and to add the information continually, so that people can access new and globally updated information. Besides, the scientific aspect to develop human resource capacity is considerably sufficient, but it also requires transfer of knowledge systematically, improving its performance. Besides, there is also a need to improve research and study by means of engaging scientists and technical staffs in Indonesia to guarantee the scientific accountability of the knowledge.

5) Information Exchange

The obligation on this issue is implemented through an information flow facilitation, collected from all available resources, concerning the implementation of the three conventions.

a. Capacity at the system level

In the information exchange context, a complete situational analysis for the Convention on Biological Diversity is available, while the other two conventions (CCC and CCD) are lacking of their complete analysis. Even though several policies on information exchange are established, they fail to regulate the information exchange issue of the three conventions.

The national reports of the three conventions have incorporated the information exchange activities. Nonetheless, the information and science exchange has been an issue that needs further elaboration at the national political level.

The existing environmental regulations are conducive to support the information exchange issue. Besides, in general there is a specific law that regulates the freedom to access information from mass media. CBD is the only convention that has a regulation on the exchange of specific information, while CCC and CCD only regulate the issue in general. A Clearing House Mechanism (CHM) was set up as a means to exchange the information. Currently it only applies to CBD, but it may be possible for other conventions to adopt a similar mechanism.

Government has invited public participation in the decision making process for an information exchange policy. Besides, public can access the general report to find the accountability of the implemented activities. There is no authority that particularly regulates an information exchange of the three conventions, since information exchange has no correlation with authority.

To date a mechanism to implement property rights and tenure principles on the natural resource diversity has not run yet, even though several agreements have been reached, among others the Technical Commission of the Natcom, under CCC, since it falls short of coordination with the NFP. The CHM acknowledges the property or copy rights of information through a mechanism; it also applies to an exchange of confidential information. The law no. 19 of 2002 regarding the intellectual property rights regulates the underlying issue and can serve as the basis for the implementation of the issue for the three conventions.

Market and financial flow issue may have no direct correlation with information exchange. A high cost is incurred when accessing some information, not because of the scarcity of the issue but because of the degree of difficulty in accessing the data; thus resulting in a high cost. The up-dated information gains a higher value. There is a need to

develop a regulation that can simplify access to information and the information exchange mechanism for the benefits of both owners and users.

b. Capacity at the institutional level

There is no strategy as the basis for the information exchange of the three conventions; even if it is available, the strategy does not work out well. The implementation of the information exchange has not taken into account risk management; hence management structure does not run effectively.

The existing strategy, as the basis for the information exchange activities of the three conventions has not been based upon mandate. The information exchange plan has not been associated with the management plan, so that the desired goals and targets are baseless.

As it does with the corporate strategy, the development of information exchange takes place in sectors. The problem lies in how to develop a mechanism to facilitate the transfer of information that sectors have to developed and to fulfill the information for the sake of an effective implementation of the conventions. Besides, the government needs to share its information with NGOs who developed their information system.

In the government institutions, the implementation of internal and external information exchange has not been properly regulated or has received less guidance. Besides, there is no monitoring and surveillance system in this respect due to the sectors ego and lacks of cooperative synergy. Nonetheless, the information system developed by sectors is benefiting their monitoring and evaluating activities.

There is a standard guideline for any reporting and accountability system for all activities at the government level; it includes information exchange report. LAKIP is one type of a reporting system with a clear definition; however the implementation is still inadequate.

c. Capacity at the individual level

Almost similar with the previous issue, there is no specific job requirement for a position that implements the information exchange. Every individual who manages the information exchange issue must comprehend things related to the information and information technology exchange.

To achieve a good information exchange implementation, the institution sets up a specific recruitment process or when the human resources is available, then the institution carries out trainings in respect to the information exchange implementation.

The existing wage and incentive standard for any individual working as a government employee in the field of information exchange conforms to the standard set by the government. In the career development, a career development system for a government employee is available, but the implementation is not according to existing system

In general, the human resources that an institution or an agency employs have been adequately prepared, supported by adequate trainings. The information exchange activities stumble due to lack of neither government coordination nor assistance. Consequently, the available information is scattered and difficult to access. The decision makers and politicians need to participate in the transfer of knowledge to guarantee the implementation of the conventions.

3.3.2 Cross-cutting Capacity of the Conventions

Referring the UNITAR guideline, Indonesia has selected several cross-cutting constraints and weaknesses, the capacity needs, opportunities as elaborated below.

A. Cross-cutting constraints and weaknesses of the conventions

Analyzing the correlation among the individual assessment of the convention and the cross-cutting assessment of the conventions, we identified the main cross-cutting constraints of the conventions in implementing the three conventions are as follows:

- (1) Policies, laws and legal framework, and its implementation;

- (2) Institutional mandate, coordination, interacting process, and cooperation among the stakeholders;
- (3) Access to funding resource;
- (4) Communication, education, public awareness, and information exchange;
- (5) Individual expertise and motivation;
- (6) Awareness building and information exchange.

1. Cross-cutting capacity constraints and weaknesses at the system level

Based on the individual assessment and the cross-cutting requirements, as well as stakeholders' agreement, we identified the cross-cutting capacity constraints at the system level as follows: national policy, law and legal framework and its implementation. The cross-cutting capacity constraints took place on account of weaknesses occurring at the system level as follows:

- Lack of legislation integrating the implementation of each convention,
- Lack of supporting mechanism to implement activities related to the three conventions in the related institutions,
- Lack of appropriate mechanism to follow up the COP results,
- Lack of an effective dissemination system that reaches the entire stakeholders in developing the legislation.

2. Cross-cutting capacity constraints and weakness at the institutional level

Based on the individual assessment and the cross-cutting requirements, as well as stakeholders' agreement, we identified the cross-cutting capacity constraints at the institutional level as follows:

- 1) Institutional mandate, coordination and interacting process as well as collaboration among stakeholders;
- 2) Financial resource, and;
- 3) Communication, education, public awareness and information exchange.

The three cross-cutting constraints took place on account of several weaknesses, as follows:

- Non-inclusion of the convention specifically in the mandate, task, authority and priority of the institutions; both at central and regional levels;
- Lack of a clear legal and mandate status, nor the main task of NFP;
- Improper delegation of the NFP of each convention; it was not located at a unit that specifically managed the convention;
- Different perception among and inter institutions regarding the importance of each convention;
- Low of coordination among and inter institutions both at national and regional levels;
- Inadequate implementation of the accountability report and development of a national report;
- Lack of information and of funding resource availability;
- Lack of capacity in focusing the appropriate activities that meet donors' requirement.
- Non inclusion of the convention's needs in the training program carried out by the related institutions.
- Low capacity on information and data system management, especially on data resource and accessibility.

3. Cross-cutting capacity constraints and weaknesses at the individual level

Based on the individual assessment and the cross-cutting requirements, as well as stakeholders' agreement, we identified the cross-cutting capacity constraints at the individual level as follows:

- 1) Individual expertise and motivation;
- 2) Awareness and information exchange.

The two constraints took place on account of the following weaknesses:

- Lack of individual participation in education and training program,
- Lack of individual expertise in accessing the available information.

