

### 1. Why have Forest Management Units (FMU)?

Indonesia is one of the world's most forested countries with a wide variety of forest types, home to more than 10% of global plant and animal species. Approximately 130 million ha (more than 70% of Indonesia's land mass) is classified as forest area. Forests are critical not only for national economic development and the livelihood of local people, but also for the functioning of the global environmental system. Forestry-based activities and industries are a major source of employment in Indonesia and up to 30 million people directly depend on forest resource management. However, the lack of adequate forest governance, management structures and law enforcement on local level triggers massive deforestation and forest degradation throughout the country contributing to nearly 60% of the national greenhouse gas emissions.



The establishment of Forest Management Units (FMU) on the local level as new and permanent management entities is directly addressing these issues and provides the basis for improved forest governance, planning, forest resources (co-)management, monitoring and stakeholder engagement. In addition FMUs will play a key role in local efforts towards sustainable economic development, climate change mitigation and adaptation as well as biodiversity conservation.

### 2. What is a Forest Management Unit?

A Forest Management Unit (FMU) is:

- a public service provider under the responsibility of central, regional and district authorities
- an operational unit of manageable and controllable size predominantly covered by forests
- a legally established permanent entity with clearly demarcated forest boundaries.

The FMU has clear economic, social and ecological management objectives stipulated by long-term management plans, annual work and business plans closely related to the main forest functions (e.g. protected forest, production forest). Operational and administrative tasks are determined by long-term management objectives and by forest managers (commercial companies, communities, state forest companies) operating in the area.

### 3. What types of FMUs exist?

An FMU normally comprises a variety of forest land (*kawasan hutan*) including:

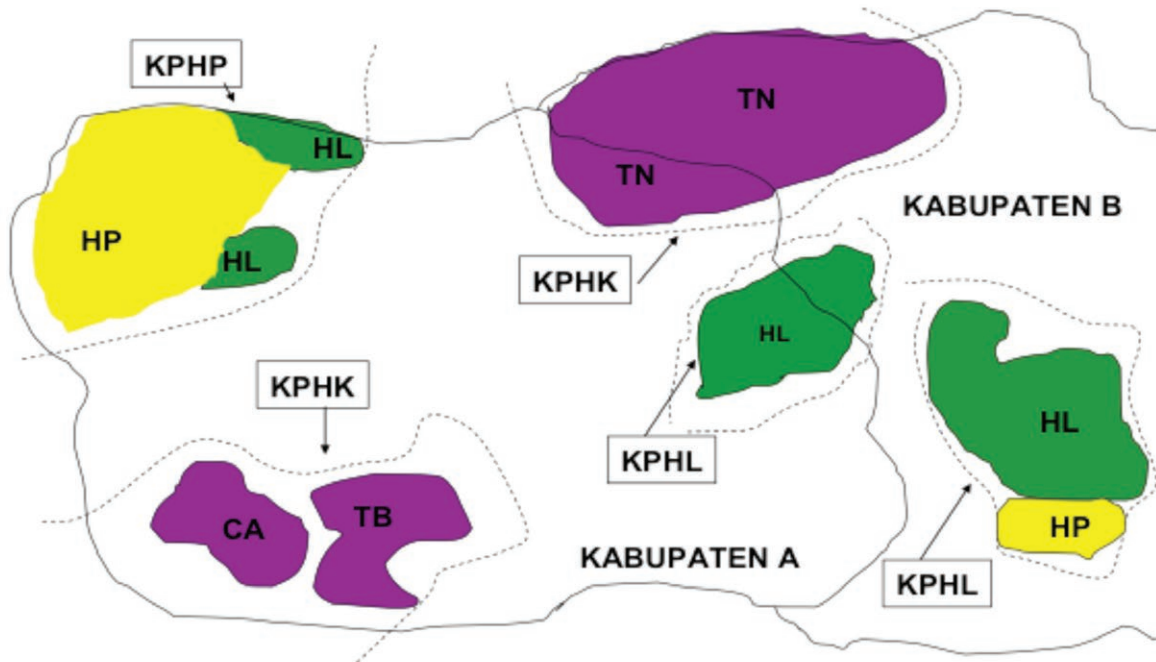
- areas with long-running licenses covering large areas of natural and plantation forest (HPH, HTI, HTR),
- smaller areas of village, community, cultural forests, smaller village license areas (HKm) and
- areas of various size without any license (*wilayah tertentu*) (mostly ex-license areas without considerable timber stock left).

