

# ICCTF External Report

2010 - 2011

Implementing Partner:



This report is prepared by:



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Indonesia Climate Change Trust Fund  
External Report 2010-2011

UNDP Indonesia

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The establishment of the Indonesia Climate Change Trust Fund (ICCTF) demonstrates the commitment of the Government of Indonesia to address climate change following the principles of the Jakarta Commitments to enhance national ownership and improve aid coordination.

ICCTF was established through two Ministerial Decrees by the Minister of National Development Planning:  
No. KEP. 44/M.PPN/HK/09/2009  
No. KEP. 59/M.PPN/HK/09/2010

In addition to these Ministerial Decrees, the Government of Indonesia issued Presidential Regulation No. 80/2011 to provide further guidance on trust funds.

ICCTF projects are managed under the following three thematic windows:

***Land Based Mitigation Window***

Focus is on efforts to reduce deforestation and forest degradation, and encourage sustainable management of peat lands and national forest resources

***Energy Window***

Includes activities that contribute to the improvement of energy security and reduction of greenhouse gas emissions from energy and industry sectors

***Resilience and Adaptation Window***

Focus is on efforts to anticipate the negative impacts of climate change, respond to the risks and uncertainties of climate disruption, reduce vulnerability, and enhance societal resilience in the most vulnerable sectors



## ICCTF Pilot Project Sites across Indonesia



### Land Based Mitigation Window

1. Banjarbaru, South Kalimantan
2. Jabiren, Central Kalimantan
3. Muaro, Jambi
4. Pelalawan, Riau



### Energy Window

1. DKI Jakarta, Jakarta
2. Tangerang, Banten
3. Serang, Banten
4. Bekasi, West Java
5. Bandung, West Java
6. Bogor, West Java
7. Klaten, Central Java
8. Semarang, Central Java
9. Surabaya, East Java
10. Gresik, East Java
11. Sidoarjo, East Java
12. Kediri, East Java
13. Kudus, Central Java
14. Muara Enim, South Sumatra
15. Pekanbaru, Riau
16. Tanjab Barat, Jambi
17. Porsea, North Sumatra
18. Deli, North Sumatra



### Resilience and Adaptation Window

1. Serdang Bedagai, North Sumatra
2. Batu, Malang, East Java
3. Bau-Bau, SouthEast Sulawesi
4. Kamal Muara, North Jakarta
5. Indramayu, West Java

## LIST OF ABBREVIATIONS

| Abbreviation | Explanation  |
|--------------|--|
| BAPPENAS     | Badan Perencanaan and Pembangunan Nasional (National Planning and Development Agency)                  |
| BMKG         | Badan Meteorologi, Klimatologi dan Geofisika (Agency of Meteorology, Climatology, and Geophysics)      |
| CSO          | Civil Society Organization   |
| DNPI         | Dewan Nasional Perubahan Iklim (National Council on Climate Change)                                    |
| GHG          | Green House Gases  |
| GoI          | Government of Indonesia  |
| ICCTF        | Indonesia Climate Change Trust Fund  |
| MOA          | Ministry of Agriculture  |
| MOI          | Ministry of Industry   |
| NIE          | National Implementing Entity   |
| PMU          | Project Management Unit  |
| PREP-ICCTF   | Preparatory Arrangements for the Indonesia Climate Change Trust Fund                                   |
| RAD-GRK      | Rencana Aksi Daerah Pengurangan Emisi Gas Rumah Kaca (Local Action Plan for GHG Emission Reduction)    |
| RAN-GRK      | Rencana Aksi Nasional Penurunan Emisi Gas Rumah Kaca (National Action Plan for GHG Emission Reduction) |
| SC           | Steering Committee   |
| TC           | Technical Committee  |
| UNDP         | United Nations Development Programme   |
| UNFCCC       | United Nations Framework Convention on Climate Change  |

# Executive Summary



## Indonesia Climate Change Trust Fund *partnership for a better climate*

### ICCTF in brief

To date, the Indonesia Climate Change Trust Fund (ICCTF) is the only national trust fund in Indonesia on climate change, led and managed by the Government of Indonesia (GOI).

ICCTF aims to effectively and efficiently mainstream and coordinate the climate change response in Indonesia, focusing on the implementation of Indonesia's national and local mitigation action plans (RAN/RAD-GRK), in turn facilitating Indonesia's commitment to reduce GHG emissions by 26% unilaterally and 41% with international support by 2020. ICCTF also supports adaptation activities across Indonesia.

Following the principles of RAN/RAD-GRK, ICCTF focuses on supporting activities that include capacity building and policy development under the 26% unilateral activities, while activities directly reducing GHG emissions will be funded under the 41% category.

### Objectives

The two main objectives of ICCTF are:

- To achieve Indonesia's goals of a low carbon economy and greater resilience to climate change; and
- To enable the GOI to increase the effectiveness and impact of its leadership and management in addressing climate change.

### The establishment of ICCTF

The GOI developed the ICCTF blueprint document in 2008 with support from development partners such as GIZ. The ICCTF was launched by BAPPENAS and the Ministry of Finance in September 2009, followed by the signing of the 'Preparatory Arrangements for Indonesia Climate Change Trust Fund' (PREP-ICCTF) project between the GOI and the United Nations Development Programme (UNDP) in December 2009. The objectives of the PREP-ICCTF are threefold:

1. To support priority initiatives on climate change for an interim period;
2. To provide support for the design/establishment of the ICCTF; and

3. To support capacity development needs for the efficient and effective implementation of ICCTF.

### Key Achievements

- ICCTF has become fully operational, successfully choosing and funding three pilot projects which were implemented in different locations across Indonesia.
- ICCTF solidified its institutional framework to become a legitimate financing mechanism supporting the GOI's initiatives on climate change, and is recognized at international, regional, national and local levels.
- ICCTF developed a business plan and investment strategy, including priority programmes and proposed activities with associated budgets (See Annex 2 for further details).
- The National Council on Climate Change (Dewan Nasional Perubahan Iklim/DNPI) endorsed ICCTF as Indonesia's first National Implementing Entity (NIE) under the United Nations Framework Convention on Climate Change (UNFCCC) Adaptation Fund.

## ICCTF Achievements

As further described in this report, the three ICCTF pilot projects produced significant outputs. The projects were all audited independently and were certified as complying with national standards.

In preparation for future projects, ICCTF also published its business plan and investment strategy, the implementation of which will ensure that all of the activities financed by ICCTF are aligned with the GOI's commitment to achieve its GHG emission reduction goals.

As a result of ICCTF's efforts during the interim phase, it has gained support from international, national and regional institutions. One of the most visible signs of this growing trust and confidence in ICCTF is the endorsement by the National Council on Climate Change of the ICCTF as Indonesia's National Implementing Entity (NIE) for the UNFCCC Adaptation Fund. If the Adaptation Fund Board accredits ICCTF as the NIE, the Trust Fund will be the first and only NIE representing Indonesia. ICCTF hopes to eventually qualify as an NIE for the Green Climate Fund.

The ICCTF's activities such as policy dialogues on the development and functions of a trust fund and the NIE application process, collectively contributed to the issuance of the recently passed Presidential Regulation No. 80/2011 on Trust Funds—the first such legislation in Indonesia.

### ICCTF funded pilot projects

During 2010-2011, three thematic windows were established under ICCTF: (1) The Land Based Mitigation Window focuses on strengthening knowledge, information and consensus to reduce land based greenhouse gas emissions including from forestry and agriculture sectors; (2) The Energy Window encourages the acceleration of investments in energy efficiency and renewable energy; and (3) The Resilience and Adaptation Window helps to develop knowledge, capacity and communication to increase resilience against climate change.

