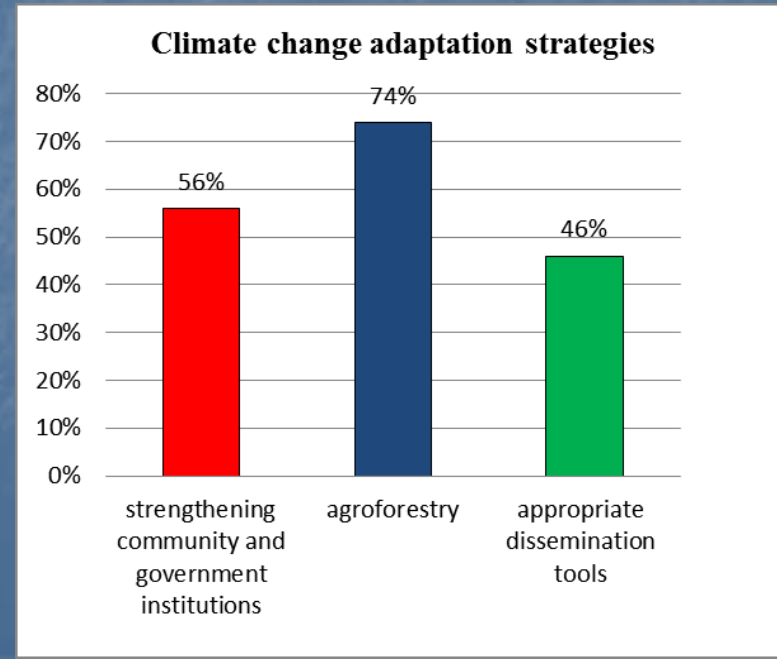


# Communicating and Operationalizing site-specific climate change adaptation strategies in selected vulnerable upland communities in Southeast Asia: Lesson learned in Indonesia

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*"Institutionalizing Agroforestry as a Climate Change Adaptation Strategy through Local Capacity and Policy Development in Southeast Asia" 2011-2012*

**Training course intends to convene the junior lecturers and forest technicians of different country network members, and the selected staff of the local government units that are providing technical and extension services to the upland farmers.**

There are some statements that could be as **leveling off understanding** of training participants that related to agro-forestry and climate change, as examples:

- **Agroforestry:** Collective terminology for the systems and technologies of land use that are planned to be implemented in a land with the combination of woody plants and agricultural crops or animals (livestock) or fish that are carried out simultaneously or in shifting to form the infraction of ecological, social, and economical with the various components.
- **Climate change:** Long time ago, the climate in Indonesia was in order, the early rainy and dry season could be sure, so that farmers could set the cropping pattern as well. Changes in temperature, air pressure, wind, precipitation and humidity as a result of global warming, and it caused by human activities as well as the use of fossil fuel that make the carbon emissions to be so high. In present, the carbon emissions, or called also as the greenhouse gases cause the increasing of atmosphere temperature. This causes the climate to be not in order or so-called climate change. This climatic irregularity is caused to the uncertain of the early of rainy season and dry season, so that farmers are failed to harvest or less production. The increasing of air temperatures will also lead to the attack of certain pests and diseases that decrease productivity. **Climate change could be overcome by mitigation and adaptation through innovation on the plant, plant shifting, agro-forestry etc. to benefit the farmers. Sustainability program will be achieved if relevant policy developed simultaneously with program implementation.**

**Lesson learned:** increasing the participants knowledge describe by their action plan towards promoting appropriate climate change mitigation and adaptation strategies among the farming communities. According to them, **the sustainability project guaranteed** if those promoting CC program at their location work since the awareness program, fields implementation and policy works have been done.

# Capacity Development of Local Climate Change Communicators in Vulnerable Upland Communities in Southeast Asia – 2014 - 2015

## Training 16 – 17 October 2014

- Those questions were about the principles used by farmers in combining the types of plants in the field, then there was also a question about the eradication of pests, marketing, utilization of water resources for the community, also the steps of appropriate vegetative propagation. After field visit, then conducted a meeting to discuss the media that will be used to provide an understanding about the impacts of climate change.
- In the discussion it was decided that the participants chose the media to raise public awareness in the form of posters and calendars. The background of the posters and calendars is pictures of farmers who sat heated and thoughtfully look at the deforestation. Then, within two (2) media were agreed to be written the statement *"Hutan Gundul, Iklim Ekstrim Muncul"* ("Forests Gone, Extreme Climate Won") and Climate Change Process poster.

## A Local Climate Change Awareness Program with the Local Climate Change Communicators as the Main Organizers and Speakers. Datar Lebuay – Tanggamus District, 27 – 28 January 2015

- Besides, the function of agroforestry products will also able to keep the micro-climatic conditions in the forest so that it will have a positive impact on the sustainability of forest ecosystems in the village area. It means, the condition of biodiversity of plants and birds or other animals are also maintained.
- Under this practice, it can be seen that the **extension workers and the government officials** could also carried out the dissemination to **increase community's understanding on climate change** well if they are given **an appropriate and adequate material**.

## Policy Brief:

- Capacity Development of Community and Extension in Climate Change Adaptation and Mitigation:  
The Importance of Policy to Underlying its Sustainability.



