



Institutional Development for Integrated Fire Management in South Sumatra: Part 2

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PREFACE

The South Sumatra Forest Fire Management Project (SSFFMP) is a technical co-operation project jointly funded, in terms of the financing memorandum IDN/RELEX/1999/0103, by the European Commission and by the Government of the Republic of Indonesia through the Ministry of Forestry (MoF).

This report has been completed in accordance with the project Overall Work Plan (OWP) and

in part fulfilment of Activity 2.1, “Support government agencies, private companies, rural communities and other relevant stakeholders to improve fire management capacity at province and district levels.”

to achieve Result 2 “Stakeholders enabled to organize and apply fire management mechanisms in their areas.”

to realise the five-year project purpose, which is “Aid and facilitate the establishment of a coordinated system of fire management at province, district, sub district and village level throughout South Sumatra province in which all involved stakeholders, including the private sector, work together to reduce the negative impact of fire on the natural and social environment.”

This report has been prepared with financial assistance from the Commission of the European Communities. The opinions, views and recommendations expressed are those of the author and in no way reflect the official opinion of the Commission.

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EXECUTIVE SUMMARY

There is no single specific institutional structure that is appropriate for all fire management organisations or all fire management situations in Indonesia. The circumstances are due to the underlying fire causes alongside with the decentralisation process that are unique and require analysis to determine a suitable structure to manage fire in the tropical environment of Indonesia.

Fire management is a continuous cycle of efforts that initially requires a comprehensive and balanced land use strategy, secure land tenure rights, clearly defined enforcement mechanisms and understanding of the underlying causes of forest and land fires. There are five principle components in the fire management cycle that include: analysis, prevention, preparedness, suppression and restoration.

Such successful fire management is founded on the cooperation and coordination amongst the several related governmental agencies, local communities and the private sector under a coordinating institution. A fire management organization that spans multiple government levels and agencies in order to regulate, implement and enforce fire management policies would be a model gaining support from all involved stakeholders to clearly and effectively develop and implement the technical, logistical, operational and social programs that are essential for successful fire management that includes all fire components.

The existing laws and regulations identify at the current moment two government institutions as the main agents for fire management, the Ministry of Forestry (prevention and suppression) and the Ministry of Environment (monitoring, evaluation and policy), under the coordination of the Natural Disaster Management Board. Support of resources and information shall be provided by several agencies, e.g. the Meteorological Service for fire danger rating and the Space Agency for hotspot detection. This system lacks cooperation and coordination at all levels and more importantly translation, guidance and implementation at the provincial and regional/local level due to various reasons and circumstances also caused by the on-going decentralisation process in Indonesia.

Moreover these parties alone can neither cover the huge task of fire prevention and controlled use of fire and its introduction to local people. Nor they can afford the necessary research and investigation to promote alternatives for livelihood income entirely without fire use or with reduced/controlled fire use in the smallholder agriculture sector. It therefore seems appropriate to specify the role of the agriculture and estate crop department in designing zero-burning policies and practices for large



and small scale purposes and even more importantly in generating fire-free income opportunities for local people in the agricultural sector.

With the decentralisation and the new rules of governance considerable responsibility for the delivery of public services have been devolved to the regions. Civil service functions and structures are as well being decentralized to regional and local levels and existing bureaucratic patterns are going to be re-organised. This also affects the discussion of capacity building needs for fire management at institutional, individual and system level. Increasing organisational and system capacities in fire management in Indonesia is twice as difficult, since fire management is a relatively new aspect in Indonesia and is not yet institutionalised. The (entirely) new fire management roles of the governmental agencies at the regional but also at the national level have to be learned and filled with new tasks, functions and job descriptions. In order to do this, governmental agencies require (long-term) support and guidance in dealing with, understanding and applying fire management from the technical side but also from the analytical, preventive and political side. Capacity building in fire management can be seen as an important factor of creating a well-functioning decentralised civil services supporting decentralisation in order to help the government to fulfil its obligations

The process of institutional development started already during the first mission in 2003 and during the second mission now in 2004 included many consultation processes, meetings and lobbying with and to the main stakeholders that are the Forestry (Dishut), Environmental Department (Bapedalda) as well as the Nation Unity and Civil Service Protection Agency (Kesbanglinmas). At provincial and district level first draft concepts of an institutional set up for fire management has been designed. These have involved national, provincial and district organisations and agencies dealing with the different aspects of fires to build and create a common and better understanding about the problems to be tackled and solutions for institutional structure of fire management. There is on both levels the tendency to involve too many players in fire management activities and assign less relevant parties with duties, which they can hardly accomplish since they have only a minimal understanding of them in the context of a functioning multi-agency fire management structure and the related activities. However, the identification of an institutional structure for fire management must be based on the functions of fire management actually carried out and in correspondence with the already existing roles and tasks of the respective agencies.