The Land Based Mitigation Window pilot project: 'Research and Technology Development of Sustainable Peat Land Management to Enhance Carbon Sequestration and Mitigation of

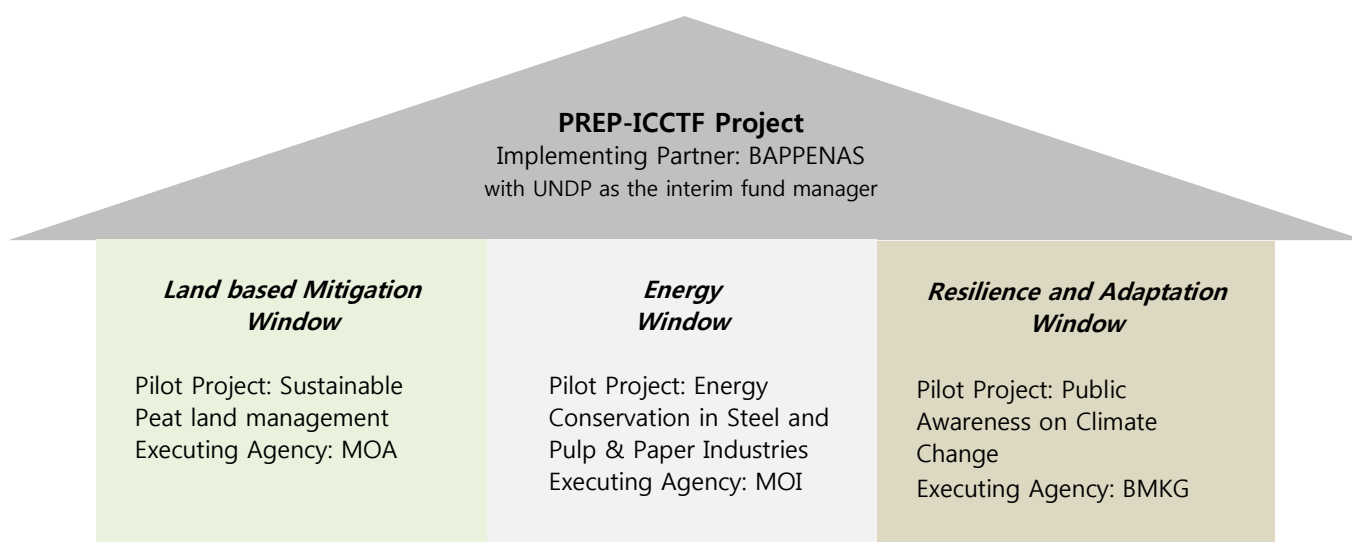
Greenhouse Gas Emissions' was implemented by the Ministry of Agriculture (MOA). The most significant output of this project was the development of Indonesia's first national guideline for sustainable peat land management. These include guidelines on: (1) Peat land identification and characterization; (2) Measurement of greenhouse gas emissions from peat land; (3) Carbon stock measurement in peat land; and (4) Demonstration plots to reduce greenhouse gas emission from peat land. These are available in hard copy from ICCTF.

The Energy Window pilot project: 'Energy Conservation and CO<sub>2</sub> Emission Reduction in Industrial Sector (Phase 1)' was implemented by the Ministry of Industry (MOI). This project enabled companies to utilize energy usage audit data to develop/implement energy efficient practices. Further, the project established Indonesia's first technical guidelines for energy efficiency and conservation for the steel and pulp and paper industries.

Finally, the Resilience and Adaptation Window pilot project: 'Public Awareness, Training and

## ICCTF and its three initial pilot projects

ICCTF has funded three pilot projects, each project representing one of the three ICCTF thematic windows with its own objective that is aligned with the specific focus of its respective ICCTF window.



Education Programme on Climate Change Issue for All Levels of Societies in Mitigation and Adaptation' was implemented by the Agency of Meteorology, Climatology, and Geophysics (Badan Meteorologi, Klimatologi dan Geofisika/BMKG). BMKG aimed to make information available on climate change and its impacts on livelihoods for farmers and fishermen. The project also developed climate change curriculum modules for different levels of education. The modules can be distributed and used in schools throughout Indonesia to educate students on climate change. The project also employed creative methods such as using various forms of media to intensively engage the general public on climate change adaptation and mitigation.

### ***Strategic development elements***

ICCTF also considers the following key strategic development elements: gender mainstreaming; risk management; and development of partnerships with various stakeholders such as donors, line ministries, provincial governments, district governments, civil society organizations (CSOs), universities, local communities, business associations, and private institutions. Each of these elements is discussed in further detail below.

### ***Challenges and Lessons Learned***

ICCTF faced several challenges during 2010-2011. These challenges include ICCTF staff having to help executing agency staff learn and adapt to a new project management system, and coordinating the involvement of CSOs in the ICCTF policy dialogue meetings with the Steering Committee and Technical Committee. In addition, ICCTF responsibilities grew faster than the appointment of necessary staff, and this resulted in uneven workloads and caused some delays in project implementation.

Through these challenges, ICCTF learned that the appropriate method to monitor and supervise implementation of projects is through a "participatory approach", whereby the ICCTF Secretariat closely oversees the pilot projects and provides support and coaching to the Project Management Unit (PMU) in preparing financial reports, monitoring and evaluation reports, and other project management practices as requested by the executing agencies. ICCTF also learned that it is crucial to have a strong human resources arm which can swiftly identify and recruit staff, and also improve staff capacity through training and mentoring.



ICCTF Sustainable Peat Land Pilot Project



# Situational Background

## Background

Over the past several years, climate change has emerged as a major environmental threat influencing the national development of Indonesia. With more than 17,000 islands, Indonesia is vulnerable to rising sea levels and floods, and erratic weather patterns have the potential to impact agricultural and fishery production, which support many communities. At the same time, Indonesia is a significant contributor to the global emissions of GHG, and therefore is also a key player in shaping the solutions to climate change.

The GOI has made a decision to be at the forefront of efforts to reduce carbon emissions. At the G-20 Summit in September 2009, the President of Indonesia pledged to reduce GHG emissions by 26% unilaterally (against projections of business as usual emissions), with a possibility of up to a total of 41% reduction with international support by year 2020.

To meet its national emission reduction targets, the GOI developed the Indonesia Climate Change Sectoral Roadmap (ICCSR) as a policy guideline for mitigation and adaptation measures. As a next step, a National Action Plan for Greenhouse Gas Emission Reduction (RAN-GRK) was formulated as Presidential Regulation No. 61/2011 to operationalize these mitigation activities. RAN-GRK elaborates sector-specific mitigation targets

for five main sectors and identifies programmes and activities to achieve emission reduction goals.

To harmonize and coordinate the international support for climate protection activities, the GOI then established Indonesia's first nationally managed climate change trust fund, the ICCTF. The establishment of the ICCTF is a significant step by the GOI to mainstream and coordinate the climate change response, focusing on the implementation of Indonesia's national and local mitigation action plans of GHG emissions reduction (RAN/RAD-GRK), and adaptation activities across Indonesia.

The ICCTF is expected to become a key financing mechanism for climate change initiatives in Indonesia and will provide a

crucial policy platform for dialogue and collaboration for those initiatives, involving all stakeholders at international, regional, national and local levels.



Launching ceremony for RANGRK (Presidential Regulation No. 61 Year 2011) supported by ICCTF

# Evaluation of Progress



## Institutional Development

### 1) PREP-ICCTF Project

The GOI developed the ICCTF blueprint in 2008 with support from development partners such as GIZ. ICCTF was launched by BAPPENAS and the Ministry of Finance in September 2009.

In December 2009, the Preparatory Arrangements for the Indonesia Climate Change Trust Fund (PREP-

ICCTF) project was signed between GOI and UNDP.

The objectives of the PREP-ICCTF are threefold:

1. To support priority initiatives on climate change for an interim period;
2. To provide support and development for design and establishment of the ICCTF; and
3. To support capacity development needs of the GOI for the efficient and effective

implementation of the ICCTF.

The plan is to have the national trustee gradually assume full operational responsibility of ICCTF by the end of the interim period in 2012. The table below summarizes the expected outputs and the current status of progress of each output of the PREP-ICCTF.