B. Capacity needs and opportunities

Using a method, similar to that used in the assessment of the individual convention, then we identified the capacity needs and opportunities of each convention as follows:

1. Capacity needs and opportunities at the system level

Based on the analysis result and the stakeholders' agreement, we identified the capacity needs of each convention, taking place at the system level as follows:

1. To review and revise the existing legislation targeted at integrating the implementation of each convention, by taking into consideration these following aspects:
 - a. Intellectual property rights
 - b. Clear authority among central and regional levels
 - c. Incentive and disincentive mechanism
 - d. Conflict settlement mechanism
 - e. Harmony among regulation and policy
 - f. Public/stakeholder participation mechanism
2. Mechanism that supports the implementation of activities pertaining to the three conventions in the related institutions;
3. Mechanism to follow up the Conference of the Party, and;
4. An effective dissemination, reaching the entire stakeholders when developing a legislation.

Analyzing the four capacity needs of each convention, we identified the existing opportunities, as follows:

- Ratification of the three conventions, providing better opportunity to develop Law and its implementing regulation;
- A dynamic political system, one example is the Constitutional Court that will review a Law;
- Experts availability to review and revise policy and regulation;
- Data availability, even though they are found scattered;
- Website availability, such as NBIN, PIKA, MBK that cover issues of the three conventions;
- Existence of local and religious laws, which are still effective to settle any dispute, and;
- Availability of an implementing guidance to settle any environmental dispute in general (Government Regulation No. 54 of 2000).

2. Capacity needs and opportunities at the institutional level

Based on the analysis result and the stakeholders' agreement, we identified the capacity needs of each convention taking place at the institutional level as follows:

1. To accommodate the convention into a specific institutional mandate, job, authority, and priority in the central and regional levels,
2. To acquire a legal status and mandate, as well as job description of the NFP in implementing the convention at the central level,
3. To strengthen the secretariate and to locate NFP in an adequate unit,
4. To strengthen coordination among and inter institution at the central and regional levels,
5. To develop an institutional accountability report and the national report as a controlling instrument,
6. To optimize the human resource management (starting from forming of cadres, placement, career path, award and sanction system),
7. To optimize the use of funding resource (national and international) in every stakeholders level,
8. To maximizing access to national and international funding resource,
9. To formulate and implement education and training program,
10. To produce and implement campaign program,
11. To set up an information management agency.

Analyzing the eleven capacity needs of each convention, we identified the existing opportunities, as follows:

- A cabinet meeting mechanism at the central level, Coordination and Development Meeting or Working Meeting at the central level, and the Regional Coordination and Development Meeting at the regional level is available and its potential can be explored,
- A legislation system is available, which can formalize the job description,
- A human resource management system is available,
- A directory and guideline on funding access are available,
- An environmental commitment of private sectors is available

- Donors' representatives exist in Indonesia
- A policy to incorporate developing countries in accessing funding resource exists, which is endorsed by certain donors.
- A human resource management system is available, and
- Availability of IT unit and instrument almost in each institution.

3. Capacity needs and opportunities at the individual level

Based on the analysis result and the stakeholders' agreement, we identified the capacity needs of each convention taking place at the individual level as follows:

1. To increase individual participation in education and training program,
2. To increase public capacity in accessing information.

Analyzing the two capacity needs of each convention, we identified the existing opportunities, as follows:

- An instrument to identify and to implement training and dissemination of each convention is available, and;
- An initial effort to develop a social and economic incentive is already in place (kalpataru, kehati award).

C. Cross-cutting Environmental Management under the Conventions

This chapter focuses on the natural resource problems related to the three conventions. We identified three problems as elaborated in the next discussion; they are 1) deforestation, 2) land, coastal and marine degradation, and 3) drought and flood.

C.1 Natural Resource Management Problems

In general, the uncontrolled natural resource destruction is associated with the natural resource mismanagement taking place in forest, land and water, as indicated in the inappropriate system – the institutional and individual system – in respect to natural resource management.

Especially for the NCSA project, the experts decided to discuss those weaknesses in the implementation of the three conventions that results in deforestation, land, coastal and marine degradation, and drought and flood.

C.2 Deforestation

C.2.1 Definition

Deforestation refers to a destruction of forest condition and existence, both in terms of qualitative decline (such as soil fertility loss) and the quantitative decline (such as area and forest canopy potency), as a result of destructive process of activities; such as unsustainable harvesting, illegal logging and forest conversion into other usage.

C.2.2 Current condition

Indonesia is one of the nations in the world with an alarming rate of deforestation. The Forest Statistic in 2004 revealed the fact that forest destruction rate in Indonesia reached 1.6 million hectares per annum. According to Citra Landsat data of DoF, during 1997-1999 the excessive logging took place mostly in the production forest. Out of the 46.7 million hectares of production forest, only 41% remained as a primary forest, 29% remained as the ex-logging area with a good to moderate condition, while the remaining 30% was considered as a destructed forest area. Illegal logging and logging robbery has inflicted a financial loss to the amount of Rp. 30.42 billion/year. The number excludes environmental and social loss, which is considerably important, even though the valuation is difficult to obtain .

Illegal logging, forest fire and forest conversion are the main factors of deforestation. Deforestation is the main issue in the three Rio conventions, namely, UNCBD, UNFCCC and UNCCD. With regards to CBD, deforestation resulted in a huge biodiversity loss of Indonesian forest ecosystem, especially in the lowland forests with the richest biodiversity. As for the UNFCCC, deforestation resulted in an increase of greenhouses gasses as a consequence of a decrease in forest coverage that could absorb CO₂, and an increase of carbon released to the atmosphere on account of forest fires and land clearings. With regards to UNCCD, deforestation is accused directly to cause forest destruction resulting in bare and non productive land.

C.2.3. Constraints

Among the constraints in the efforts to reduce and to halt deforestation rate, one of them is the low of awareness, understanding and concern from the related stakeholders. Most of the society are lacking of the awareness and understanding regarding the impacts of the deforestation in their daily activities as the asset of development. Most of the stakeholders only recognize the short term productive value of a forest resource.

The lack of understanding on the long term forest value leads to a no concern attitude, exacerbating the destruction level of the biodiversity resource. Greediness is also another factor of this lack of concern, disregarding the sustainable principles and law, resulting in excessive exploitation of forest resource that exceeds the carrying capacity. Besides, greediness also results in illegal logging.

C.3 Land, Coastal and Marine Degradation

C.3.1 Definition

Land degradation (including coastal area) is a reduction or a land productivity loss in regards to its physical, chemical, biological and economic characteristics, as well as its land complexity as rain receptor, irrigating land, or as savanna, flock tending area, natural forest and plantation forest; as consequences of land use or a process or a combination of processes, including man-made processes and land use pattern. Meanwhile, marine degradation refers to destruction of marine ecosystems, such as coral reefs and lagoon on account of destructive fishery activities or processes and activities taking place in land that directly affects marine ecosystem.

C.3.2 Current Condition

The worsening land condition forces society living in the degraded land to encounter several threats, such as the decline (loss) of soil fertility, lack of water resource, famine and emergence of several diseases. Besides, land degradation in global terms also threatens the existence of several biodiversities and could cause global warming. Land and marine degradation refers to these following conditions: *Over fishing*, coral reef deterioration, abrasion, ship accident, mangrove

destruction, sea sand exploration, land digging and coastal line reclamation.

We can say a seashore or marine suffers from an environmental damage when coastal degradation exists and mangrove forest area dwindles because of its conversion into ponds. The environmental damages are physically feasible through the existence of coastal erosion/abrasion, loss of coastal borderline and decline or destruction of biodiversity or fauna and its habitats. Society living in the degraded mangrove forest suffers from an economic and welfare drawback. Destruction of mangrove forest and of the coastal environment adversely affects the fishing yield and reduces fishermen' income who live in coastal village. Forest mangroves converted into shrimp ponds and fish ponds in the Northern part of Java Island, Eastern part of Sumatra Island and South Celebes coastal lines, usually experienced an optimum harvesting in the first five years of production. After that, the ponds were not productive anymore and were left unmanaged, and thus becoming critical lands. The area of mangrove forest dwindles 1.1% per annum. Based on the latest forest mangrove data (National Forest Inventory Project in 1993), the area of mangrove forest declined to 4.25 million hectares in 1982, while in 1993 it remained only 3.7 million hectares.