RINGKASAN (INDONESIAN SUMMARY)



ABBREVIATIONS AND ACRONYMS

Abbreviation	Indonesian	English
ASMC		ASEAN Specialised Meteorological Centre
BAKORNAS PBP	Badan Koordinasi Nasional Penganggulangan Bencana	National Co-ordinating Agency for Emergencies (Disasters)
Bapedalda	Badan Badan Peningkatan Dampak Lingkungan	Environmental Control Agency on the Provincial Level
BAPPEDA	Badan Perencanaan Pembangunan Daerah	Regional Development Planning Board
BKSDA	Balai Konservasi Sumber Daya Alam	Agency for Natural Resource Conservation
BMG	Badan Meteorologi dan Geofiskia	Agency for Meteorology and Geophysics
BPN	Badan Pertahanan Nasional	National Land Agency
BPPT	Badan Pengkajian Dan Penerapan Teknologi	Agency for Assessment and Application of Technology
BrigDaIKarhut	Brigade Pengendalian Kebakaran Hutan	Forest Fire brigades
Damkar	Komandan Daerah Kebakaran	
DAOPS	Daerah Operasi	Operational area
DIS	Kabupaten	District
Dishut	Dinas Kehutanan	Forestry Department
Dishutbun	Dinas Kehutanan dan Perkebunan	Forestry and Estate Crop Department
Distan	Dins Pertanian	Agriculture Department
Disdik	Dinas Penedidikan	Education Department
Dislinkup Pertanian	Dinas-dinas pada lingkup pertanian	Similar to Agriculture Departement
Distamben & LH	Dinas Pertambangan & Lingkungan Hidup	Mining and Environment Department
DJ PHKA	Direktorat Jenderal Perlindungan Hutan dan Konservasi Alam	Directorate General of Forest Protection and Nature Conservation
Dinas Kesos	Dinas Kesejahteraan	Social Welfare Service
EU	Uni Eropa	European Union
GTZ		German Technical Co-operation/ Gesellschaft für Technische Zusammenarbeit
Infokom	Informasi dan Komunikasi	Information and communication
JICA		Japanese International Cooperation Agency
Kab.	Kabupaten	District
Kadishut	Kepala Dinas Kehutanan	Head of Forestry Department
Kalinmas	Kantor Lingkungan Masyarakat	Bureau for Civil Society Protection
Kec.	Kecamatan	Subdistrict
KesBangLinMas	Kesatuan Bangsa dan Lingkungan Masyarakat	Agency for National Unity and Civil Society Protection



MNLH	Kementerian Lingkungan Hidup	Ministry of Environment
KARHUT-LA	Kebakaran Hutan dan Lahan	Forest and Land Fire
KTNA	Kelompok Tani dan Nelayan Andalan	Advance Farmers and Fishermen Group
LAPAN		Indonesian Space and Aviation Agency
LSM	Lembaga Swadaya Masyarakat	Non-Governmental Organisation
Menko Kesra	Mentri Koordinator Kesejahteraan Rakyat	Coordinating Minister for People's Welfare
MoF	Departemen Kehutanan	Ministry of Forestry
MoU	Perjanjian Kerjasama	Memorandum of Understanding
ORMAS	Organisasi Masyarakat	Community cooperative
PBK	Regu Pemadam Kebakaran	Fire suppression crew
PDE	Pusat Data Electronic	Electronic data centre
POLRI	Kepolisian Negara Republik Indonesia	National Indonesian Police
PPNS	Penyedik Pegawai Negri Sipil	
Prop	Propinsi	Province
PUSDALOPS	Pusat Pengendalian Operasional	Fire suppression Centre
PT.	Perseroan Terbatas	Limited Enterprise
Satgas	Satuan Tugas PBP	Task Force PBP
SATKORLAK PBP	Satuan Koordinasi Pelaksana PBP	Implementation Coordination Unit PBP
SATLAK	Satuan Pelaksana PBP	Implementation Unit PBP
SATLAKDALKARHUTLA	Satuan Pelaksana Pengendalian Kebakaran Hutan dan Lahan PBP	Implementation Unit for Forest and Land Fire Control
SSFFMP		South Sumatra Forest Fire Management project
SOP		Standard Operating Procedures
Subdin	Sub Dinas	Subordinate Agency
TN	Tanam National	National Park
TNI	Tentara Nasional Indonesia	National Indonesian Military
UPTD	Unit Pelaksana Teknik Daerah	Technical Implementation Unit
Wil	Wilayah	Region



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1 Objective of the mission

The South Sumatra Forest Fire Management Project is a co-operation project between the Government of Indonesia and the European Union. It aims to:

Aid and facilitate the establishment of a coordinated system of fire management at the province, district, sub-district, and village level throughout South Sumatra in which the local communities, private sector companies and government agencies work together to reduce negative impact of fires on the natural and social environment.

