

# Sustainable Landscape-Based Management for Integrated Fire Prevention By FMUs

## The policy and current regulatory framework for integrated fire prevention at FMU level

As a response to the forest fires in the El Nino year 2015 and 2016, a substantial reform of the Indonesian fire prevention approach was initiated by the Presidential Decree on Forest and Land Fire Fighting as well as the Ministerial Decree P32/MenLHK/Setjen/Kum.1/3/2016 of the Ministry for Environment and Forestry (MoEF). Based on these regulations a “Grand Design for Forest and Land Fire Prevention 2017 – 2019” was defined and elaborated with the support of GIZ, CIFOR and the Agricultural Institute in Bogor. The Directorate for Forest and Land Fire Control (of the Ministry of Environment and Forestry) as well as other national institutions such as the Meteorological Service, Disaster Management, Ministry of Agriculture and others are instructed to implement the above-mentioned provisions and to coordinate actions at national, provincial and local levels.

The Ministerial Decree P32/MenLHK/Setjen/Kum.1/3/2016 specifies that the newly established Forest Management Units (Kesatuan Pengelolaan Hutan - FMU) play a key role in fire prevention and stipulate that in addition to good coordination among stakeholders, the establishment of a specific task force at the FMU level, named Brigade Pengendalian Kebakaran Hutan dan Lahan (Forest and Land Fires Control Brigade) is also required.

## The FMUs in the context of integrated fire prevention

With the established +600 FMUs over whole of Indonesia, FMUs are the potential institution on the ground that can integrate forest and land fire prevention measures into their activities based on the definition of proper roles and functions as well as efficient coordination. The strategy to support forest and land fire prevention as part of the forest and land fire control mechanisms put in place by the MoEF and the FMUs at the lowest level of the Indonesian forest management system, needs to be clearly defined in standard operational procedures (SOP) and routine job descriptions.



Based on experiences and common understanding, fire prevention is the best way to break the cycle of annual fire occurrence and haze threats in Indonesia. The implementation experience in the GIZ pilot area in West Kalimantan showed that successful approaches and standards have been developed for up-scaling and were considered in the elaboration of proposals for improved regulations. The pilot FMU Kubu Raya has expanded according to its capacities, e.g. in the field of fire information development as well as in the technical field (forest office based fire brigade) and was intensively supported by the FORCLIME component in its further development (personnel, tasks, budgets). In doing so the FMU also plays a recognised pioneering role in the field of fire prevention at the forest office level and represents this in the exchange and coordination with other forest offices in West Kalimantan and at the national level. It became clear that the forestry offices and their FMUs can only be successful in the long term in cooperation and coordination with other authorities, the private sector, the support structures of local NGOs and above all with the rural population of surrounding communities combining fire prevention with livelihood measures. This requires the establishment of appropriate structures for example regarding the mandate of Brigdalkarhutla KPH to go beyond fire prevention and suppression, which were reflected in the developed SOPs and the budgets of the FMU Kubu Raya.

As seen from the ground, challenges lie in coordinating and synergizing actions among the structural institutions as well as temporarily agencies emphasizing the need for clear protocols of coordination, the definition of institutional roles and functions besides clear action planning and SOPs. It can be a regulatory framework or technical guidelines which could be referred to by related parties such as the Forest and Landfires Control Command established by the Dinas LHK on provincial level.