All these areas, although being part of the same FMU, are managed or should be managed differently and require different approaches. In addition an FMU might cover different types of forests including conservation, protection and production forest and will be named according to the most dominant forest type as follows:

- **Conservation FMU** - Kesatuan Pengelolaan Hutan Konservasi (KPHK) with the primary function of conserving plant and wildlife biodiversity and their ecosystem
- **Protection FMU** - Kesatuan Pengelolaan Hutan Lindung (KPHL), with the primary function of protecting life support systems to regulate water, prevent flooding, control erosion, prevent seawater intrusion and maintain soil fertility
- **Production FMU** - Kesatuan Pengelolaan Hutan Produksi (KPHP) with the primary function of producing forest products

Hence the management of these areas will be based on meaningful long-term and short-term management plans for each area with different kinds of management.

**4. What are the main duties and functions of an FMU and what is the relationship with national and subnational forest services, concessionaires and communities?**



While the national and subnational forest services (*Dinas Kehutanan*) provide the forest administration framework, the FMU is responsible for day to day on-site forest management ensuring that all functions and services of the forests in the area are maintained, and that sustainable forest management (SFM) is implemented.

This is achieved by:

- monitoring and controlling the forest management plans and operations of private forest managers (forest concessions).
- providing advice/services, approving, monitoring and controlling forest management plans and forest operations carried out by local communities (e.g. community and village forest).
- directly managing state forest not given to third parties for management (e.g. 'open access' forest) including forest rehabilitation, reclamation, protection and nature conservation.
- helping to resolve overlapping claims that cause conflicts and may threaten forest functions.

**5. How many FMUs do already exist and how many are expected to be established?**

By May 2012, the Indonesian forest estate was sub-divided into a total of 600 FMUs, covering the total of 130.68 million ha of legally classified forest land, and divided into 530 FMUs in production and protection forest and 70 FMUs in conservation forest. Currently, 60 model FMUs are receiving support from the Ministry of Forestry (MoFoR) through the national budget, with 49 of these having already reached full legal establishment. By the end of 2014, according to the Forest Sector Strategic Plan (Renstra), a total of 120 Model FMUs are expected to be fully operational.

**6. What is the average size of an FMU?**

The average size of the current 60 model FMUs is approx. 133,000 ha but can vary significantly from around 4,500 ha to 780,000 ha depending on the forest types, management and ownership characteristics.

The optimal size of an FMU is difficult to fix, therefore criteria are used which could guarantee effective and efficient FMU organization to be formed, such as management purpose, condition of the river catchment area and administrative borders.

## 7. How is the development and operation of FMUs financed and linked with national, regional and local governments?

Funding sources for FMU development are from:

- Central Government Budget (APBN)
- Provincial Government Budget (APBD)
- Other sources authorized by law and regulation

However, significant financial input from local, national and international sources will be needed to set up the management structure as well as technical infrastructure of FMUs.

The financing of FMU operations depend on the type of FMU. Conservation FMUs are expected to depend on local, regional and national budgets, while for Production and Protection FMUs the financial management system of public service providers such as the Public Service Agency (PPK-BLU) or the Regional Public Service Board (PPK-BLUD) is recommended.

## 8. What is the authority of each government level in Indonesia with regard to FMU area establishment?

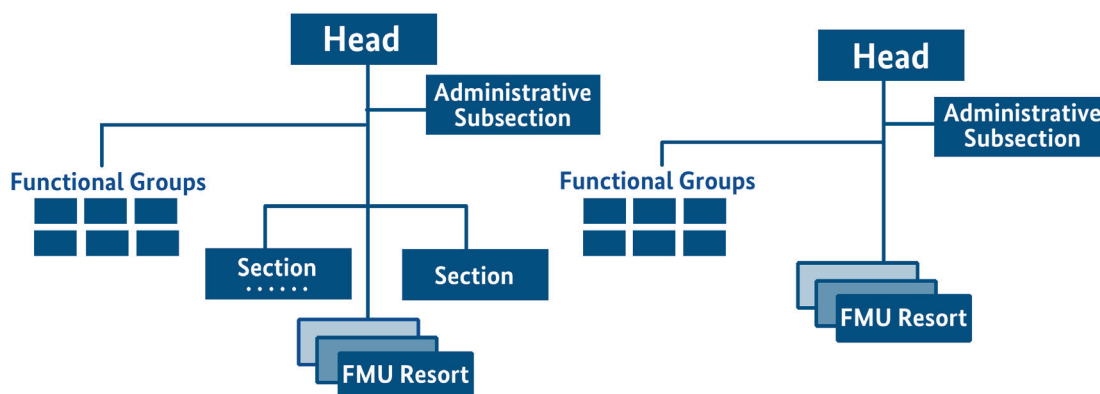
FMU area establishment is based on land characteristics, administrative boundaries, forest types and utilization licenses, watershed condition, social, cultural and economic conditions of communities as well as customary laws.