In this context the present mission aims to support institutional conditions to allow the implementation of effective fire management and to address the complex issues of the underlying fire causes and the resulting fire management activities. By supporting and facilitating a common understanding of an integrated fire management concept that includes all five key elements of fire management: 1.) analysis (of the fire problem), 2.) prevention, 3.) preparedness and information (to respond to fires), 4.) response (to actual fires, suppression), and 5.) recovery (rehabilitation and other impact measures) it is attempted to enable stakeholders to organise and apply fire management mechanisms in their specific area.

To actively involve important governmental land management agencies, during the mission workshops/ seminars/ meetings are being organised. This shall enable and stimulate stakeholders to elaborate on their respective roles, functions and responsibilities in fire management and identify training needs in the specific areas/levels of the concept of integrated fire management.



2 Introduction

At the present fires and haze have become annual events in Indonesia, and many aspects of effective fire management (see section 4.2-4.3) remain unattended. However, fire management is a relatively new aspect in the organisational landscape and Indonesia has only recently started to gain experiences in fire management and to incorporate the understanding of its fire history into its institutional framework. There is no single specific institutional structure and the existing laws and regulations identify at the current moment two government institutions as the main agents for fire management, the Ministry of Forestry (prevention and suppression) and the Ministry of Environment (monitoring, evaluation and policy), under the coordination of the Natural Disaster Management Board. Support of resources and information shall be provided by several agencies, e.g. the Meteorological Service for fire danger rating and the Space Agency for hotspot detection (see also Report No. 1 on Institutional Development 2004).

Although this coarse institutional framework is set by the national level, it lacks cooperation and coordination at all levels and more importantly translation, guidance and implementation at the provincial and regional/local level due to various reasons and circumstances also caused by the on-going decentralisation process in Indonesia (see section 4.3). A coordinated system of fire management requires the development of a common understanding about fire management (see 4.2) based on strong analysis about the problem of forest and land fires.

This report aims to continue the discussion started in the first report about institutional development of fire management in South Sumatra (A.A. Hoffmann, January 2004) considering the findings and recommendations already made in this report.



3 Work approach

The approach was continuous consultancy and advocacy of a more balanced fire management (see section 4.2) through socialisation and presentation of results and findings of report No 1 (2004) to key stakeholders and decision makers at all three administrative levels.

During the mission the project/author has facilitated a variety of multi-stakeholder and on-going public consultation processes, attended and organised several workshop and meetings by also providing presentations and various materials about fire management (see appendix 2), existing laws and institutional examples. At provincial and district level first draft concepts of an institutional set up for fire management has been designed. These have involved national, provincial and district organisations and agencies dealing with the different aspects of fires to built and create a common and better understanding about the problems to be tackled and solutions for institutional structure of fire management. These processes have been supported through using, establishing and maintaining intensive networks and to draw on existing structures and experiences.



4 Summary of the results for the counterpart

4.1 Fire problem in Indonesia

As widely known a large portion of the ignition sources for (wild) fires originate for various reasons, however mostly for the preparation of land in order to establish fields or plantations either by large scale companies or by local people (see also report No 1, underlying fire causes). Although it is forbidden for companies to clear land by fire, the Indonesian government tends to concentrate on investigations and legal prosecutions in large scale estate crop and agro forestry companies. However, prosecution in any case remains difficult, due to unclear land use/rights and boundaries and secondly due to the even more indistinguishable system of locally managed agro forestry cooperatives, the so called “Hutan Inti Rakyat” or “Perkebunan Inti Rakyat” locally managed plantation areas supported by large scale companies by various means (e.g. seeds). In both cases land use boundaries are rarely clear hence fire is neither stopped at any border line nor do local people feel responsible to prevent agriculture fires from spreading.

Furthermore some government authorities even want “the people” to burn as this is a sign of “progress and development” (conversion of “unproductive (peat) forest into production areas). In addition, provincial and national governments often issue announcements in anticipation of the dry season requesting companies and people not to burn, report fires, and take action to suppress. However, these announcements are never actually socialized or implanted into any (preventive or suppressive) action because there is no means for publicizing such information widely and there is no real coordinated fire management system in place. The agencies that should normally be involved in such socialisation and extension programs and activities have no real understanding of fire management, preventive measures and the needed activities (see section 4.2). They are not specifically tasked, educated and equipped on how and when measures should be taken, what sort of information should be carried forward and how to cooperate with other agencies in these matters. In addition since fire management is not at all institutionalised (see also section 4.3) it lacks a systematic approach amongst governmental agencies to tackle the problem and it lacks sufficient budgets.