### 2) Policy Development

Since its establishment, ICCTF has proactively created forums for

| PREP-ICCTF Project<br>Expected Output  | Explanation/Progress   | Status                                  |
|--|--|---|
| <b>1.1. Selection of Priority Climate Change Initiatives</b>                     | The three pilot projects were successfully completed in 2011 and the new project selection will be consulted with the SC in the beginning of 2012.   | Fully achieved for the initial projects |
| <b>1.2. Priority Climate Change Initiatives Funded, Monitored, and Evaluated</b> | The budget and the disbursement arrangement for three pilot projects are in the financial report section of this report. Currently all projects are under review and the project programmatic reviews will be presented to the SC in the beginning of 2012. All three projects were audited by an independent auditor and were certified as complying with national standards. | Fully achieved                          |
| <b>2.1. Development of a Fully Functioning Policy Dialogue Framework</b>         | Policy dialogues were held during the SC/TC meetings. Most of these meetings will continue to focus on the internal development of ICCTF and its responsibility to implement programmes that support the GOI's commitment to reduce GHG emissions.   | On track                                |
| <b>2.2. Increased Awareness of ICCTF Nationally and Internationally</b>          | The ICCTF developed its communication strategies and will begin to release a periodic external newsletter in 2012. The ICCTF is actively seeking opportunities to have presentations in targeted national and international events, including the UNFCCC Conference to continuously increase the awareness of ICCTF.   | On track                                |
| <b>3.1. Capacity Developed for the Potential Beneficiaries</b>                   | ICCTF focused on the capacity assessment and development of the three PMUs of ICCTF pilot projects.  | Fully achieved                          |
| <b>3.2. Capacity Developed for ICCTF Governance Entities</b>                     | Various trainings for ICCTF SC, TC, and Secretariat members were conducted in 2011. ICCTF plans to continue its capacity development trainings and also to evaluate the effectiveness of such trainings.   | On track                                |
| <b>3.3. Support For Secretariat to Appoint National Trustee</b>                  | ICCTF is currently finalizing the transition plan and plans to have a national fund manager appointed in 2012.   | On track                                |
| <b>3.4. Develop Monitoring Instruments for ICCTF Activities</b>                  | ICCTF has developed and is continuously improving its tracking, monitoring and evaluation system for its projects.   | On track                                |
| <b>4. Fully Functional ICCTF Secretariat and ICCTF Technical Committee</b>       | ICCTF Secretariat and TC have been fully established, including an IT infrastructure. ICCTF is continuously making an effort to improve its effectiveness by having structured monitoring and evaluation tools.  | On track                                |

policy dialogue to develop national and local policies on GHG emission reduction among stakeholders. In particular, calls for project proposals from line ministries for the ICCTF stimulated dialogue among the executing agencies on climate change issues. This was significant because these dialogues encouraged each agency to assess their contribution towards the GOI's effort to reduce GHG emissions and to ensure that its respective responses are aligned with the national priorities. The ICCTF has also played a key role in introducing international reporting and monitoring standards to the executing agencies. The adoption of these standards was reinforced in the periodic reports submitted to ICCTF, detailing the progress on various stages of their pilot projects. This type of oversight had not been provided in the past in the context of climate change programmes, but proved to be one of the most critical improvements for the proper monitoring of the progress of the projects.

ICCTF also reviewed these reports submitted by the executing agencies to ensure the accuracy and quality of the submitted data. This quality assurance provided by ICCTF encouraged the executing agencies to produce results. The requirement for a more periodic reporting and improved quality of data increased the transparency and the accountability of the executing agencies as well.

In addition, because ICCTF is the first national trust fund, all of the GOI's efforts towards establishing ICCTF, including the coordination among the line ministries, discussions on the institutional framework, and strategies to strengthen the operation of ICCTF, have contributed to the GOI's knowledge on trust funds.

### 3) ICCTF's recognitions as a national trust fund

ICCTF is now well established and has been cited as a legitimate national institution by many

sources. The following list includes examples of this recognition:

- **President Yudhoyono** highlighted the establishment of ICCTF to support low carbon emission development during his keynote speech at the Business for the Environment Global Summit. Jakarta, 28 April 2011.
- A **Kompas** article entitled "Climate Information Community Living Guide" mentioned the ICCTF-BMKG project and its efforts to disseminate food security information to farmers and fishermen. 25 March 2011.
- **Overseas Development Institute** (ODI) EDC-2020 Working Paper No.11, highlighted ICCTF as a new financing mechanism to address climate change issues in Indonesia. 11 February 2011.
- **Overseas Development Institute** (ODI) Climate Finance Fundamentals Briefs 2&5, recognized the establishment of ICCTF and noted that ICCTF's main function is to align international finance resources with the national investment strategies within Indonesia. November 2010.
- **World Resource Institute** (WRI) Report "Power, Responsibility, and Accountability – Rethinking the Legitimacy of Institutions for Climate Finance", reviewed the activities of ICCTF along with other climate change trust funds in other regions. 2010.
- **European Capacity Building Initiatives (ECBI)** Fellowship Programme, National Funding Entities (Gomez-Echeverri) mentioned ICCTF as a new climate financing mechanism in Indonesia. October 2010.
- **Asia Pacific Climate Change Finance and Aid Effectiveness Dialogue** (Gomez-Echeverri) noted that Indonesia is one of the first countries in the world to establish a new national fund for organizing climate change finance, called ICCTF, Bangkok. 19-20 October, 2010.
- **Oxford Institute for Energy Studies**, The Reformed Financial Mechanism of the UNFCCC Part II Overseas Development Institute acknowledged the establishment of ICCTF to address the emerging and immediate needs of ICCSR programme investments. April 2010.
- **Jakarta Post** article recognized that ICCTF was established by BAPPENAS to pool all financial aid to tackle climate change issues. 15 October 2009.

#### 4) ICCTF as Indonesia's National Implementing Entity

ICCTF has proven to be a legitimate national trust fund, gaining the trust of donors and partners. Both SIDA and UKCCU contributed new and additional



Technical Committee members from various line ministries meet to discuss project proposals to be funded by ICCTF

funds to ICCTF upon learning of ICCTF's progress and achievements.

In addition to this international support, ICCTF also gained trust from the executing agencies and other government entities, and ICCTF was endorsed by DNPI (National Council on Climate Change) to become Indonesia's only NIE for the UNFCCC Adaptation Fund. Once ICCTF secures approval as the NIE by the Board of Adaptation Fund, ICCTF expects to also qualify for the Green Climate Fund.

### Development of Project Priorities

The GOI formulated the Indonesia Climate Change Sectoral Roadmap (ICCSR) to set national goals, sectoral targets, milestones and priorities for actions with regards to climate change adaptation and mitigation for all affected sectors of the economy in Indonesia. The ICCSR sets up three categories of activities for each development sector. Category 1 includes those activities that relate to data, information and knowledge management (KNOW-Manage); Category 2 includes planning and policy, regulation and institutional development (PLAN-PRIDE); and Category 3 is for activities that include implementation and control of plans and programmes (ICON-Monev). Most of the ICCTF activities in the initial phase fall

within Category 1 activities, as shown in the priority project list in Annex 2.

Based on the Yellow Book, which provides a list of climate change initiatives that were submitted by various government institutions that seek international support, the GOI identified a series of primary and secondary sectors in which investment activities should be prioritized by ICCTF. In order to refine its priority project list, the ICCTF conducted numerous consultation sessions with its development partners, and also formed a CSO Forum to seek ideas from a wider audience. Based on the feedback, ICCTF determined its specific mitigation and adaptation targets and related strategies in relation to ICCSR and RAN-GRK. Annex 2 contains the summary of priority strategies, programmes and activities, and the projected budget until year 2020.

To demonstrate GOI's commitment to GHG emission reduction, BAPPENAS has committed to allocate an amount equal to approximately 10 to 15% of the international monetary contribution towards ICCTF's operation cost from GOI budget. Since 2010, BAPPENAS has allocated approximately \$210,000 for this purpose. In addition, GOI provides in-kind-contributions to ICCTF to support its operation.



Raising public awareness. Comic book on climate change was prepared by BMKG to attract the attention of younger audiences



ICCTF Secretariat staff meet with UNDP to discuss ICCTF Trust Fund management structure

# Sustainable Peat Land Management

Executing Agency: Ministry of Agriculture (MOA)

### Full name of the pilot project:

Research and Technology Development of Sustainable Peat Land Management to Enhance Carbon Sequestration and Mitigation of Greenhouse Gas Emissions

**Total budget: \$ 1,166,208**

**Expected output:** emissions data, research reports, guidelines and policy brief for sustainable peat land management

### Pilot project sites:

- Banjarbaru, South Kalimantan;
- Jabiren, Central Kalimantan;
- Muaro, Jambi;
- Pelalawan, Riau.