C.3.3 Constraints

Almost similar with the deforestation issue, the main factors of land, coastal and marine degradation lie in the lack of awareness, lack of understanding, lack of concern and greedines of almost the entire stakeholders.

An unsustainable catching and fishing of fishery resource takes place when people harvest the resource excessively and or use a technology or techniques that adversely affect the environment. The practice exists in several marine areas in Indonesia, harvesting certain types of fish. There are several instruments destroying coastal biodiversity, such as the use of fish collecting tools, explosives, poisoning materials and tiger prowl. The degree of destruction often exceeds the degre of tidal destruction, since the prowl used to catch shrimps were 20 m of

Comment [TP4]: Pukat harimau

width and it could grind the sea bottom to the area of 1 km² within 1 hour.

C.4 Flood and Drought

C.4.1 Definition

Flood and drought are two natural phenomena, taking place always in Indonesia, whereas rainfall is the major cause of each of them. Flood is a result of an excessive rainfall (rainy season), while drought is a result of limited rainfall and water resources condition (dry season). These two phenomena adversely affect the livelihood of a society. The incorrect water conservation is the major cause of these phenomena.

Drought is defined as a natural phenomenon whereas the rainfalls do not reach the normal standard, causing hydrologic instability that affects water resource production system.

Flood is defined as an excessive rainfall condition retained in land surface in a relatively long period of time as a consequence of a positive water balance.

C.4.2 Current condition

Society is often experiencing water scarcity issue, especially when dry season arrives. The water need increases along with the population increase, massive growth of industrialization, housing sector, and the energy sector, that is, electricity. Even though the surface water potency (especially rivers) in Indonesia reaches approximately 15,500 m³/capita/annum, the availability varies in place and time. Java island consisting of 65% of total Indonesian population, can only provide 4.5% of the national fresh water capacity. Also, water resource fluctuates along the wet and dry seasons.

Problems on drought and flood are often associated with the destruction of the Water Catchments Areas (RCAs). RCAs deterioration in several locations in Indonesia results in a change of hydrological function of RCA. RCA, as a supporting catchment area, will lose its function when the area is degraded. Land conversion in the catchment

area, the expansion of critical lands and the spreading out of critical RCAs, illegal logging in the catchment areas and other factors contributing to the conversion of RCAs function are the starting points of a massive loss of water volume, in this regards, the surface run off needs to be conserved. The facts indicate that there is an increase of water deficit in the water shortage areas or the decrease of water resource in the surplus areas. The drying out of water pouches in the RCAs basins indicates that RCA loses its hydrological function.

The current flood pattern shows an increase intensity along with the increase of flood level on account of the change in rainfall pattern and land use change, caused by the expansion of forest conversion into other usage. Land use extremely affects the hydrological change in RCA and it will exacerbate the future flood intensity.

C.4.3. Constraints

Water conservation technologies are not popular in society because they are money consuming while the results are not directly feasible. Consequently, there is only a slight opportunity to put the technologies into practice. To date, society especially farmers need a support in terms of subsidy to implement water conservation technologies. The technologies generated and implemented under a governmental project only runs when the project exists. After the project reaches its completion, the technology is not put into practice anymore.

We can draw a conclusion that Java Island has a tremendous challenge in respect to water resource management at this present time. The current problem has a tendency to increase in the future. There are several water resource management programs put into action in Java; even they were dated back in the Dutch colonial time. To our concern, the proposed concepts and technical solutions have not addressed the current problems due to their complexity that require an integral management approach.

Low of public awareness in terms of water management, forest and river basin destruction, the inconsistent spatial planning are the main factors contributing to floods and droughts, that require an integrated

solution. The assessment is made as an effort to address flood and drought problems in Java island. It is expected that this assessment can bring forth an integrated concept that can be realistically implemented. The analysis focusses on the existing condition of the water resource infrastructure and other external factors that significantly affect the infrastructure management.

3.4 Action Plan

Action plan is the final NCSA output. The action plan discusses the implementing capacity at the system, institutional and individual levels.

3.4.1 Capacity Building at the system level

Based on the assessment result, there is a single constraint in implementing the capacity at the system level, which lies in the inadequate policy, law and regulation, and its implementation, as follows:

1. Most of the formal political statements endorsed by the government institution do not support the goal of the convention,
2. Non legally binding formal documents,
3. Legislation framework, starting from the law to regional regulation pertaining to the implementation of the three conventions, is not in harmony one to each other,
4. The implementation of the action plan of each convention is still in partial and lacks of integration.

a. Description of capacity, needs and the existing opportunity

To date, a function to develop and to implement policies, laws and regulations related to the three conventions has not run optimally. The condition takes place due to the unavailability of a complete situational analysis when developing polices, laws and regulations related to CBD, CCC and CCD. Besides, public participation is still limited both at the national and local levels, before and after the ratification of the three conventions.

Stakeholder awareness on the implementation of the conventions is also inadequate; even the implementing regulation formulated after

the ratification took place, has not either accommodated the three conventions integrally.

Other problem in the context of policies, laws and regulations for the implementation of the three conventions arises from the sectoral policies which overlap one to another and are not in harmony, as well as being found contradictive. The condition results in several repetitive programs that different institutions carry out due to lack of coordination.

Law enforcement in the implementation of the three conventions is still ineffective, with these following reasons:

- Low in sanctions;
- Low in awareness of the material and the contents of the laws;
- Low of political willingness to punish those violate the environmental compliance;
- Low of good governance, such as high rate of Corruption, Collusion and Nepotism in law enforcement efforts.

Based on the constraints on policies, laws and regulations, we found several weaknesses during the implementation of the three conventions, such as:

1. Lack of legislation integrating the implementation of each convention;
2. Lack of supporting mechanism for the implementation of activities related to the three conventions in the related institution;
3. Lack of COP follow up mechanism, and;
4. Lack of an effective dissemination system that can reach the entire stakeholders when developing the legislation.

To overcome the above mentioned constraints, Indonesia needs to implement the following activities:

1. To review and revise the existing legislation targeted at integrating the implementation of each convention, by taking into consideration these following aspects:
 - a. Intellectual property rights;
 - b. Clear authority among central and regional levels;

- c. Incentive and disincentive mechanism;
 - d. Conflict settlement mechanism;
 - e. Harmony among regulation and policy;
 - f. Public/stakeholder participation mechanism.
2. Mechanism that supports the implementation of activities pertaining to the three conventions in the related institutions;
 3. Mechanism to follow up the Conference of the Party, and;
 4. An effective dissemination, that reaches the entire stakeholders when developing a legislation.