Communities all “want” their fires initially, and the problem is communities have no means of limiting the extent or duration of this burning, nor do government authorities, and eventually, the fires become “unwanted” due to the smoke/haze complaints from the international community. There is neither a concept nor program in place (that should

be normally driven by the Agriculture Department) to investigate in alternative forms of fire prevention and controlled use of fire and its introduction to local people. Nor is there the necessary research and investigation ongoing to promote alternatives for livelihood income entirely without fire use or with reduced/controlled fire use in the smallholder agriculture sector.

4.2 Fire Management Cycle

Fire management is a continuous cycle of efforts that initially requires a comprehensive and balanced land use strategy, secure land tenure rights, clearly defined enforcement mechanisms and understanding of the underlying causes of forest and land fires. There are five principle components in the fire management cycle that include: analysis, prevention, preparedness, suppression and restoration (Figure 1).

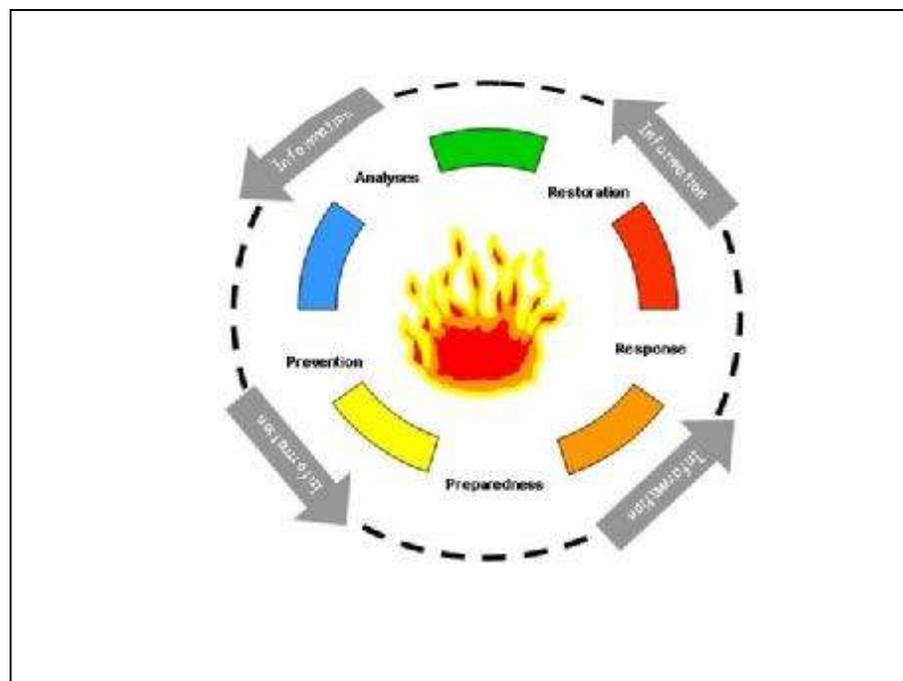


Figure 1: Fire management cycle with its 5 components

Such successful fire management is founded on the cooperation and coordination amongst the several related governmental agencies, local communities and the private sector under a coordinating institution. A fire



management organization that spans multiple government levels and agencies in order to regulate, implement and enforce fire management policies would be a model gaining support from all involved stakeholders to clearly and effectively develop and implement the technical, logistical, operational and social programs that are essential for successful fire management that includes all fire components. The following description of the fire management cycle is based on Project Fire Fight “Burning Issues” No. 6, but slightly modified and added.

Analysis (include information)- While fire suppression capabilities are needed, they are only be effective if embedded in an integrated program with the right institutional set up and involvement of all stakeholders through educational and fire prevention/ fire-use programs. Lack of available information concerning number, place, size, and location, influence of weather, fuel characteristics and causes of fire contributes strongly to an incomplete understanding of fire and its causes. This is a key reason for governments in the region reacting to fire events instead of addressing the underlying causes. This lack of a basis for analysing and comprehending clearly the fire “problem” is also reflected in fire legislation that focuses on suppression. To prevent fires, those concerned must know, who or what starts the fires and why. Indonesia and its authorities should restructure and streamline fire management and better educate their employees about the importance of the rule of law in general and current laws and regulations relating to fires in particular.

Analysis is essential to define the problem to clearly address it effectively and using resources most efficiently. For preparedness and suppression efforts it is important to know, where and when most fires start; this includes also fire danger information, next to a comprehensive knowledge about the available fire suppression resources (equipment trained crews etc.). That those forces used most effectively depending on vegetation and land use it must be clear which fires are wanted, and which are not.