### Contextual Relevance

Indonesia's peat land covers approximately 20 million hectares, and stores more than 40 Gt of carbon. Various land activities such as land clearing, burning, and draining of peat land are known to cause carbon oxidation, and result in emission of CO<sub>2</sub>. At the time of this project, there was no accurate baseline for the GHG emissions from peat lands. Because peat land covers such a vast area and has potential to be a large source of GHG emissions, ICCTF determined that establishing a baseline of GHG emissions as well as developing guidelines for the effective management of peat lands would be necessary for

reducing GHG emissions. In addition, sustainable peat land management is strategically significant because the peat lands have the potential to become the reserve lands for national food security programme.

### Project Description

In order to develop the sustainable peat land management guidelines necessary for reducing GHG emissions, this project helped set a baseline of GHG emissions and carbon sequestration from different types of peat land usage and created maps of biophysical characteristics and properties of peat lands in a number of Indonesian provinces. The data, map and guidelines produced from this project will be used to develop a nationwide guideline on sustainable peat land management.

This project aims to:

1. Measure peat land related GHG emission/carbon stock;
2. Map and identify peat land profile at four selected locations;
3. Collect and process data on GHG emissions and identify emission factors to support the sustainable peat land management practices that reduce GHG emissions; and
4. Develop a policy brief and guideline on sustainable peat land management.

### Challenges

1. Different characteristics and spatial variety of the peat lands make it difficult to formulate a model of peat lands;
2. Climate conditions in the field were not anticipated and caused harvest failure in two demonstration plots and also



resulted in discontinuous data measurements; and

3. Non-homogeneous annual crops in each demonstration plot caused high variance and too many variables to be measured.

### Achievements

Through this pilot project, MOA made substantial progress towards creating sustainably managed peat lands in four provinces in Indonesia.

First, the pilot project collected the GHG emissions data from peat land use to create a baseline of GHG emissions and carbon sequestration from peat lands. The project also produced maps of biophysical characteristic and properties of peat land in the four provinces. These are the first set of maps that were ever developed specifically for the peat land area. The baseline data and maps will be shared with other stakeholders to further develop sustainable peat land use practices.

The project also developed a sustainable peat land agriculture management guideline, which will be used by MOA as the basis to develop a national level guideline on peat land management.

As a result of this work, MOA is planning to conduct more in-depth research at a demonstration plot and also to expand a similar project in Papua with the target to have a more comprehensive data coverage for sustainable peat land management in Indonesia.



## Pilot Project - 2

# Energy Efficiency in Steel and Pulp and Paper Industries

Executing Agency: Ministry of Industry (MOI)

### Contextual Relevance

Energy consumption in 2008 for the industry sector was 49.14% of the total national energy consumption in Indonesia. Some surveys indicated that energy consumption in this sector could be reduced by 15-30% through energy saving practices. Steel and pulp and paper industries are two of the eight groups defined as energy intensive industries in Indonesia. Therefore, increasing energy efficiency in these industries can significantly contribute to the effort of reducing GHG emission.

### Project Description

In order to identify energy saving opportunities in steel and pulp and paper industries, this project created a baseline for CO<sub>2</sub> emissions and established a data system to manage the emission data. This resulted in the identification of energy saving practices, and the development of industry guidelines on implementation of energy conservations and reduction of CO<sub>2</sub> emissions.

The objectives of this project were as follows:

1. To strengthen MOI capacity in coordinating, developing, and supporting the implementation of energy conservation in the steel and pulp and paper industries;
2. To facilitate energy efficiency and energy conservation in target industries; and
3. To increase capacity of target industry companies to realize energy conservation and CO<sub>2</sub>

emission reductions.

### Challenges

This project had several challenges. First, the inexistence of authority for certification of energy audit expertise in Indonesia created a problem in hiring a capable national energy auditor for the project. Second, there were several similar energy audit programmes conducted by other line ministries for the same companies, which made it difficult to establish partnerships with these companies. Third, the Energy Efficiency Management Information System (EEMIS) in the steel and pulp and paper industries could have been managed in a more sustainable way if there was a regulation from MOI on the use of this system.

### Achievements

MOI successfully achieved all of its objectives for this project. The MOI established a baseline for the first time for CO<sub>2</sub> emission in the steel and pulp and paper industries, which will be used by GOI in developing its future energy conservation strategies.

This project also developed the EEMIS in steel and pulp and paper industries. The EEMIS is an innovative data system that can easily be replicated in other industries to manage their emission data for energy audit purposes, and can significantly expedite the energy auditing process across various industries in Indonesia. The MOI also conducted series of trainings on

**Full name of the pilot project:** Energy Conservation and CO<sub>2</sub> Emission Reduction in Industrial Sector (Phase 1).

**Total budget:** \$2,035,966

**Expected outputs:** Standard Operating Procedures, System Information Management of Energy Audit from each participating industry

**Pilot project sites:** 18 cities all over Indonesia



energy conservation and CO<sub>2</sub> emission reduction to strengthen the capacity of staff. Through these trainings, MOI was able to help companies in the target industries develop or prepare, for the first time, their own Standard Operating Procedures, Technology Needs Assessment, Feasibility Study and Investment Grade Audit.

The data from this project helped MOI develop guidelines and regulations for the implementation of energy conservation and reduction of CO<sub>2</sub> emissions for the steel and pulp and paper industries.

Based on these successes, the MOI is preparing for the second phase of this project to create an energy service company model implementation in the industrial sectors.

## Pilot Project - 3

# Public Awareness on Climate Change

Executing Agency: Agency of Meteorology, Climatology, and Geophysics (BMKG)

In collaboration with Indonesian Institute of Science (Lembaga Ilmu Pengetahuan Indonesia/LIPI), Agency for Technology Assessment and Application (Badan Pengkajian Dan Penerapan Teknologi/BPPT), Ministry of National Education,

**Full name of the pilot project:** Public Awareness, Training and Education Programme on Climate Change Issue for All Level of Societies in Mitigation and Adaptation.

**Total budget:** \$1,127,917

**Expected output:** radio programs, training for trainer modules for field extensions and educational module on climate change

**Pilot project sites:** Serdang Bergadai, North Sumatra; Batu, Malang, East Java; Bau-Bau, Sulawesi; Kamal Muara, North Jakarta; Indramayu, West Java



BMKG in collaboration with CSO network conduct a "Community School" and brought together 16 communities of farmers and fishermen from provinces in Java.

## Project Description

In order to create a better adaptation response to the changing climate, this project employed different methodologies to increase awareness among the general public of the effects of climate change. These included using local community radio programmes, providing training on climate change mitigation and adaptation and developing educational curriculum on the impact of climate change.

The objectives of this project were:

1. To enhance awareness of climate change and food security issues among the targeted communities and extension workers in the agriculture and fishery sectors; and
2. To establish climate change education modules to be distributed and used in all levels of the education system.

## Challenges

The public awareness programmes involving different ministries and agencies were new to BMKG. Therefore, capacity building for BMKG and Project Management Unit (PMU) staff was required. "Climate change adaptation" is also a long process that begins with creating an understanding of current vulnerabilities, building capacity to support adaptation planning, and eventually deploying strategies to respond to climate change. Because this was the first pilot project, BMKG still needs to compile lessons learned from this

project to develop effective adaptation measures.

## Achievements

As part of the pilot project, BMKG used the community radio program for the first time as a way to increase the awareness on climate change and food security issues among the farmers and fishermen in five most vulnerable provinces in Indonesia. In addition, BMKG employed new types of media and TV programmes to attract broader audiences and to make information on climate change adaptation and mitigation efforts more accessible to the general public.

BMKG also developed training modules and conducted training sessions on climate change mitigation and adaptation measures for approximately 400 extension workers in the agriculture and fishery sectors. These extension workers, in turn, went to rural areas to share their new knowledge with hundreds of other local workers, farmers and fishermen.