Several existing opportunities to fulfill the above mentioned needs are as follows:

- Ratification of the three conventions, providing better opportunity to develop Law and its implementing regulation;
- A dynamic political system, one example is the Constitutional Court that will review a Law;
- Experts availability to review and revise policy and regulation;
- Data availability, even though they are found scattered;
- Website availability, such as NBIN, PIKA, MBK that cover issues of the three conventions;
- Existence of local and religious laws, which are still effective to settle any dispute, and;
- Availability of an implementing guidance to settle any environmental dispute in general (Government Regulation No. 54 of 2000).

b. List of on going activities

- Review on Law No. 5 of 1990;
- Review on Law No. 23 of 1997;
- Endorsement of Draft Law on Utilization of Genetic Resource;
- Formulation of Draft Law on the Utilization and Conservation of Genetic Resource;
- Formulation of Draft Law on Bioprospect, and;
- Preparation of the ratification of the *International Treaty on Plant Genetic Resources for Food and Agriculture*

Comment [TP5]: Apa itu bioprospeksi?

c. List of the active partners of the conventions

- Ministry of Environment
- Department of Forestry
- Department of Agriculture
- Department of Marine and Fishery
- The National Development and Planning Agency
- Department of Health
- Department of Foreign Affair
- Department Finance
- Department of Industry
- Department of Trade
- Ministry of Research and Technology
- Department of Education
- Department of Energy and Mineral Resource
- Department of Public Work
- Non-Department Governmental Agency
- NGO on conservation and environment
- Private sectors
- Academics

d. Proposed activities

There are several activities to be carried out in fulfilling the needs identified at the system level, such as:

- (1) Review, revise the legislation, integrating the implementation of each convention, by taking into consideration these following issues:
 1. Intellectual property rights
 2. Clear authority among central and regional government
 3. Incentive and disincentive mechanism
 4. Conflict settlement mechanism
 5. Harmony among regulation and policy
 6. Public/stakeholder participation mechanism

Those activities will be carried out through these following steps:

- a. Inventory and identification of regulations and policies related to the implementation of the conventions;

- b. Review of the regulations and policies identified from the inventory and identification activities, and;
- c. Formulation of policies based on the review result, meeting the needs at every level.

Several laws and regulations which need to be revisited are as follows:

1. Legislation on the CCC implementation:
 - Traditional knowledge (e.g. Law No. 41 of 1999 regarding Forestry, Law No. 23 of 1997 regarding Environmental Management);
 - Sanction rule on the utilization of the biodiversity resource (e.g. Law No. 5 of 1990 regarding the Conservation of Biodiversity Resource and the Ecosystem);
 - Genetic Resource utilization in agriculture, forestry and fishery, as well as its supporting sector (water use, honey bee, etc);
 - Incentive system (e.g. Law No. 23 of 1997 regarding Environmental Management, Law No. 5 of 1990 regarding the Conservation of Biodiversity and the Ecosystem);
 - Forest ranger authority and Government Officer Investigator/Environmental Officer Investigator (GOI/EOI) (e.g. Law No. 41 of 1999 on Forest Protection), and;
 - Public/stakeholders participation (e.g. Law No. 41 of 1999 on Forest Protection, Law No. 5 of 1990 on the Conservation of Biodiversity and the Ecosystem).

Besides the existing regulations, CBD implementation requires assurance on access to and profit sharing of the genetic resource and traditional knowledge.

2. Regulations related to the implementation of CCC are:
 - Air emission standard and regional regulation on air emission (e.g. Law No. 6 of 1994 on CCC ratification), and;
 - Energy and emission use (e.g. Law on Energy and Mining, and Law on Transportation).

Besides the existing regulations, the CCC implementation requires Clean Development Mechanism (CDM) formulation (regulation, criteria, sustainable development indicator), facilitating the implementation commitment while reviewing the existing subsidy and tax on energy and fossil fuel use (a need to provide an award for energy reduction and an efficient use of fossil fuel).

Comment [TP6]: MPB singkatan dari apa?

3. Regulations related to the implementation of CCD are as follows:

- River basin management that goes across counties and provinces (e.g. Government Regulation and Joint Ministerial Decree);
- Water resource (e.g. Law No. 7 of 2004 on Water Resources), and;
- Sanction for land destroyers and for those who do not implement land conservation (e.g. Law on Environment, Law on Forestry, and Law No. 24 of 1999 on Spatial Planning).

Besides the existing regulation, the implementation of CCD requires some regulations on incentive and disincentive for any land conservation in the upstream area, related to Article 10 of CCD.

4. Regulations related to the implementation of the three conventions regarding tenure conversion, regulation on out-of-court dispute settlement mechanism, network mechanism for the implementation (e.g. Presidential Decree No. 36 of 2005 regarding Government Rights).

There are several regulations that need harmonization, such as:

- CBD, Law No. 5 of 1990 (Department of Forestry) and Law No. 31 of 2004 (Department of Marine and Fishery) on on-site conservation related to CBD implementation;
- CCD, Law No. 5 of 1960 on the Basic Agrarian and Presidential Decree No. 36 of 2005 on land utilization, and;
- Standardization of terms used in the implementation of the three conventions, such as standardization of the emission unit between the international (scientific requirement) and national

(concentration/ppn). CCC requires a stipulation on the emission unit, which its mass/time meets the scientific requirement.

- (2) Develop a mechanism that support the implementation of activities related to the three conventions in the related institutions, and a mechanism to follow up the Conference of the Party result.

Followings are the steps taken to implement the above mentioned activities, such as:

1. MoE initiated series of meeting to develop the national coordinating agency or called *Bakornas*, and;
2. "*Bakornas*" formulates the basic concept of the mechanism and procedure of the three conventions, as well as finalizing the implementing guideline, supporting the activities of the three conventions in the related institutions.

- (3) Formulate an effective dissemination mechanism regarding the provisions of the conventions, accommodating the entire stakeholders' interest.

There are several steps to implement the above mentioned activities, such as:

1. To make an inventory and to identify the existing dissemination system, and;
2. To develop an effective dissemination mechanism.

e. Segregation of roles and responsibilities

The Ministry of Environment initiated the first meeting of "Bakornas" establishment. After being set up, "Bakornas" has a function to coordinate steps to implement the convention.

f. Success Indicators

The success measures are reflected in the following indicators:

Quantitative indicator

1. At least, one recommendation document is produced, containing the review result of several implementing regulations of each convention (CBD, CCC and CCD);

2. At least, one mechanism and a procedural concept are formulated that supports the implementation of activities related to the three conventions, as well as producing a mechanism to follow up the result of the Conference of the Party;
3. At least, a draft of dissemination and network mechanism are produced.

Qualitative indicator

1. The inclusion of each convention into a respective legislation (CBD, CCC and CCD), and the inclusion of intellectual property rights, clarity of authority among central and regional governments, incentive and disincentive mechanism, and harmonization of regulation and policy into recommendation paper resulted from the review activity;
2. A functional "Bakornas" is set up, equipped with appropriate mechanism and procedure;
3. Finalization of draft paper on an effective dissemination and networking mechanism for the three conventions.

Time and location indicator

All those activities should be carried out in one year period and be located in Indonesia.

g. Assumption

Those activities will run smoothly, should these following aspects be met:

1. Fund availability;
2. Political support, political will and commitment.
3. Adequate human resource availability, and;
4. Procedure, agreed by the entire stakeholders.

3.4.2 Capacity Building at the institutional level

The assessment activity identifies three implementation constraints when developing capacity at the institutional level. These constraints are elaborated in detail as follows:

1. Institutional mandate, coordination and interaction process, and cooperation among the stakeholders.

The assessment of each convention and the cross-cutting assessment identified several conditions when improving the capacity to implement the institutional mandate, coordination and interaction process, and the cooperation among the stakeholders, taking place at the institutional level, as follows:

a. Description of capacity, need and the existing opportunity

There is no sound basis in the appointment of the National Focal Point of each convention, resulting in some coordination hurdles among the related institutions, such as difficulty in communication and access to information. Different perception and lack of understanding among the central and regional institutions about their rights and mandates following up a ratification of a convention leads to some hurdles that an institution encounters, especially in developing working programs related to the three conventions. Therefore, the central and regional governments need to improve their functions in terms of coordination, cooperation, and information network.