To address aspects of restoration and rehabilitation measures and to integrate those into spatial regional and financial planning it needs to be known what has been damaged, to which degree, where, and how much. This information reported by local (fire) institutions and fire brigades is also needed for future prevention measures and equipment.

Prevention – Recognising that prevention is the best, and in most cases the only, effective strategy for the long-term management of fires strong emphasis should be given to the right prevention strategy to reduce the likelihood and impact of fires. Depending on the case, this can involve education and awareness raising, fuel management and sound sustainable forest management, and law enforcement (appropriate laws and regulations, sanctions and supervision). Especially in Indonesia where fire



is regularly used to clear land for all sorts of agricultural, fishing and cattle raising purposes fire cannot be eliminated from the landscape of Indonesia. Therefore focus must be given not only to eliminate fire but rather to introduce and educate the controlled and sustainable use of fire for agriculture purposes. And finally effective law enforcement based on sound fire policy and sanctions not only against large scale companies but also against local people must be implemented as prevention measures.

Preparedness - ensures that fires are not a surprise and that fire management is a matter that have to be dealt with not only during the dry (fire) season. The important aspects of preparedness are training and development of fire management and suppression personnel; the installation and maintenance of infrastructure such as access roads and tracks, firebreaks, fire detection systems and preparing assets and homes; fire fighting equipment purchase and maintenance; and the ongoing monitoring of weather conditions, fuels and ignition sources to provide timely advice and warnings on possible fires to ensure that resources can be effectively used. As an element of preparedness (but also prevention and response) the Fire Danger Rating System (FDRS) is an important tool to determine the daily fire prevention, preparedness and suppression activities of the land management agencies holding responsibilities for fire management activities. The Fire Danger Rating System is the basis to define readiness levels describing the existing state of alertness and preparedness of fire management organization. Readiness levels are the basis for recommendations to political officials, agencies, and institutions as well as Standard Operating Procedures (SOP) to local fire centres and other land management agencies.

Response - is commonly referred to as 'fire fighting' or 'suppression' by containing a fire and prevents it from further spreading. The usual method is to cut the fire from access to new fuels by creating a fire line around the perimeter of the fire to stop the fire spread. After the fire line is completed, the fire is made safe by cooling embers and hotspots along the fire line in a process known as 'mopping up'. All fire lines operate by the same principle: removing fuel or making it less flammable. Eventually the fire will burn all of the fuel and go out. Type of vegetation, terrain, strengths of the fire and climatic conditions dictate the widths of the fire line.

In general, fires in Indonesia burn with low intensity (except during El Niño periods). Therefore as long as initial attack and access to the fire is granted, suppression activities are relatively easy and at low cost by using hand tools and few water tank equipped vehicles.

Restoration - in its widest sense covers the repair, replacement or rebuilding of assets damaged by fire. This includes assets, such as plantations, houses and infrastructure, but also the restoration of fire



damaged ecosystems including the re-establishment of ecosystem function, structure, productivity and natural fire regimes, all of which are part of sustainable forest management. In Indonesia's tropical forests, natural-caused fires rarely occur due to the high humidity and mostly shaded and moist conditions. However, if the tropical forest is disturbed by harvesting or other human activities, the forest canopy is opened and fuel drying can occur. Restoration can be very important to prevent future fires. Burnt areas may be more prone to fire in the years following a fire due to increased fuel and debris from burnt, dead plants. After a forest is burnt, more light and space is available for grasses and other vegetation to grow on the forest floor. This vegetation quickly dries out and easily burns. This can create a cycle rendering the forest increasingly more flammable, if the forest is not properly managed and restored after a fire outbreak.

4.3 Decentralisation, civil services and capacity building in fire management

With the decentralisation and the new rules of governance considerable responsibility for the delivery of public services have been devolved to the regions. Civil service functions and structures are as well being decentralized to regional and local levels and existing bureaucratic patterns are going to be re-organised. However, at the regional level the (new) role of the governmental agencies as civil servants for good public services is still underdeveloped. To reform the civil services as a supporting strategy of decentralisation increases the need of capacity building programs at all three levels such as individual training (knowledge, skills, competency), organisation (structures, procedures, decision making processes) and system (legal framework, policies).

This also affects the discussion of capacity building needs for fire management (as described in section 4.2.) at institutional, individual and system level. In order to be sustainable with a capacity building program in fire management, assessment and implementation should be not limited at one level alone but it should always be tried to cover all three (also all three administrative) levels. For fire management this means that e.g. fire fighting or information technology training measures at the district level for individuals/villages will hardly sustain if not correspondingly measures are undertaken to enhance and build capacities at the organisational and system level that not excludes certain measure at the provincial and national level.