# Hutan Gundul Iklim Ekstrim Muncul 2015

Januari	Februari	Maret	April
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
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Ditertbitkan atas kerjasama:

# Hutan Gundul Iklim Ekstrim Muncul

Ditertbitkan atas kerjasama:

# DARI PEMANASAN GLOBAL KE PERUBAHAN IKLIM

MAKASDILAH (KEMENTERIAN RI) PELATIHAN PERUBAHAN IKLIM DI KPHL SATU TEGI - LAMPUNG - JANUARI 2015

PERUBAHAN SUHU BUMI

PERUBAHAN INPUT RADIASI MATAHARI

PERUBAHAN TEKANAN UDARA

PERUBAHAN ARAH ANGIN

PERUBAHAN POLA MUSIM

TETAPI SUHU UDARA LOKAL JUGA BISA BERUBAH KRN PERUBAHAN LINGKUNGAN

ADAPTASI

MITIGASI

Ditertbitkan atas kerjasama:

- ES MENCAIR
- SUHU PERMUKAAN LAUT MENINGKAT
- TINGGI MUKA LAUT NAIK
- LAJU EVAPETRANSPIRASI MENINGKAT
- KELEMBABAN UDARA MENINGKAT
- BANYAK HUJAN ATAU KEKERINGAN

- PERCEPATAN AWAL MUSIM, PENINGKATAN DURAS HUJAN MUSIMAN, KEMUNDURAN MUNDURNYA PERUMBUH K. WIND
- PRODUKSI TANAMAN HORTIKULTURA BANYAK DITENTUKAN OLEH SUHU DAN KELEMBABAN UDARA
- BERKAITAN DENGAN KETIDAK PASTIAN PANEN YANG MENGHANGGAM JADUAL PENGOLAHAN PASCA PANEN
- PERUBAHAN SUHU DAN MUSIM KEDUA YANG PALING MEMPESWAR JEJANG TERADANYA KEKARON HUTAN

- PEMILIHAN BIBIT UNGGUL TANAM
- KEBERHAMA, EFEKTIF DALAM PENYULUHAN AIR DAN PUPUK
- DIVERSIFIKASI PANGAN TERUTAMA ZUMBER KERSIHORBIT
- PENYERABANGAN MODEL UNTUK NONPERIBUDI DUMAGALUM SENGUNDA DAPAT DIKALAKAN PENYERABANGAN JADUAL TANAM

- MEMBENTUKAN GENANGAN AIR PADA PADI PADI SEWAH
- PENGOLAHAN PUPUK TERKAT SIKLE DAN SISTEM
- PENGOLAHAN KOTONGAN TRAK
- EKUIFENSI DALAM PERUBAHAN ENERGI BAHAN BAKAR DALAM KEBERHAMA PEKERJAAN
- PENCEGAHAN ALIH FUNGSI LAHAN HUTAN TERUTAMA YANG DILAKUKAN DENGAN PEMBAKARAN
- PENYERABANGAN LAHAN TERKATA UNTUK PENYULUHAN SUHU UDARA

# Policy Brief

## Capacity Development of Community and Forestry Extension in Climate Change Adaptation and Mitigation: The Importance of Policy to Underlying its Sustainability

APN



### Introduction.

For more than three decades, the forestry sector has been the main capital of national development, whether as foreign exchange earner, generating activities in other sectors as well as national economic growth driver. In general, the Act No.41 / 1999 has mandated that the performance of forestry should embrace the principle of benefit and sustainable, democracy, justice, solidarity, open and integrated.

Regarding to it, management of forest resources must involve the participation of communities inside and around the forest. Future forest development is directed to involve the participation of the larger community. Various efforts that are conducted to be able to empower local communities is to utilize forest land or community land through the activity of community capacity building through education and training on forestry. It could also be done through study visits, internships and others.

Sustainable forest management accompanied by an increase of its functions could be realized, if on its implementation is supported by the active participation of the entire community and other relevant agencies. Especially about the active participation of the community, it could be realized if they are aware and conscious, and also concerned to the existence of forest area for himself, for the environment, community, nation and the country (Mahbub, 2007). Related to the issue of climate change (CC) it is expected that the community could understand how the correlation between forest and CC process then actively participate in the adaptation and mitigation of CC.

Community participation would be grow if the community are placed as the subject of development in the sense of becoming the stakeholders and decision makers in various aspects of forestry development (Wulandari, 2013). It is included in the adaptation and mitigation of CC, since the planning, implementation, security, and utilization of the products. Followed by actively participating also as parties partner to monitor and evaluate.

To create CC understanding and the conditions of active participation of community in Lampung on the activities that support CC adaptation and mitigation is required the movement of extension and training on participatory forestry. It is expected that from the extension and training on participatory forestry will create a conducive atmosphere. This condition could happen because of the trainees who are to extension and training in order to increase the capacity could be implemented in a sustainable manner, then it would require the strong policy foundation at the provincial and local levels. Community as the extension target and forestry extension agent as the bridge of message, innovation and technology will cooperate and participate.

## Promoting Climate Change Adaptation Strategies via Establishment of Agroforestry Learning Laboratories (ALLs) in Upland Communities in Southeast Asia - 2016

- The goats and fish farming development **agrosilvofishery dan agrosilvopasture**, these activities are also expected to eventually be able to **CC adaptation and provide additional income** for the community so that the dependence of communities on the forest area will be decreases and impacted to the reduced levels of disruption to the forest area, especially Reg 22 and Reg 39
- From the results of the **cross visit**, the participants came to understand that their CF group still need to **further strengthen the institutional internally** as well as **increased the ability to manage** its **Community Forest** land to the **marketing of the products**.
- **Local policy** development for guarantee the program sustainability to be achieved



Thank you...