The inadequate capacity pertaining to the institutional mandate, coordination and interaction process, and cooperation among the stakeholders is the result of the following factors:

1. The non-inclusion of the convention into a specific mandate, job, authority, and priority in the central and regional levels;
2. Lack of legal status, mandate and job description of the National Focal Point;
3. The non-inclusion of the National Focal Point of each convention in a specific unit that manages the convention;
4. Different perception among and inter institutions on the importance of each convention;
5. Lack of coordination among and inter institutions in the central and regional levels, and;
6. Inadequate implementation of the accountability report and the national report formulation.

The following activities are proposed to address those weaknesses:

- a. To accommodate the convention into a specific institutional mandate, job, authority, and priority at the central and regional levels;
- b. To acquire a legal status and mandate, as well as job description of the NFP in implementing the convention at the central level;
- c. To strengthen the secretariate and to locate NFP in an adequate unit;
- d. To strengthen coordination among and inter instution in the central and regional levels, and;
- e. To develop an institutional accountability report and the national report as a controlling instrument.

Several opportunities in fulfilling the above mentioned needs are:

- A cabinet meeting mechanism at the central level, Coordination and Development Meeting or Working Meeting at the central level, and the Regional Coordination and Development Meeting at the regional level are available and their potency can be explored;
- A legislation system is available, which can formalize the job description.

b. List of active partners of the conventions

- Ministry of Environemnt
- Department of Forestry
- The National Development and Planning Agency
- Department of Agriculture
- Non-Department Governmental Agency
- Meteorology and Geophysic Agency
- Department of Transportation
- Department of Health
- Department of Energy and Mineral Resource
- Ministry of Research and Technology
- Department of Marine and Fishery
- Department of Public Work
- Regional Government
- Academics
- NGOs, society groups
- Private sectors

c. Proposed Detailed Measures

The proposed activities are proposed to fulfill the identified needs at the institutional level, as follows:

(1) Clarification of the institutional mandate

1. To accommodate the convention into specific institutional mandate, job, authority and priority in the central and regional levels;
2. To acquire the legal status and mandate, as well as the job description of the NFP in implementing the convention at the central level;
3. To strengthen the secretariate and to locate NFP in the appropriate unit, and;
4. To strengthen coordination among and inter institutions in the central and regional levels.

The activities will go through these following steps:

1. Formalization of institutional mandate and job description in the central and regional levels;
2. Formalization of mandate and job description of NFP;
3. Strengthening the NFP secretariat and the related sector, and;
4. Setting up a national and regional coordination agency.

(2) Formulate an institutional accountability and a national report as controlling instruments

The proposed activities include the dissemination of the institutional accountability report and the national report of the three conventions to public.

d. Segregation of roles and responsibilities

When the "Bakornas" is established, then the institution will act as a coordinator of activities implementing the conventions. Later on, sectors will implement all technical activities at the institutional level under "Bakornas" coordination.

e. Success Indicators

Success measures of the proposed activities will be reflected in the following indicators:

Quantitative Indicators

1. A strong legacy exists in formulating the legal mandate and job description of an institution;
2. A strong legacy exists (Presidential Decree) in formulating the legal status and job description of the NFP;
3. A unit serving as the secretariat of the convention exists;
4. National and regional coordination agencies exist, endorsed by an appropriate regulation, and;
5. An institutional accountability report and the national report are available.

Qualitative Indicators

1. A strong legacy in formulating the mandate and job description of an institution;
2. An appropriate Presidential Decree;
3. Effective national and regional coordination agencies;
4. An effective and efficient unit, and;
5. An accountable and transparent financial resource alternative agency.

Time and location indicators

All these proposed activities should be carried out in the period of 1 to 3 years, carried out parallelly in Indonesia.

f. Assumption

The activities run effectively, should these following factors be met:

1. Financial resource is available;
2. Political support, political will and commitment are available;
3. An appropriate human resource is available;
4. A procedure agreed by the entire stakeholders is available.

2. Funding resource access

The assessment of each convention and the cross-cutting assessment identified several conditions when improving the capacity to implement

the access of funding resource, taking place at the institutional level as follows:

a. Description of capacity, need and the existing opportunity

The capacity on the access to funding resource in the national and international levels is still considerably insufficient, due to the following reasons:

1. Lack of institutional concern on the access to funding resource;
2. Lack of information on funding availability;
3. Low capacity in focussing the activities as required by donors.

The following activities are proposed to address those weaknesses:

1. Optimizing the human resource management (from forming of cadres, placement, career path, award and sanction system);
2. Optimizing the use of funding resource (national and international) at every level of stakeholders, and;
3. Maximizing access to national and international funding resource.

Several opportunities in fulfilling the above mentioned needs are:

- A human resource management system already exists;
- A directory and guideline on funding access already exists;
- Private sectors have shown their environmental commitment;
- Donor agency representative exists in Indonesia;
- A policy to incorporate developing countries in accessing funding resource exists, which is endorsed by certain donors.
- Cooperation programs funded by international partners exist.

b. List of the related ongoing activities

- Training on how to develop a proposal on access to funding disbursed by certain donors, and;
- Promotion of certain programs.

c. List of active partners of the conventions

- Ministry of Environment
- National Development and Planning Agency
- Department of Finance
- NGO

- Donor (GEF)

d. Proposed detailed measures

The proposed activities to fulfill the identified needs at the institutional level are as follows:

- (1) Strengthening the human resource management and funding access
 1. Optimizing the human resource management (forming of cadres, placement, career path, award and sanction system);
 2. Optimizing the use of funding resource (national and international) in every stakeholders level, and;
 3. Maximizing access to national and international funding resource.

The proposed activities shall be carried out through these following steps:

1. Optimizing the human resource management through setting up a clear form of cadres, placement, career path, award and sanction system, supporting the implementation of each convention;
2. Optimizing the use of funding resource (national and international) in every stakeholders level;
3. Maximizing access to national and international funding resource:
 - NFP encourages the full access to international funding.
 - NFP looks for and communicates funding alternative in implementing the three conventions.
4. Establishment of a new alternative funding resource agency.

e. Segregation of roles and responsibilities

The Ministry of Environment initiated the early “Bakornas” establishment. When this institution is set up, then it will act as the coordinator in setting up further actions, implementing the coventions pertaining to access to funding resource. Later on, the related sectors will carry out the technical activities at the institutional level.

f. Success Indicators

Success measures of the proposed activities will be reflected in the following indicators:

Quantitative Indicators

1. Guideline on human resource management is available, reflected in the clear form of cadres, placement, career path, award and sanction system;
2. Guideline on funding management is available;
3. An external network and cooperation is established, and;
4. An alternative funding resource agency exists.

Qualitative indicators

1. A transparent and an accountable guideline on human resource management, reflected in the clear form of cadres, placement, career path, award and sanction system;
2. A transparent and an accountable guideline on funding management;
3. An operational external network and cooperation, and;
4. A transparent and an accountable alternative funding resource agency.

Time and location indicator

All of these activities should be carried out in one year period in Indonesia.

g. Assumption

The activities run effectively, should these following factors be met:

1. Financial resource is available;
2. Political support, political will and commitment are available, and;
3. An adequate human resource management is in place;
4. A procedure agreed by the entire stakeholders is available.