Lastly, for the first time, BMKG developed curricula on climate change awareness for all levels of schools in Indonesia.

Building on these achievements, BMKG will distribute the educational module and publication materials developed in this project to schools and BMKG stations throughout Indonesia and measure their effectiveness.

ICCTF External Report 2010-2011

## Contextual Relevance

Indonesia is the largest archipelago in the world, with approximately 230 million inhabitants on 17,000 islands, mostly living along the coastal lines. Therefore, erratic weather patterns have significant impact on their livelihoods, especially for farmers and fishermen. BMKG was chosen as the executing agency for the project because of its mandate to provide climate and meteorological information to the public to forecast seasonal weather changes and help agricultural and fishery sectors adapt to the changing climate.

# Gender Mainstreaming



Female researcher conducting field study for the peat land pilot project

## The goal of gender mainstreaming

UNDP coordinates global and national efforts to integrate gender equality and women's empowerment into poverty reduction, democratic governance, crisis prevention and recovery, and environment and sustainable development. UNDP's goal of gender mainstreaming is to ensure that women have a real voice in all governance institutions, from the judiciary to the civil service, as well as in the private sector and civil society, so they can participate equally with men in public dialogue and decision-making and influence the decisions that will determine the future of their families and countries.

## Gender mainstreaming practice in ICCTF

The PREP-ICCTF is supported by UNDP, and therefore gender mainstreaming should be considered in all of its activities.

The three pilot projects encouraged both women and men to participate in the project implementation process. This included providing equal access to the information, inviting men and women to equally voice their concerns about the projects at public workshops and ensuring that everyone received benefits from the project outputs. In the Public Awareness on Climate Change project, for example, many public workshops were conducted to provide equal access to the information on climate change and adaptation, so that women and men could both learn to apply their new knowledge on adaptation measures to their daily lives. In all of these pilot projects,

many women became managers, researchers, trainers and consultants as well. By encouraging women to participate in these pilot projects, ICCTF effectively empowered women to actively become a part of the GOI's efforts to combat climate change—a significant shift from women playing a passive role in the past to now going out to the field to participate in policy dialogues and decision making processes and gathering and analyzing data that help develop national guidelines on mitigation and adaptation measures for climate change.

In these pilot projects, gender interventions focused mainly on providing access to women to voice their concerns during the decision making processes. A more strategic gender intervention would further ensure equal benefit for women and men. Therefore ICCTF will learn from this lesson and plans to incorporate clear gender mainstreaming indicators and closely monitor gender equality in future ICCTF projects.



Equal opportunity: A group of researchers working together on a PREP-ICCTF pilot project



Assessment of MOA project in Central Kalimantan

# Risk Management

## External Risks

External risks include political, economic, and security issues. ICCTF is particularly sensitive to political conditions. The success of the ICCTF's projects is highly influenced by the stability of the government, political support for these projects, and the commitment of the executing agencies to taking responsibility for and completing these projects. Collaboration by all stakeholders and effective communication are essential in mitigating risks posed by these political factors.

The economy poses another type of risk. A stable economy will ensure continued financial support for the ICCTF's activities. However, the global economic recession in the recent years has created uncertainty for the continued monetary contribution from international donors for future ICCTF activities.

Security issues include unexpected or unanticipated external events such as crimes, natural disaster, riots and demonstrations, accidents, and other types of interruptions that could affect the daily operation of ICCTF. The GOI has developed an early warning system to detect these events so that risks posed by these security factors may be mitigated and could help prevent a total interruption of ICCTF operation.

## Internal Risks

The two main internal risks include: (1) Challenges with the

harmonization of different regulations from various executing agencies; and (2) A lack of precedent related to trust fund management.

First, working with different sets of procedures and regulations from different executing agencies often prevents efficient and timely execution of projects.

Second, ICCTF is among the first nationally managed trust fund for climate change in the world; therefore, there is only a limited precedent from which it can draw lessons. As a result, ICCTF has taken the initiative to learn from and improve upon its own experiences. This requires ICCTF to take precautions in its activities and carefully manage possible risks involved in the ICCTF operation.

## Risk Assurance

ICCTF has incorporated risk assurance measures to ensure smooth operation. For example, through programmatic monitoring, financial spot-check and quarterly monitoring reporting, ICCTF Secretariat identified the bottlenecks and obstacles of project implementation, and resolved many of these issues by making recommendations based on the Letter of Agreement, its annual work plan, and the Project Management Implementation Guideline and coordinating actions with the Technical Committee, executing agencies, implementing agencies, and PMUs.

On a project level, every executing agency was required to submit a quarterly monitoring report to ICCTF secretariat, and report any potential risks and issues that surfaced during the reporting period. This way, Secretariat was able to promptly work with the executing agency to reduce and resolve these issues.

In addition, ICCTF has taken several security measures to ensure the safety of ICCTF staff. For example, the UN Department of Safety and Security conducted a physical inspection of the ICCTF office space and verified the sufficiency of the building security and the safety features of the office space.

Moreover, staff at ICCTF is required to undergo an online security course and obtain a security certification as part of the hiring procedures so that every staff knows how to respond in case of an emergency or a crisis, and how to reduce risks. Furthermore, prior to going on a field mission, an ICCTF staff must fill out an online report and obtain clearance from a security officer. The purpose of this clearance process is for the staff to obtain relevant information and guidance on security measures on the ground, and also for the security officer to track the staff's location in case of an emergency and provide necessary insurance coverage to the staff. ICCTF will continue to improve the security assurance system to ensure the safety of its staff and its operations.

# Partnerships



## Our Partners

To achieve the goals of the projects, ICCTF has worked closely with various stakeholders, including donors, line ministries, and CSOs. In particular, ICCTF developed a strong working partnership with its executing agencies to ensure effective and timely execution of its pilot projects. For example, over the past two years, ICCTF has conducted many face to face meetings, training sessions and workshops with the staff of the executing agencies to build trusting relationships.

In addition, ICCTF is actively forming partnership with a wider group of stakeholders who also

have an interest in climate change issues, such as provincial government, district government, universities, private entities and business associations. More than 50 ministries and institutions participated in ICCTF activities since its establishment.

ICCTF will continue to develop and strengthen its partnerships with stakeholders in order to increase its effectiveness and improve efficiency.

*In executing its objectives, ICCTF has built partnerships with various institutions based on common interest to increase effectiveness and efficiency in implementing the project.*

### Partners

- ✓ Ministry of Agriculture
- ✓ Ministry of Agriculture
- ✓ Badan Meteorologi, Klimatologi dan Geofisika (Agency of Meteorology, Climatology, and Geophysics)
- ✓ Badan Pengkajian Dan Penerapan Teknologi (BPPT)
- ✓ Provincial governments of:
  - West Java
  - Banten
  - DKI Jakarta
  - East Java
  - Central Java
  - Jambi
  - North Sumatera
  - Riau
  - Central Kalimantan
  - South Kalimantan

- ✓ District governments of:
  - Indramayu
  - Serdang Bedagai
  - Bau-bau
  - Batu
  - Kamal Muara
- ✓ Bogor Agricultural Universities (IPB)
- ✓ Bandung Institute of Technology (ITB)
- ✓ Pulp and paper industrial association
- ✓ Steel industrial association

- ✓ UKCCU
- ✓ AUSAID
- ✓ SIDA
- ✓ Development partners:
  - United Nations Development Programme
  - Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ)
  - Japan International Cooperation Agency (JICA)



BAPPENAS meeting with NGOs and CSOs with ICCTF

# Challenges and Lessons Learned

*ICCTF Secretariat members consider lesson learned as one of the most important aspects for organizational development.*

## Challenges

Despite the challenges faced by ICCTF in its initial phase, the trust fund is continuously expanding its capacity and strengthening its core functions as a national trust fund, and will require additional funding in the near future in order to carry out its planned activities.