In case of increasing organisational and system capacities in fire management in Indonesia this task is twice as difficult, since fire management is a relatively new aspect in Indonesia and is not yet institutionalised. It is neither running well at national level nor there any

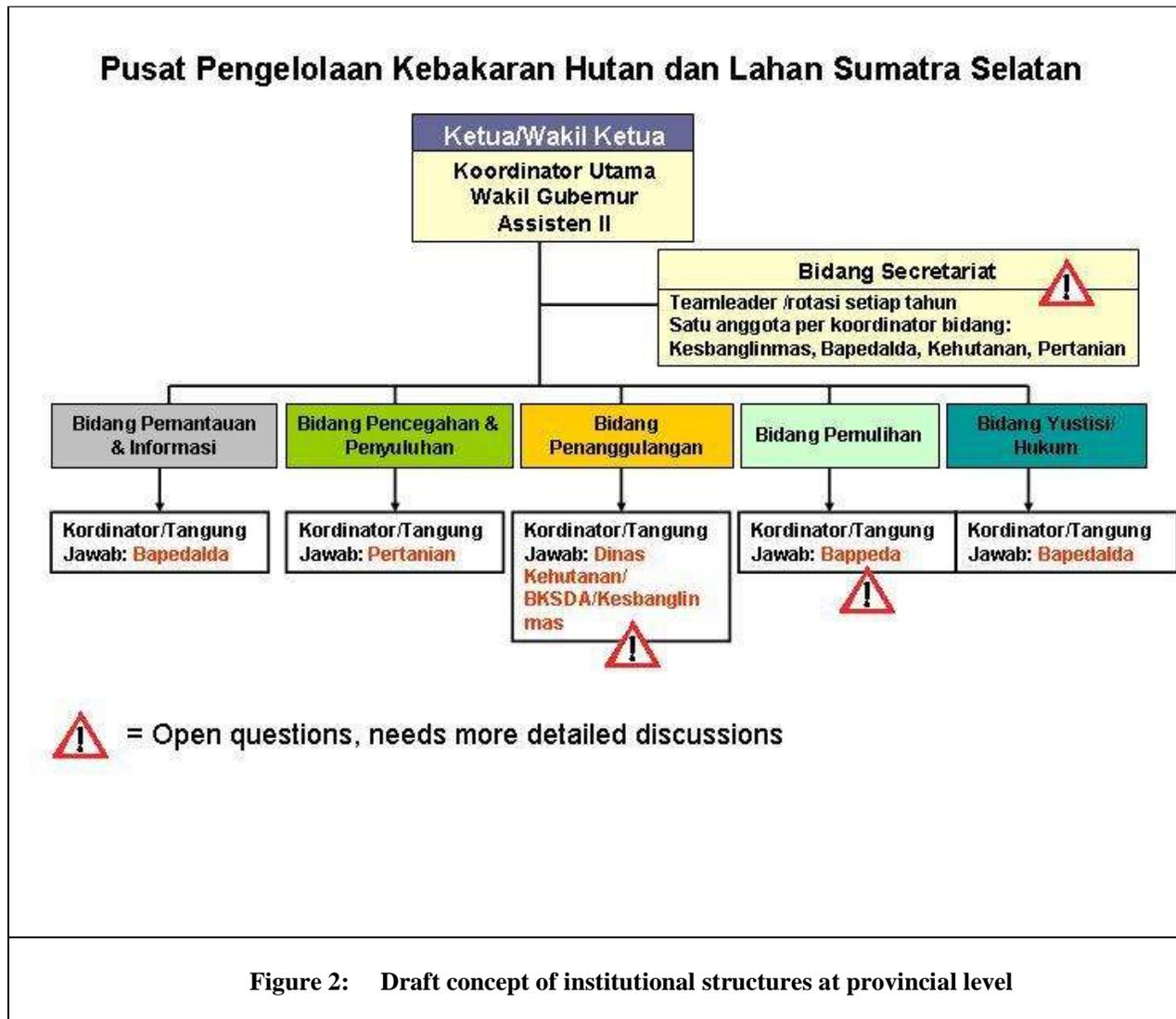


good examples where all three levels and their inherent interdependencies are well connected nor functioning. Therefore the resulting (entirely) new fire management roles of the governmental agencies at the regional but also at the national level have to be learned and filled with new tasks, functions and job descriptions. In order to do this, governmental agencies require (long-term) support and guidance in dealing with, understanding and applying fire management from the technical side but also from the analytical, preventive and political side. Alongside with technical training for suppression capacities and information technology that serves also to create personal networks amongst various levels, concepts and procedures for decision making process, reporting mechanism, interagency standards etc. need to be created and delivered.