3. Communication, education, public awareness and information exchange

The assessment of each convention and the cross-cutting assessment identified several conditions when improving the capacity to implement the communication, education, public awareness and information exchange, taking place at the institutional level as follows:

a. Description of capacity, need and the existing opportunity

The capacity in the area of communication, education, access, people awareness and information exchange is considerably insufficient, due to these following reasons:

1. Lack of training in each related institution, accommodating the need of each convention, and;
2. Low on information and data base system, especially on the source and accessibility of data.

The following activities are proposed to address those weaknesses:

1. Formulation and implementation of ducation and training programs;
2. Formulation and implementation of campaign programs, and;
3. Establishment of an information management agency.

Several opportunities in fulfilling the above mentioned needs are:

- Human resource management system is available, and;
- Almost every institution has an IT unit and instrument.

b. List of the ongoing activities

Several ongoing activities related to the issue are as follows:

- Clearing House establishment for two conventions (CBD and CCC);
- Dissemination of the Biological Diversity (CBD) strategy and action plan;
- Preparation of the second National Communication (CCC), and;
- Training on the biodiversity mapping, exploring the dynamic model.

c. List of active partners of the conventions

- Ministry of Environment
- National Development and Planning Agency
- Department of National Education

- Non Department Governmental Agency
- NGO

d. Proposed detailed measures

The proposed activities to fulfill the identified needs at the institutional level are as follows:

(1) Strengthening the human resource capacity

1. Development of an education and training program related to the implementation of each convention, and;
2. Development of a campaign program related to the implementation of each convention.

The proposed activities shall be carried out through the following steps:

1. Need identification and training strategy to implement the convention, and;
2. Development of campaign packages using simple wording which is easily communicated (multimedia dissemination)

(2) Establishment of an information management institution

Steps to establish an information management institution are required to implement activities related to information system management.

e. Segregation of roles and responsibilities

The Ministry of Environment initiated the early “Bakornas” establishment. When this institution is set up, then it will act as the coordinator in setting up further actions implementing the conventions, pertaining to access to funding resource. Later on, the related sectors will carry out the technical activities at the institutional level.

f. Success Indicators

Success measures of the proposed activities will be reflected in the following indicators:

Quantitative indicators

1. List of training need in implementing each convention is available;
2. Campaign materials are available, and;
3. An information management agency for each or for the three conventions exists.

Qualitative indicators

1. A comprehensive training list;
2. Adequate and communicative campaign materials, and;
3. A reliable information management agency for each or for the three conventions.

Time and location indicator

All these proposed activities will be carried out in one year parallelly. The campaign programs should be continuously done in Indonesia.

g. Assumption

The activities run effectively, should these following factors be met:

1. Financial resource is available;
2. Political support, political will and commitment are available, and;
3. An adequate human resource is available
4. A procedure agreed by the entire stakeholders is available.

3.4.3 Capacity Development at the individual level

The assessment activity identified two implementation constraints when implementing the capacity building at the individual level. These constraints are low of individual expertise and motivation, and low of awareness and information exchange, as elaborated in detail, as follows:

1. Individual expertise and motivation

The assessment of each convention and the cross-cutting assessment identified several conditions when improving the capacity of individual expertise and motivation that takes place at the individual level, as follows:

a. Description of capacity, need and the existing opportunity

At present, individual expertise in implementing items of the convention is still inadequate. Most of the technical expertise related to the three conventions are relatively limited, for example the capacity to address land rehabilitation problem.

Function to mobilize issue related to the three conventions have not run optimally. Besides, individual motivation in implementing the convention is also low, since concern over the incentive and career development issues in the institutional level is also low.

The low individual expertise and motivation in implementing the three conventions as described above are the result of low individual participation in training and education program.

Therefore, improving the individual participation in training and education program is the answer to address these weaknesses.

Several opportunities in fulfilling the above mentioned needs are:

- An instrument to identify and to implement training and dissemination of each convention is available, and;
- An initial effort to develop a social and economic incentive is already in place (kalpataru, kehati award).

b. List of the ongoing activities

- Training on Biodiversity Mapping, exploring the Dynamic model (2005);
- Development of the Second National Communication (2005), and;
- The CBD and CCC clearing houses updating.

c. List of active partners of the conventions

1. Ministry of Environment
2. Department of Forestry
3. Department of Agriculture
4. National Development and Planning Agency
5. Department of Public Work
6. Non Department Governmental Agency
7. Academics

8. Non Governmental Organizations on conservation and environment
9. Private sectors

d. Proposed activities

Several proposed activities in fulfilling the need to invite individuals participating in education and training program for the implementation of the conventions (specifically and technically) are as follows:

1. To carry out education and training program related to the implementation of the three conventions, for example: a training is carried out to increase concern over the implementation of the three conventions through apprenticeship, internship which will improve an individual's skill, such as training on how to make a proposal, training on how to develop a web link;
2. To carry out workshops (as an example: on local wisdom related to the three conventions), seminars, supervision, infotainment, edutainment, expeditions, and local curriculum-based education, and;
3. To increase the capacity of police investigator, GOI/EOI and practitioners (lawyers and attorneys) through:
 - Participation of the the law enforcement executors and the GOI/EOI in education and training related to the three conventions;
 - Increasing the number and the capacity of judges and attorneys who understand and are able to address environmental problem.

Apart from the expectation of becoming the solution of the current weaknesses or constraints, the proposed activities have a function to mobilize information and knowledge.

e. Segregation of roles and responsibilities

When the "Bakornas" is set up, then it will act as the coordinator in setting up further actions implementing the conventions, pertaining to access to funding resource. Later on, the related sectors will carry out the technical activities at the individual level.

f. Success Indicators

Success measures of the proposed activities will be reflected in the following indicators:

Quantitative indicators

1. Education and training related to the implementation of the three conventions is available;
2. Seminars and workshops are carried out;
3. Education and training targeted at the law enforcement executors and GOI/EOI is available, and;
4. Number of judges and attorneys understanding environmental problem is increased.

Qualitative indicators

1. A qualified education and training;
2. A qualified seminars and workshops;
3. A qualified education and training for the law enforcement practitioners and GOI/EOI, and;
4. Qualified judges and attorneys.

In achieving an optimal and continuous result, there should be an analysis used in defining the "qualified" term of the indicators above, by referring to training materials, seminars or workshios, presenters, and participants.

Time and location indicator

All of those proposed activities should be carried out continuously (regularly) not only in Indonesia, but also in other countries.

g. Assumption

The activities run effectively, should these following factors be met:

1. Financial resource is available;
2. Political support, political will and commitment are available, and;
3. An adequate human resource is available
4. A procedure agreed by the entire stakeholders is available,
5. Facility and infrastructure for education and training is available, as well as the trainers and trainees.

2. Awareness building and information exchange

The assessment of each convention and the cross-cutting assessment identified other constraints when improving the capacity to implement the convention; those are awareness building and information exchange, as follows:

a. Description of capacity, need and the existing opportunity

Awareness building and information exchange on issues related to the three conventions are still inadequate. The function to mobilize issues related to the implementation of the three conventions is not optimum. The condition takes place due to information access problem, as a result of the low individual capacity in accessing information.

Therefore, an increased public access to information is the answer to address these weaknesses.