## Our partners

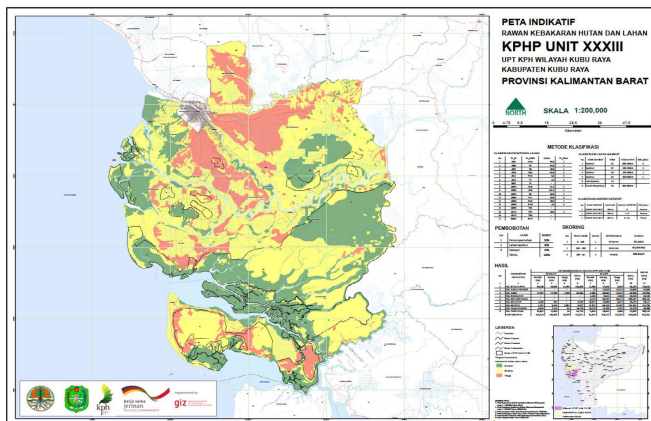
Main partners to implement the integrated forest fire prevention were the Directorate of Forest and Land Fire Control at the Ministry of Environment and Forestry. At field level, the important focal point was the Provincial Environment and Forestry Service of Kalimantan Barat (Dinas Lingkungan Hidup dan Kehutanan Provinsi Kalimantan Barat, LHK) and the forest management unit under its administration. Additionally, we worked also with other local stakeholders such as provincial government institutions, district government institutions, private sector, as well as NGOs and the village leaders and their communities.

## Our activities

Based on the sustainable landscape-based management, GIZ's approach focused on the empowerment of the FMU personnel to be competent facilitators in order to encourage communities to develop and strengthen their own livelihood through agricultural or agroforestry techniques and land use planning without using fire. The technical approaches were adapted from existing results from various organisations and locations. The project promoted the cultivation of a dialogue and assistance to communities to establish permanent agriculture/agroforestry and thereby reducing the fire use as the main cause for widespread forest and land fires.

The FMU Kubu Raya in West Kalimantan was selected as the pilot to integrate forest fire prevention measures because it complied with the following criteria:

1. The FMU already had its operations and key personnel on duty.
2. The FMU had annual problems of fire occurrence as well as haze.
3. Reducing wildfires in and around the FMU had been a high priority for provincial government (the close proximity to the provincial airport ensured this).
4. The provincial forestry service (Dinas Kehutanan Provinsi) and other provincial/district stakeholders had the same concerns and interests in managing forest fire.
5. The FMU had cooperation with other organizations regarding the same issue, which was an advantage.
6. The FMU needed to be easily accessed.



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FORCLIME TC, a programme implemented by the Indonesian Ministry of Environment and Forestry and GIZ, and funded through the German Federal Ministry for Economic Cooperation and Development (BMZ)

To materialize our support at the village level, we selected 4 villages as pilots where the FMU developed its fire prevention strategy jointly with the selected communities based on individual conditions on the ground.

## Activities and achievements

- Establishment of the forest and landfire brigades (Brigade Pengendalian Kebakaran Hutan dan Lahan/Brigdalkarhutla of KPH Kubu Raya).
- Development of the Brigdalkarhutla operational plan.
- Development of Standard Operating Procedures for the Brigdalkarhutla.
- Development of a drafted forest fire regulation for the provincial level as a proposal for improved regulations to be established by the Dinas LHK.
- Human capacity development on technical and social economic matters, especially for KPH's staff and the village community.
- Strengthening the understanding of KPH staff on peatland management issues because 50% of FMU's intervention area consists of peatland causing forest and land fire occurrences.
- Supporting upscaling measures at national and provincial level such as the development of a guideline for fire brigades at KPH level in West Kalimantan.
- Technical capacity support on regional level such as knowledge exchange through study trips and references as basis of development.
- Facilitation of regional stakeholder coordination involved in fire prevention issues.
- Human capacity development at national and regional level, i.e. including environment and forestry government staff at provincial and KPH level.
- Development of ground mapping and monitoring methods of burnt scar areas in KPH's intervention area and surroundings including the preparation of a fire risk map for operational utilities.
- Agricultural development and provision of lessons learnt based on the baseline assessment conducted for the selected pilot villages.
- Village model establishment for supporting integrated fire prevention on the ground:
  - o Village model selection process as basis of community livelihood development,
  - o Village model establishment as the FMU mentoring site,
  - o Village model planning based on their characteristics.
- Capacity building of the Brigdalkarhutla KPH team to become facilitators at village level.
- Implementing the Participatory Rural Appraisal (PRA) method for village level development.
- Village development by an integrated support of stakeholder's orientation.

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