Some of these challenges included the following:

First, staff within the executing agencies and PMUs needed capacity development training, especially to learn how to use a new type of project management system. During this training phase, the ICCTF Secretariat focused on coordinating and standardizing various financial reporting, monitoring and evaluation processes among the executing agencies. This capacity development training was necessary for the proper implementation of the projects, because this was the first time that the executing agencies and the PMUs needed to prepare periodic reports with specific details as required by ICCTF. During this initial phase of project implementation, ICCTF needed to closely monitor and offer constant support to the executing agencies and the PMUs because they were not familiar with the format or the contents of the reports required to be submitted to ICCTF to measure the progress of the projects.

Second, a CSO forum for ICCTF was established, but to date, the involvement of CSOs in the ICCTF

policy dialogue meetings with the Steering Committee and the Technical Committee has been limited. This is because this forum has not yet appointed its representative to sit in the Steering Committee and the Technical Committee meetings. In the near future, ICCTF hopes to have a representative from CSOs to sit in these meetings so that ICCTF can obtain inputs from CSOs.

Third, the tasks for ICCTF grew faster than the recruitment of staff at ICCTF. As a result, the office became short staffed and the work load was unevenly distributed among the staff. This in turn caused some delays in the implementation of the projects. Over time, ICCTF has managed to recruit skilled staff to address the needs and concerns of the office to effectively and efficiently implement the projects and carry out the mission of ICCTF.

## Lessons Learned

There are four main lessons learned from the initial phase of the ICCTF establishment:

First, ICCTF learned that the best way to monitor and supervise the implementation of the funded project is through a "participatory approach" or an approach that accommodates the needs and the concerns of the participants. In this process, the ICCTF Secretariat closely oversees the pilot projects and provides support and coaching to the PMU in preparing financial reports, monitoring and

evaluation reports, and other project management practices as requested by the executing agencies. Through this approach, the executing agencies were able to provide their input and feedback to the coaching sessions and inform ICCTF of the specific needs that each agency required to comply with the requirements of the ICCTF.

Second, ICCTF learned that a thorough consideration and analysis was necessary to ensure that the selected projects are aligned with the national priorities and that the implementing entities have the adequate capacity to effectively implement the projects.

Third, the standardized monitoring and evaluation procedures at the initial phase of project implementation were not fully followed by the pilot projects. ICCTF, in response, developed its own monitoring and evaluation framework for each pilot project to ensure timely and effective completion of the project.

Fourth, through the challenges faced by having a lack of human resources, ICCTF learned the importance of having a strong human resources team that can facilitate recruitment of staff and also improve staff capacity building efforts.

Based on these lessons learned, the ICCTF will continue to refine its operational and institutional mechanisms to better implement future projects.

# Conclusion and Ways Forward



## Conclusion

The GOI, through BAPPENAS and the Ministry of Finance, made a significant advancement in its implementation of the Jakarta Commitment by successfully establishing the ICCTF. ICCTF is the first and only nationally managed trust fund specifically for climate change programmes in Indonesia. The plan is to channel all future international and domestic financial support related to climate change through ICCTF.

During the first phase of its development, the ICCTF has solidified its institutional framework and has become a legitimate financing mechanism to actualize the GOI's commitment to create a low carbon economy. As discussed in this report, ICCTF has become a key financing institution that is recognized at international, regional, national and local levels.

ICCTF recognizes the importance of creating a roadmap for the future. Therefore, to ensure that

all of its activities are aligned with national priorities, ICCTF has developed its own Business Plan along with its targets, investment strategies, priority programmes and proposed activities with budget (see attached Annex 2).

## Ways Forward

Although ICCTF faced some challenges during its initial phase, ICCTF has used these challenges to further improve its institutional capacity.

The first two years following its establishment allowed ICCTF to learn from its challenges and further strengthen its capacity. In 2012, ICCTF will focus on the following:

First, ICCTF will continue to focus on and develop the government-to-government partnerships among the various executing partners. These relationships will become the foundation for the

solid national trusteeship entrusted to ICCTF.

Second, ICCTF will focus on establishing a national trust fund under the framework of Presidential Regulation 80/2011, including the selection of a national trust fund manager.

Third, ICCTF will further develop its management system, procedures, and mechanisms, including audits by external independent auditors. These are strategically important improvements that must be made to ensure that projects funded by ICCTF meet internationally recognized standards. Compliance with such international standards will be required for ICCTF to become the NIE for the Adaptation Fund and eventually to qualify as NIE for the Green Climate Fund.

Fourth, ICCTF will continuously strengthen its three thematic windows and will eventually extend opportunities to non-governmental institutions and CSOs, universities and local government so that they too can become implementing agencies of the ICCTF projects.

Lastly, ICCTF will continue to work with the line ministries to realize the vision of ICCTF to be a transparent nationally managed trust fund to facilitate Indonesia's commitment to reduce GHG emissions by 26% unilaterally and 41% with international support by 2020, as well as to enhance resilience to climate change.



Indonesia with rich natural resources and human resources has significant potential for a low carbon economy and enhanced resilience to climate change.

# Expenditure Summary

2010-2011

| Financial contributions                          | in USD            |
|--|-------------------|
| UKCCU  | 9,518,110         |
| AUSAID   | 1,404,470         |
| SIDA   | 331,730           |
| <b>TOTAL financial contribution from donors*</b> | <b>11,254,310</b> |

\* Based on exchange rate at the time of contribution

| Financial Outflow (USD)   |                       |                     |                     |                       |                      |
|---|-----------------------|---------------------|---------------------|-----------------------|----------------------|
| Objectives  | Budget<br>2010 & 2011 | Expenditure<br>2010 | Expenditure<br>2011 | Total<br>Expenditures | Remaining<br>Balance |
| 1. Support priority climate change initiatives as prioritized by the Government (Land-based mitigation window, energy window, and resilience & adaptation window) | 4,808,809.54          | 2,229,642.06        | 2,361,750.38        | 4,591,392.46          | 217,417.08           |
| 2. Support the design and establishment of the ICCTF  | 264,902.00            | 0.00                | 116,272.51          | 116,272.51            | 148,629.49           |
| 3. Support capacity development needs for the efficient and effective implementation of ICCTF   | 428,120.00            | 57,724.45           | 373,848.39          | 431,572.80            | -3,452.80            |
| 4. Support and strengthen ICCTF Secretariat   | 634,413.53            | 65,538.39           | 314,156.80          | 379,695.20            | 254,718.33           |
| Revaluation (exchange rate gains/losses)  | -                     | -477.67             | 4,976.08            | 4,498.41              | -4,498.41            |
| <b>GRAND TOTAL</b>  | <b>6,136,245.07</b>   | <b>2,352,427.23</b> | <b>3,171,004.16</b> | <b>5,523,431.38</b>   | <b>612,813.69</b>    |
| <b>GRAND TOTAL REMAINING BUDGET</b>   |                       |                     |                     |                       | <b>\$5,730,879</b>   |



# Annexes



## Annex 1

### ICCTF Annual Plan and Budget 2012

| Objectives:   | Total Planned Budget (in US\$) |
|---|--------------------------------|
| 1. Support priority climate change initiatives as prioritized by the Government<br>-Land-based mitigation window<br>-Energy window<br>- Resilience and Adaptation window            | 33,289                         |
| 2. Support the design and establishment of the ICCTF  | 106,334                        |
| 3. Support capacity development needs for the efficient and effective implementation of ICCTF   | 201,087                        |
| 4. Support and strengthen ICCTF Secretariat   | 282,628                        |
| <b>SUB TOTAL (as previously allocated and registered with the state budget system)</b>  | <b>623,338</b>                 |
| <u>Additional funds to be allocated:*</u><br><br>1. Additional capacity assessment and capacity building of ICCTF Secretariat<br><br>2. Support selected climate change initiatives | \$5,107,541                    |
| <b>GRAND TOTAL</b>  | <b>\$5,730,879</b>             |

\*The exact allocation of funds to be discussed at the next Steering Committee meeting