Both central and local governments have joint authority over state forests. The roles and responsibilities of district, regional and central government are defined as follows:

- **Central government:** Determination of norms, standards, procedures and criteria for FMU establishment and determining the formation and implementation of Conservation FMU (KPHK = National Parks) including area determination, zoning and management.
- **Provincial government:** Design and propose the establishment and zonation of Protection and Production FMUs including the technical and institutional set up if one FMU is located in more than one district.
- **District government/city:** Design and propose the establishment and zonation of Protection and Production FMUs including the technical and institutional set up if one FMU is located in one district.

## 9. What is the organizational structure of an FMU and how many employees are needed to run it?

The organizational structure of an FMU has to comply with the Minister of Home Affairs Regulation which allows the following two organizational structures:



The minimum number of employees to run an FMU very much depends on its characteristics such as FMU type, management activities and size. The **FMU Yogyakarta** (one of the first FMUs to be established) for example covers 15,358 ha, including 2,312 ha protection forests and 13,412ha production forests. The FMU has 178 employees however, the majority works in the cajuput (*Kayu putih*) oil production which is the most important source of income for the FMU.

In contrast the estimated number of employees for the **FMU Berau Barat** covers at least 75 responsible for an area of 781,021 ha, including 251,357 ha protection forest, 431,506 ha limited production forest and 103,139 ha production forest (95% production forest is under concessions).

### 10. What is the role of FMUs in climate change mitigation (REDD+, National- and Regional Emission Reduction Plans) and climate change adaptation?

FMUs are a key element in local climate change mitigation and adaptation efforts. By conducting forest planning (inventory and stock assessment), management (including planting, thinning, harvesting) as well as conservation activities, they provide the basis for a functional MRV (Measurement, Reporting, Verification) and safeguard information system (SIS) under the Indonesian Emission Reduction Plan (RAN/RAD-GRK) and a future REDD+ mechanism.

In addition the implementation of sustainable forest management and forest conservation techniques contributes significantly to climate change adaptation and adaptive capacities of local communities e.g. by planting locally adapted tree species, securing freshwater resources, soil stabilization and providing alternative livelihood options (e.g. use of timber and non-timber forest products), forest fire control etc.

### 11. What is the role of FMUs in biodiversity conservation?

The primary purpose of Conservation FMUs is safeguarding terrestrial flora and fauna biodiversity and environmental functions and services of ecosystems. However, more than 70% of Indonesia's terrestrial biodiversity are found outside national parks and protected areas and is threatened especially due to forest degradation and forest land conversion. Effectively managed Protection and Production FMUs have also a high potential for conserving biodiversity in the remaining forests ecosystems. Protection and production forests under FMU management can serve as buffer zones for protected areas, effectively preserving the habitat of species and at the same time reducing threats to the biodiversity. In other cases, FMUs support the maintenance of forest corridors between protected areas and other land use systems for species migration.

Another contribution towards biodiversity conservation is the implementation of sound and appropriate forest co-management approaches serving the interests and needs of local forest users. Effective on-site management, intensive collaboration with local communities through community based forests management (CBFM) schemes, like management of village forest (*hutan desa*), community forest (*hutan kemasyarakatan*) and customary forest (*hutan adat*) will ensure good forest governance by community involvement and benefit sharing.

### 12. What is the role of FMUs in sustainable development/green economy/low carbon development?

FMUs have significant potential for contributing to sustainable and green development in Indonesia by protecting natural resources (sustainable forest and integrated watershed conservation, safeguarding environmental services), reducing greenhouse gas emissions from forest and peatlands, improving the livelihoods of local communities and developing sustainable economic concepts.

Especially Production FMUs have high potential to develop sound management and business plans based on key forest and non-forest product commodities including sustainably harvested timber, non-timber forest products and services



(e.g. rattan, cacao, bamboo, gum, agarwood, honey, medicinal plants, tourism etc.). They can also promote innovative solutions and concepts for involving communities and private sector in setting up sustainable value chains for timber and non-timber forest products including production, processing and marketing, providing additional local jobs and income.