Several opportunities in fulfilling the above mentioned needs are:

- An instrument to identify and to carry out training and dissemination of each convention is available, and;
- An initial effort to develop a social and economic incentive is already in place (kalpataru, kehati award).

b. List of the ongoing activities

- Training on Biodiversity Mapping, exploring the Dynamic model (2005);
- Development of the Second National Communication (2005), and;
- Update of CBD and CCC clearing houses.

c. List of active partners of the conventions

1. Ministry of Environment
2. Department of Forestry
3. Department of Agriculture
4. National Development and Planning Agency
5. Department of Public Work
6. Non Department Governmental Agency
7. Academics

8. Non Governmental Organizations on conservation and environment
9. Private sectors

d. Proposed activities

To fulfill the need of increasing public access to information, then these following activities are proposed:

1. Increasing the access to information, among others are through multi media and street library;
2. Dissemination of information through social-cultural and religious activities, and;
3. Increasing publication of articles and information.

Apart from the expectation of becoming the solution of the current weaknesses or constraints, the proposed activities have a function to mobilize information and knowledge.

e. Segregation of roles and responsibilities

When the "Bakornas" is set up, then it will act as the coordinator in setting up further actions implementing the conventions, pertaining to access to funding resource. Later on, the related sectors will carry out the technical activities at the institutional level.

f. Success indicators

Success measures of the proposed activities will be reflected in the following indicators:

Quantitative indicators

1. Information dissemination is available through multi media and street library, evenly distributed in each region;
2. Information is disseminated, and;
3. Articles and information are published.

Qualitative indicators

1. Informative information contained in multi media and an adequate street library;
2. Socio-cultural and religious information, and;

3. Published articles and information which public easily accepts.

Time and location indicator

All of those proposed activities should be carried out continuously (regularly) not only in Indonesia, but also in other countries.

g. Assumption

The activities run effectively, should these following factors be met:

1. Financial resource is available;
2. Political support, political will and commitment are available, and;
3. An adequate human resource is available

CHAPTER IV

IMPACTS OF THE REGIONAL AUTONOMY AND WTO IN THE IMPLEMENTATION OF THE THREE CONVENTIONS

The stipulation of Law No. 22 of 1999 regarding the Regional Governments creates several problems among the Central and Regional Governments and among the Regional Governments themselves. The problems originates from several factors, starting from different regulations to different perspective in applying the commonly agreed regulation.

In respect to trade policy, the WTO secretariat states that trade may not cause the decline or the increase of environmental quality. But the July package creates a competitive barrier, where product competitiveness is directly affected by the capacity of a country in managing the environmental issue.

Given the importance of those two issues, we elaborate the conditions resulted from the endorsement of policies on Regional Autonomy and global trade in the following discussion.

4.1 Regional Autonomy Policy

The implementation of the Regional Autonomy policy, handing over some of the central authorities to the regions, significantly influences the development activities in the regions. As an example: handing over of the marine authority from central to regional governments is an effort to comply to the Law No. 22 of 1999, article 10 regarding the Regional Government, that says:

- (1) Region has an authority to manage the national resource which is available under its territory and has a responsibility to maintain the environmental conservation in compliance with the existing regulation and law;

- (2) Regional authority over marine territory as mentioned in article 3 consists of: a) exploration, exploitation, conservation, and management of marine treasure in the respective territory, b) regulation of the administrative interest, c) spatial planning regulation, d) law enforcement towards the regional regulation or authority handed over by the Government, e) safety enforcement assistance and nation's supremacy;
- (3) Authority of a District and a City over the marine territory as written in article (2) consists of one third of the Provincial marine border line.
- (4) Further regulation on the requirements stated in article (2) will be stipulated under the Government Regulation.

The direct result of the authority handing over is the greater responsibility borne to the regional government in managing the available natural resources. Consequently, the regional government should provide the required needs, such as qualified human resources, good governing practices supported by adequate facility and infrastructure. A success indicator that a region accomplishes is measured by the amount of the Regional Original Revenue (ROR) collected by each regional government.

Regions endowed with abundant natural resources will have different problem from those with limited resources. Even though central government has allocated a General Allocation Fund (GAF) and a Specific Allocation Fund (SAF), in reality the deficient regions still consider those funds insufficient compared to the needs they must fulfill. Therefore, there are several regional governments that have implemented policies in contrary with the existing regulation, in their attempts to collect the desired ROR. The condition is reflected in the existence of several regional regulations in contrary with the respective Law or with the Government Regulations, as a means to implement the Law. The number of these contrary regional regulations reaches thousands. The problem is closely related with the content of Article 11 of Law No. 22 of 1999, regarding the Regional Government, which determines the handing over of the Central Government to District and City Government once the Law was put into effect¹.

¹ Rachma Triwiduri, Kompas, 14 Agustus 2003.

Starting from the early implementation of the Regional Autonomy in Indonesia, a new phenomenon arises, that is, the proliferation of new small kingdoms. Every matter located in the regional territory is considered as part of the kingdom and should be subject to the King's will, manifested into Regional Regulations. In a short period, the 370 districts/cities in Indonesia are filled with a new euphoria, producing thousands of regional regulations for the interest of the regions themselves.

The stipulation of those regional regulations contributes significantly to the regional economy while also affecting the environmental management, as discussed below.

- (1) Log management is a noteworthy example, revealing a conflict of interest among the Central and Regional Governments. Even though the Central Government, in this respect is the Department of Forestry has set a rule banning any log export activities to foreign country, some Majors or Heads of District in Borneo allow businessmen to export logs². The problem emerges on account of the Surveillance Activities by Officers Validating the Production Outputs Report (OVPOR) and Officers Checking Logs Received (OCLR). OVPOR carries their duty by means of validating the Production Output Report (POR) three times in a month. To implement this duty, the persons in charge need supporting facility and transportation budget; unfortunately the facility is not available. To have their woods validated, companies holding the concession rights must serve them in terms of providing the respective facility. The condition makes the OVPOR lose their independency when carrying out the duty. A similar case also happens with the OCLR officers, who actually must stay in the Upstream Wood Producing Industry (UWPI) 24 hours a day to watch logs coming into the UWPI area. Unfortunately, the limited number of OCLR officers, which is less than the number of UWPI, creates some hurdles in implementing such a mechanism. In general, OCLR officers also receive facilities provided by the companies in executing their jobs (Triyono and Haryatno, 1996).

² Diskusi terbatas dengan Tim Kajian Perbatasan, BPPT-2002

- (2) In terms of sea sand management, the Central Government has handed over the management authority to regions, such as handing over permits on the exploration, exploitation, trade and EIA implementation. In real practice, EIA in the region serves merely as a tool to fulfill the needed performance, aiming at smoothing the export of sea sand to foreign countries. The Government of Riau Province is one example of the region allowing the export, in cooperation with the Singaporean Government. Trade of this commodity becomes an everlasting conflict among the Central and Regional Governments on account of the impact incurred during the implementation of this activity, such as loss of an island on account of dredging, where the height of the island remains only three meters above the sea level. Besides, the direct trade with Singapore, especially the export to foreign country, has violated the rule stipulated under the Government Regulation No. 25 of 2000.
- (3) Mining Without Permit and local mining are another two results of the regional autonomy euphoria, which merely focus on how to collect a maximum ROR without considering the need to manage the environment. Consequently, there are numbers of ex mining locations, both of the Mining Without Permit and local mining, that are left unmanaged.
- (4) The Environmental Impact Management Agency in the region (or called Bapedalda) receives no support from the regional government in its environmental management efforts. Budget limitation in the environmental management context results in the inadequate implementation of the three conventions. Lack of the decision makers' concern of the mandate and opportunities that the three conventions provide, namely the convention on biodiversity, convention on climate change and convention to combat land degradation, exacerbates the problem, as indicated in a small number of regional regulations that support the implementation of the three conventions.
- (5) There are three types of violations in the formulation of regional regulations; these are 1) principle issue, 2) substantial issue and 3) technical or juridical issue. The juridical issue refers to any violation related to the economic activity in a wider context, such as *free internal trade*, which impedes economic access of society, public interest, and government authority. The substantial issue refers to a distortion

among the goal and the content of a regional regulation. An unclear service standard is also the other example, such as time, expense, structure and tariff standard. Meanwhile, a technical error refers to the relevance of the legal resource reference, new regulation reference, and technical- juridical-formal comprehensiveness, that the regional regulation must comply when endorsing a new levy.