## Annex 2

# Priority Areas, Strategies, Programmes, Proposed Activities and Budget

### Land-based Mitigation Window

| Land-based Mitigation Window: Reducing GHG emissions from forestry and peat-land                                |   |   |                                |      |       |       |           |                                     |             |
|---|---|---|--------------------------------|------|-------|-------|-----------|-------------------------------------|-------------|
| Investment Strategies   | Programmes  | Proposed Activities   | Required Budget (Million US\$) |      |       |       |           | Total Planned Budget (Million US\$) | Phase*      |
|   |   |   | 2012                           | 2013 | 2014  | 2015  | 2016-2020 |                                     |             |
| 1. Strengthening institutional setting and capacities, regulative framework as well as forest governance reform | 1.1. Development of policy and regulative framework; building institutional setting and creating financial incentives and instruments regarding land-based mitigation | 1.1.1 Establishment and strengthening of Forest Management Units (FMU) through pilot projects   | -                              | 16.1 | 16.1  | 21.5  | 43        | 96.7                                | Plan-Pride  |
|   |   | 1.1.2 Formulation of Presidential Regulations on National Strategic Zones (NSZ); development of Regional Regulations (Perda) on spatial planning for islands, provinces, districts and cities based on Strategic Environmental Assessment (SEA)   | 2.2                            | 2.2  | 2.2   | -     | -         | 6.6                                 | Plan-Pride  |
|   |   | 1.1.3 Development of 'Payments for Forest Ecosystem Services' Models; development of financial incentives and instruments to promote Sustainable Forest Management (SFM) programs and Chain of Custody Certification in production forest   | 1.1                            | 2.2  | 2.2   | 1.1   | -         | 6.6                                 | Plan-Pride  |
|   |   | 1.1.4 Formulation of standard criteria for categorizing degraded peat land and ecosystems; development of a 'Master Plan for Peat land Ecosystem Management' at provincial level  | -                              | 2.2  | 2.2   | 2.2   | -         | 6.6                                 | Plan-Pride  |
|   | 1.2. Strengthening forest governance reform   | 1.2.1 Development of pilot projects concerning "Sustainable Production Forest Management"   | 10.8                           | 21.5 | 21.5  | 21.5  | 43        | 118.3                               | Plan-Pride  |
|   |   | 1.2.2 Inventory and monitoring system of 'Forest Resources'; development of control mechanisms for non-forest related usage of forest areas and peat land ecosystem's hydrological entity   | -                              | -    | 21.5  | 32.3  | 75.3      | 129.1                               | Plan-Pride  |
|   | 1.3. Raising awareness and building capacities of indigenous people and local communities   | 1.3.1 Development of "Forest and Climate Change" education and training programs for local communities  | -                              | -    | -     | 4.3   | 8.60      | 12.9                                | Plan-Pride  |
|   | 2. Improving land-based related management practices; development and improvement of measurement and information systems related to land-based mitigation activities  | 2.1.1 Modeling of carbon absorption and emission estimates for various types of ecosystems; upgrading Remote Sensing Ground Stations and improving databases  | -                              | 5.4  | 5.4   | 5.4   | 21.5      | 37.7                                | Know-Manage |
|   |   | 2.1.2 Research on and development of low-emission technologies for land-based sector and methodology for Measurable, Reportable, Verifiable (MRV) in forestry and agriculture sector; methodology to measure climate change impacts on biodiversity, spatial planning and preservation of Indonesian tropical forest wildlife | -                              | 5.4  | 5.4   | 5.4   | 21.5      | 37.7                                | Know-Manage |
|   |   | 2.2.1. Development and establishment of sustainable agricultural land management practices in abandoned and degraded peat land areas to support plantation, animal raising and horticulture sub-sectors   | -                              | -    | 10.8  | 10.8  | 32.3      | 53.9                                | Plan-Pride  |
|   |   | 2.2.2. Enhancement of forest plantation businesses (HTI, HTR)   | -                              | 21.5 | 21.5  | 21.5  | 64.5      | 129                                 | Plan-Pride  |
|   | 2.3. Conservation programs to avoid emission from deforestation   | 2.3.1. Designing and establishing conservation and essential ecosystem areas and sustainable management of protected forests  | 5.4                            | 5.4  | 5.4   | 5.4   | 21.5      | 43.1                                | Plan-Pride  |
| 3. Investments required outside the forest sector to reduce the pressure on forests                             | 3.1. Rural development and social and economic infrastructure programs, alternative livelihood and poverty reduction measures   | 3.1.1. Development of low-carbon 'Agroforestry Management Practices', 'Forest Food', 'Medicine Reserve', 'ecotourism' and 'alternative energy programs' to improve local communities welfare  | -                              | -    | 4.3   | 4.3   | 12.9      | 21.5                                | Plan-Pride  |
| T o t a l   |   |   | 19.5                           | 81.9 | 118.5 | 135.7 | 344.1     | 699.7                               |             |

Source for Annex 2: ICCTF Business Plan 2011-2020, See page 7 of the External Report for more discussion on development of project priorities

\* The Indonesia Climate Change Sectoral Roadmap (ICCSR) sets up 3 categories of activities for each development sector. Category 1 includes those activities that related to data, information and knowledge management (KNOW-Manage), Category 2 includes planning and policy, regulation and institutional development (PLAN-PRIDE), and Category 3 is for activities that include implementation and control of plans and programs (ICON-Money).



## Annex 2

### Priority Areas, Strategies, Programmes, Proposed Activities and Budget

#### Energy Window

| Energy Window: Significant GHG emissions reduction in energy supply and sectors of energy demand     |   |   |                                |      |      |      |           |                                     |             |
|--|---|---|--------------------------------|------|------|------|-----------|-------------------------------------|-------------|
| Investment Strategy  | Programmes  | Proposed Activities   | Required Budget (Million US\$) |      |      |      |           | Total Planned Budget (Million US\$) | Phase       |
|  |   |   | 2012                           | 2013 | 2014 | 2015 | 2016-2020 |                                     |             |
| 1. Facilitate the development, deployment and dissemination of low-carbon energy supply technologies | 1.1. Financing of technology feasibility studies; support of regulatory framework and policy development  | 1.1.1 Development of BAU-Baseline for GHG emissions in relevant sectors (energy and transportation, industry, and waste)    | 5.4                            | 10.8 | 10.8 | -    | -         | 27                                  | Know-Manage |
|  | 1.2. Pilot projects for new low-carbon technologies   | 1.2.1 Development and deployment of renewable energies (geothermal, solar, biomass, hydro) in Indonesia                     | 21.5                           | 32.3 | 43   | 43   | 86        | 225.8                               | Icon-Monev  |
|  |   | 1.2.2 Use of natural gas as city public transportation fuel   | 2.2                            | 4.3  | 4.3  | 4.3  | 12.9      | 28                                  | Icon-Monev  |
|  | 1.3. Integrating climate change issues into decision-making processes   | 1.3.1 Establishment of university networks on climate change mitigation programs in Indonesia                               | 1.2                            | 2.2  | 2.2  | -    | -         | 5.6                                 | Plan-Pride  |
|  | 1.4. Tariff restructuring and improved incentive schemes for renewable energy power producers; and raising awareness of the communities   | 1.4.1 Feasibility study about Feed-in Tariffs in Indonesia  | -                              | 2.2  | 2.2  | 2.2  | -         | 6.6                                 | Plan-Pride  |
| 2. Promoting the implementation of energy efficiency and energy conservation measures                | 2.1. Development of sustainable "Green Building" codes and standards; establishment of energy-related benchmarking and labeling; and improving incentives to accelerate the deployment of new energy-efficient technologies | 2.1.1 Development of a long-term strategy, Action Plan, and incentive schemes for energy efficiency and energy conservation | -                              | 4.3  | 4.3  | -    | -         | 8.6                                 | Plan-Pride  |
|  |   | 2.1.2 Implementation of energy efficiency measures in industry, transportation, household, and building sector              | 16.1                           | 21.5 | 21.5 | 21.5 | 64.5      | 145.1                               | Icon-Monev  |
|  | 2.2. Promotional measures to encourage the establishment of energy service companies (ESCO)   | 2.2.1 ESCO Model implementation in industry sector  | -                              | 2.2  | 4.3  | 4.3  | -         | 10.8                                | Plan-Pride  |
| Total  |   |   | 46.4                           | 79.8 | 92.6 | 75.3 | 163.4     | 457.5                               |             |