Capacity building in fire management can be seen as an important factor of creating a well-functioning decentralised civil services supporting decentralisation in order to help the government to fulfil its obligations. As a result there should be a clear concept for fire management in Indonesia to develop and support institutional structures and mechanisms.

4.4 Draft concept of institutional structures at province level

The process of institutional development started already during the first mission in 2003 and during the second mission now in 2004 included many consultation processes, meetings and lobbying with and to the main stakeholders that are the Forestry (Dishut), Environmental Department (Bapedalda) as well as the Nation Unity and Civil Service Protection Agency (Kesbanglinmas). After a comparison study for institutional fire management structures to Riau Province in November 2004 attended by representatives of the above mentioned departments, a first draft concept for an institutional set up has been designed. Although there are still many open questions as well as on-going discussions about possible roles and functions of the mentioned parties such the restoration function of the Regional Planning Agency (Bappeda), the rotation structure of the leadership or the involvement of the Nation Unity and Civil Service Protection Agency into operational fire management activities of suppression, a first step is taken into multi-stakeholder discussion about the provincial fire management structure (see figure 2).



Note: For the acronyms and abbreviations please refer to abbreviation list in the front

4.5 Draft concepts of institutional structures at the three priority districts

Semi-workshops and work meetings were held with the fire management working groups of the three priority districts. The participants were asked to outline an institutional concept for fire management. Setting pre-requisites such as considering the given situation and conditions with regard to roles and functions in their respective departments the groups (districts) came up with a first, simple concept facilitated with the help of meta-plan cards. These concepts should be refined and related (new)



positions/department sections as well procedures and job descriptions obtained in on-going consultation processes and work meetings.

Table 1: Draft concept of Banyuasin

Banyuasin Workgroup I		
Pencegahan & Penyuluhan	Pemadaman & Pengendalian	Restorasi & Rehabilitasi
Dishutbun	PBK Kesbang & Linmas	Bappeda
Distan	Regu Pemadam Kebakaran Perusahaan Perkebunan & Kehutanan	Dishutbun
Kesbanglinmas	Karhutla Dishutbun	Perusahaan Perkebunan & Kehutanan
Disdik	PT. Expan	PT. Exspan
Kepala Desa	Regu PBK Desa	BPN
Tokoh Masyarakat	Masyarakat	
Distamben & LH		

Note: For the acronyms and abbreviations please refer to abbreviation list in the front

Table 2: Draft concept of Ogang Komering Ilir

Oki Workgroup I		
Pencegahan & Penyuluhan	Pemadaman & Pengendalian	Restorasi & Rehabilitasi
SSFFMP	SSFFMP	SSFFMP
Dishutbun	Kantor Linmas	Disbun
Kalinmas	Disbun	Dislinkup Pertanian
Dislinkup Pertanian	Perusahaan	Dinas Kesos
Perusahaansan	Kantor Pertambangan & LH	Perusahaan Perkebunan & Kehutanan
Camat	Dinas Naker & Kesos	ORMAS
Kepala Desa	Camat	
Lembaga Adat	Kepala Desa	
Kelompok KTNA	Organisasi Masyarakat (ORMAS)	

Note: For the acronyms and abbreviations please refer to abbreviation list in the front

In Musa Banyuasin various work meetings about the institutional development and related standard procedures have been held. A draft version of the institutional arrangement in fire management is shown below (figure 2.)