- (6) Regional funding limitation is the only rationale that most of the regional officers can put forward when confronting with a huge number of regional regulations protecting regional tax and levy. Given this, ROR is the only regional focus for survival. The regional government believes in ROR as a regional independency symbol. The more ROR is collected, the more independent is the region. This perspective puts aside people's complain, those who become objects of levy and of environmental destruction. Even in this situation, the regional government rejects any intervention from the central government who wants to revise the regional regulation. As long as the regional autonomy is still incapable of demonstrating a significant progress of bussiness environment in the region, the regional economy will never bloom.

4.2. Implementation of WTO Policy

The capacity building in terms of environmental management contained in in the *July Package WTO*, among other says that the international economic integration and the reinforcing growth required to express the national and international environmental policy is essentially important to control trade among countries in the borderline. Even though, one time those countries will not execute the real trade.

As we know, the environmental issue under WTO is a vested interest imposed by the European Countries), Switzerland and several other European nations³. The negotiation mandate makes an environment as a strategic issue used by the developed parties of WTO as a bargaining tool in the entire negotiation.

Trade and Environment under the Cancun Sceleton only re-emphasizes the commitment at the Ministerial level towards the ongoing negotiation and

Comment [TP7]: Apa ini Skeleton Cancun?

³ PTRI Jeneva, Matriks Perundingan dan Pembahasan Agenda Pembangunan Doha, 2004

encourages the *Committee on Trade and Environment in Special Session* (CTE-SS) to expedite its work.

Environmental trade is one important issue for Indonesia, since the adverse impact inflicted on Indonesia. The sea sand trade, exported from Indonesia to Singapore, is another example that inflicted an adverse environmental impact on Indonesia. A similar situation also occurs in the trading of logs, some of them comes from illegal logging. The practice incurs not only a huge financial loss to Indonesia, but also generating a severe forest destruction. Therefore, an environmental trade is an essential discussion.

There are several environmental issues that the government of Indonesia must follow up, as follows:

- (1) The government stand believing in no conflict among the *trade measures* of the *Multilateral Environment Agreements* (MEAs) and WTO rules – because of no dispute emerged among parties regarding the *rule measures* of the MEAs and WTO rules; only several MEAs use trade rule (about 20 out of the existing 200 MEAs) and several *Specific Trade Obligations* (STOs) contained in MEAs, which is considered as a vested interest of the developing countries, including Indonesia in its effort to protect the environment – should be defended. The condition is believed as an effort to harmonize MEAs and WTO, apart from the WTO condition that contains an environmental conception. Therefore, WTO rule is a *lex specialis* compared to MEAs rule.
- (2) Indonesia supports the settlement of environmental issue between two parties to be brought into WTO in order to get a fair decision.
- (3) Implementation of the information exchange between the MEAs secretariate and CTE committee will improve the understanding of the interconnection between trade and environment. This effort requires an improved interaction and coordination among officers, who hold the authority to manage environment and those holding the authority to manage trade at the national level.
- (4) As part of the environmental conservation effort, Indonesia is required to know which environmental products are targeted for

export and which environmental products are targeted to fulfill the domestic needs.

- (5) Indonesia needs to prepare its national environmental labelling system, as the issue, brought up by EU, is continuously progressing.
- (6) Paying close attention to Indonesia explanation of its stand towards any WTO decision on environmental issue will generate a good impact on the environmental management practices, leading to enhancing the support of the implementation of the three conventions, namely, the convention on biodiversity, the convention on climate change, and the convention to combat land degradation. In spite of this, the lack of understanding of the decision makers and bussiness practitioners on these three conventions requires capacity building in terms of function formulation and policy implementation at the systemic and institutional levels.

APPENDIX

LESSONS LEARNED

There are several lessons learned during the implementation of NCSA project as elaborated below.

1. Lessons Learned During Data Collection Process

During data collection activities, the team experienced some difficulties in accessing some data, both in terms of hardcopy and softcopy deposited in a certain institution. Difficulties in accessing the data is result of improper data management that the institution puts into practice. Another constraint lies in data updating, which is put available in the internet website.

The situation may create an unconstructive opportunity, such as data trade. The situation reveals a need for incorporating partnership commitment on data management, especially on network maintenance, network connectivity and cohesiveness in managing data and information of the three conventions, fulfilling public rights on the access to information.

During the data collection, the team also detected a lack of understanding on the Convention of Biodiversity (CBD), the Convention on Climate Change and the Convention to Combat Desertification, that the decision makers in the central and regional governments showed. In view of the obligation matters that the decision makers and the executors of the conventions must implement, they are advised to undertake a learning by doing strategy.

The data collection of the three conventions reveals a lot of policies, programs, and activities implemented in several sectors, which are indirectly related with the implementation of CBD, CCC and CCD. However, when we tracked them in detail, we found some incoherence in the existing programs, activities or policies in achieving the conventions' goals. The condition was a result of a reference shift, whereas the program and activities should have been based upon the principles and mandates contained in the three conventions. The government officers in each institution still or only focused on the main job or function of their respective institution.

Considering this, the team identified a need to establish a forum to coordinate and to disseminate information integrally, improving the awareness of the executors of the three conventions, CDB, CCC and CCD, in each related sectors, both at the central and regional levels.

Addressing the difficulties encountered during data and information collection, the team revised the data collecting method, which had been designed initially as a questionnaire method and an interview based on a guideline, into a kind of investigation method.

2. Lessons Learned on the Assessment of the Conventions

The evaluation capacity of each issue applying the analysis of the key function at every levels consumed a lot of time and required a complete set of data. Given the time, data and budget limitation, then the team simplified the assessment based on the national consent, as follows:

1. determination of prioritized issues for each convention,
2. analysis of the key function by using the dominant functions of the prioritized issues as the reference.

Building a national consent was not an easy thing to do, since Indonesia consists of more than 400 autonomous districts/cities, with a huge geographic distance, which is separated in 17,000 islands.

3. Lessons Learned on the Assessment of the Cross-cutting Issues of the Conventions

Considering the low capacity in implementing the three conventions, the experts agreed to implement the four dimensions of the cross-cutting assessment of the conventions, as follows:

- 1) conformance with the requirements/mandates of the three conventions,
- 2) capacity constraintss of the three conventions,
- 3) capacity needs of the three conventions,
- 4) opportunities of the three conventions.

Considering the mega biodiversity status of Indonesia, the experts advised the team to assess the fifth capacity dimension of the natural resource

management. Besides, the cross-cutting assessment of natural resource management clarified the interconnection of the environment issue with the global problem and the three conventions.

Similar to the lessons learned during the assessment of the convention, due to time and budget limitation the cross-cutting assessment of the conventions covered these following issues:

1. determination of prioritized issues for each convention,
2. analysis of the key function referred to the dominant functions of the prioritized issues.

4. Lessons Learned on the Development of Action Plan Draft

Due to time and budget limitation, the team could only produce an action plan draft. Therefore, the issues of time, budget and quantitative indicators were not explained in detail.

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