## Annex 2

# Priority Areas, Strategies, Programmes, Proposed Activities and Budget

### Resilience and Adaptation Window

| Resilience and Adaptation Window Activities  |  |  |                                |      |      |      |           |                                     |                                    |
|--|--|--|--------------------------------|------|------|------|-----------|-------------------------------------|------------------------------------|
| Investment Strategies  | Programmes   | Proposed Activities  | Required Budget (Million US\$) |      |      |      |           | Total Planned Budget (Million US\$) | Phase                              |
|  |  |  | 2012                           | 2013 | 2014 | 2015 | 2016-2020 |                                     |                                    |
| 1. Improving policy and institutional frameworks concerning the dissemination of climate forecasts to end users, especially farmers, fishers and health workers  | 1.1. Increasing the usage of climate forecasts for farmers, fishers, and health workers  | 1.1.1 Developing institutions for accessing and disseminating climate forecasts at end-user level (farmers, fishers, health worker)      | 8.6                            | 12.9 | 12.9 | 4.8  | -         | 39.2                                | Know-<br>Manage,<br>Plan-<br>Pride |
|  |  | 1.1.2 Increasing the ability of local governments to disseminate climate forecasts   |                                |      |      |      | 59.1      | 59.1                                | Plan-<br>Pride                     |
|  | 1.2. Improvement of policy and institutional frameworks for dissemination of climate forecasts   | 1.1.1 Assessment and improvement of current policy and institutional frameworks (research studies and consultation process)              | -                              | -    | 1.1  | 1.1  | -         | 2.2                                 | Know-<br>Manage,<br>Plan-<br>Pride |
|  | 1.3. Improving methodology for disseminating climate forecast to end-user (farmers, fisher)  | 1.3.1 Development and evaluation of a methodology for disseminating climate forecasts  | -                              | 0.2  | 0.1  | 1.1  | -         | 1.4                                 | Know-<br>Manage                    |
| 2. Supporting activities to build knowledge, facilitate technology transfer, and financing schemes that improve the resilience of the community and enable them to conduct adaptation measures for the most vulnerable sectors | 2.1. Studies on climate change impacts on fishery and health sector  | 2.1.1 Updated knowledge about impacts of climate change to sea water fishery, aquaculture, pest and insect, and climate-related diseases | 3.2                            | 3.2  | 3.2  | 3.2  | -         | 12.8                                | Know-<br>Manage                    |
|  |  | 2.1.2 Inventory of areas mostly affected by climate change risks   | -                              | 3.2  | 3.2  | -    | -         | 6.4                                 | Know-<br>Manage                    |
|  | 2.2. Developing a policy and legal frameworks to establish incentive schemes for adaptive farming practices                                  | 2.2.1 Dialogues with stakeholders for the development of incentive schemes for adaptive farming practices                                | 0.6                            | 0.6  | 0.6  | 0.6  | 2.2       | 4.6                                 | Know-<br>Manage,<br>Plan-<br>Pride |
|  | 2.3. Development of a platform for knowledge exchange on effective adaptation measures   | 1.1.1 Development of an information exchange platform (website and newsletter)   | 1.1                            | 1.1  | 1.1  | 1.1  | 5.4       | 9.8                                 | Know-<br>Manage,<br>Plan-<br>Pride |
|  | 2.4. Shaping favorable institutional and legal frameworks for accelerating the deployment of technology that supports the adaptation process | 2.4.1. Development and dissemination of a new variety of staple crop that is more resistant to climate change                            | 4.3                            | 4.3  | 4.3  |      | 4.3       | 17.2                                | Know-<br>Manage,<br>Plan-<br>Pride |
|  |  | 2.4.2. Assessment of institutional and legal frameworks regarding the dissemination of new variety of staple crop                        | 0.6                            | 0.6  | 0.6  | 0.6  |           | 2.4                                 | Know-<br>Manage,<br>Plan-<br>Pride |
|  | 2.5. Establishment and application of protection instrument available for most vulnerable groups   | 2.5.1. Developing climate insurance for vulnerable groups (farmers, fishers, urban poor)   | 5.4                            | 5.4  | 5.4  |      | 21.5      | 37.7                                | Know-<br>Manage,<br>Plan-<br>Pride |
|  |  | 2.5.2. Developing favorable policy and legal frameworks for climate insurance  |                                |      |      | 0.6  |           | 0.6                                 | Know-<br>Manage                    |
|  | 2.6. Support of urgent and replicable adaptation activities undertaken by communities  | 2.6.1 Improving the implementation of organic farming and market   |                                |      |      | 1.1  | 3.2       | 4.3                                 | Know-<br>Manage,<br>Plan-<br>Pride |
|  |  | 2.6.2 Deployment of sustainable practices, technology and respective incentives  |                                |      |      |      | 21.5      | 21.5                                | Plan-<br>Pride                     |
|  | 2.7. Developing and shaping favorable policy and legal frameworks on sustainable water management to respond to impacts of climate change    | 2.7.1 Developing policy frameworks for incentives to conserve water  |                                |      |      | 1.1  | 1.1       | 2.2                                 | Know-<br>Manage,<br>Plan-<br>Pride |
|  |  | 2.7.2 Evaluation on policy regulation/ instruments concerning water allocation during extreme climate events                             |                                |      | 1.1  | 1.1  |           | 2.2                                 | Know-<br>Manage                    |
|  |  | 2.7.3 Stakeholder dialogues on water management and stakeholder responsibility   |                                |      | 2.2  | 2.2  | 4.3       | 8.7                                 | Know-<br>Manage,<br>Plan-<br>Pride |

Continued...



## Annex 2

# Priority Areas, Strategies, Programmes, Proposed Activities and Budget

### Resilience and Adaptation Window (*continued*)

| Resilience and Adaptation Window Activities   |  |  |                                |      |      |      |           |                                     |                                    |
|---|--|--|--------------------------------|------|------|------|-----------|-------------------------------------|------------------------------------|
| Investment Strategies   | Programmes   | Proposed Activities  | Required Budget (Million US\$) |      |      |      |           | Total Planned Budget (Million US\$) | Phase                              |
|   |  |  | 2012                           | 2013 | 2014 | 2015 | 2016-2020 |                                     |                                    |
| 3. Building capacities of central and local governments in conducting risk and vulnerability assessments; in formulating climate adaptation strategies, and in integrating climate change into local development planning | 3.1. Improving knowledge about risks, vulnerabilities and impacts of climate change at regional/local level  | 3.1.1 Risk and vulnerability assessments on coastal and small islands, and rural areas   | 5.4                            | 5.4  | 5.4  | 5.4  |           | 21.6                                | Know-<br>Manage                    |
|   |  | 3.1.2 Monitoring activities related to impacts at community level (on agriculture, fishery, health, and water resource)  | 8.6                            | 8.6  | 8.6  |      | 21.5      | 47.3                                | Know-<br>Manage,<br>Plan-<br>Pride |
|   |  | 3.1.3 Dissemination/training of extension agents about the impacts of climate change to agriculture, fishery and health  |                                | 3.2  | 3.2  | 3.2  | 16.1      | 25.7                                | Know-<br>Manage,<br>Plan-<br>Pride |
|   | 3.2. Increasing the capacity of local government stakeholders to enable them to conduct risk and vulnerability assessments, to formulate climate adaptation strategies, and to integrate climate change issues into development planning | 3.2.1 Technical assistance for local governments in developing spatial plans and regulation integrating climate change   | 3.2                            | 3.2  | 6.5  | 6.5  | 32.3      | 51.7                                | Know-<br>Manage,<br>Plan-<br>Pride |
|   |  | 3.2.2 Development of a guideline about integrating climate change issues into spatial planning   |                                |      | 1.1  | 1.1  |           | 2.2                                 | Know-<br>Manage                    |
|   | 3.3. Development of policy and legal frameworks on reviewing and integrating climate change into spatial planning and into local development plans   | 3.3.1 Stakeholder dialogues to develop policy and legal frameworks on reviewing and integrating climate change into spatial planning and local development plans |                                |      | 1.1  | 1.1  | 4.3       | 6.5                                 | Know-<br>Manage,<br>Plan-<br>Pride |
| T o t a l   |  |  | 41                             | 51.9 | 61.7 | 35.9 | 196.8     | 387.3                               |                                    |

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