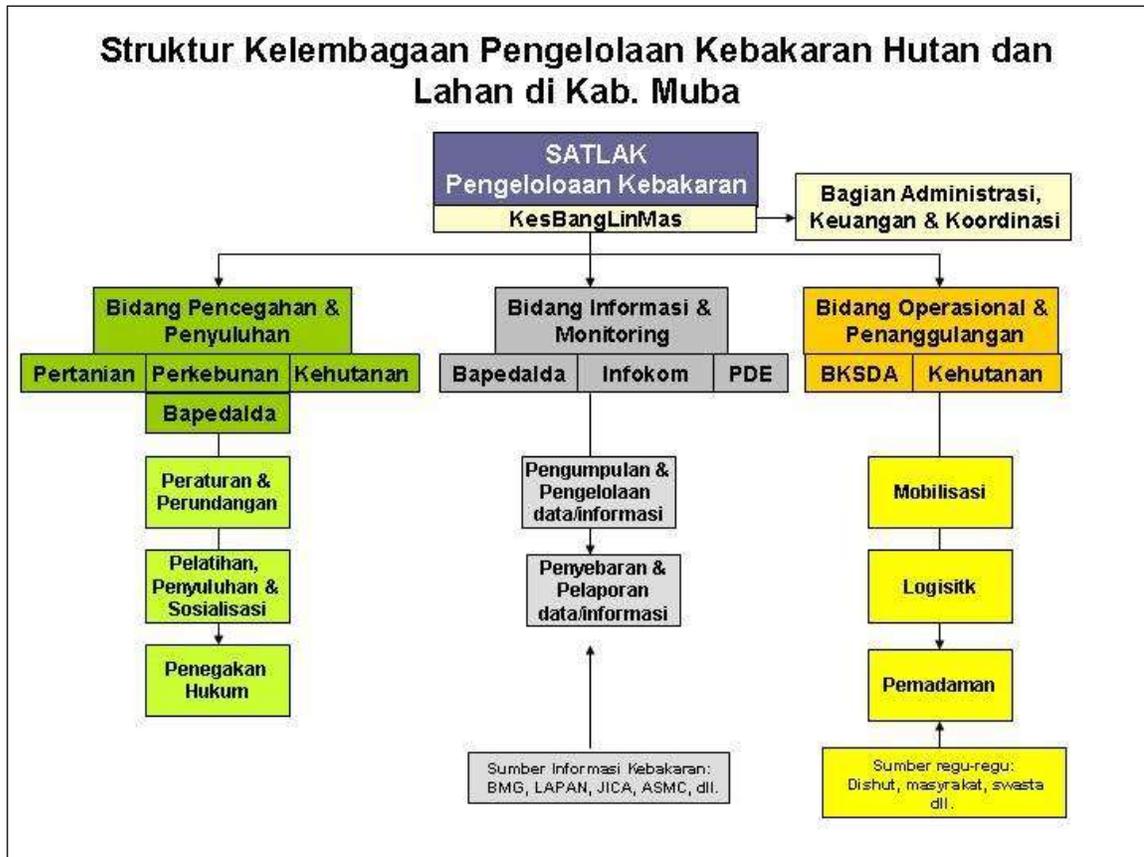


Figure 3: Draft concept of institutional structure in Musa Banyuasin

.Note: For the acronyms and abbreviations please refer to abbreviation list in the front



5 Overall conclusion and recommendation

There is no single specific institutional structure that is appropriate for all fire management organisations or all fire management situations in Indonesia. The circumstances are due to the underlying fire causes alongside with the decentralisation process that are unique and require analysis to determine a suitable structure to manage fire in the tropical environment of Indonesia. However, the identification of an institutional structure for fire management must be based on the functions of fire management actually carried out.

Various elements of fire management are already available, mostly of the response and information components (see also report Fire Information), however there is a lack of systematic use and information sharing as well as application of these elements for decision making and actions at the local level. There is a continuous need for socialisation of the concept of integrated fire management with its 5 components (analysis, prevention, preparedness, response and rehabilitation), especially at higher “fire manager” level. The existing governmental agencies are required to elaborate and work in a mutual process (based on this common understanding about fire management) on capacity building needs, implementation strategies and interagency standards as well as cooperation agreements to identify the circumstances under which multiple agencies can or must act to prevent and combat the fire problem and mitigate the negative impacts. The role of the agriculture and estate crop department in designing zero-burning policies and practices for large and small scale purposes and even more importantly in generating fire-free income opportunities for local people in the agricultural sector have to be specified. The consequent capacity building requirements at organisational, individual and system level needs to be assessed and appropriate programs/activities designed.

Since in Indonesia more than one fire management organisation exists and therefore attention must be given to co-ordination mechanisms. All parties involved in fire management activities (at all levels) more and more note the need for common standards on how to work together as agencies. There is a demand for interagency standards for fire management that clearly describes roles and functions and defines standards for e.g. fire information, equipment, training etc. and outlines the fields of interagency support and collaboration.

The institutional development of fire management must be very sharply guided by aspects of decentralisation and its inherent process of civil service reforms at the regional (but also national) level. The question is how this process can be supported in the sense of “good governance” by



the example of fire management and the related roles of the involved land management (and other) agencies and stakeholders.

5.1 National level

With regard to Report January 2004 the main players in fire management at the national level remain the same, however the agriculture and estate crop sector needs to be officially embedded in the already existing framework of fire management according to BAKORNAS PBP, the National Disaster Management Coordination Body. The main players such as the Forest and Land Fire division of the Environmental agency and the Fire Control department of the Ministry of Forestry understand fire management as a multi-stakeholder task at the national level.

BAKORNAS remains the coordination body. However, both parties alone cannot cover the huge task of fire prevention and controlled use of fire and its introduction to local people. Nor they can afford the necessary research and investigation to promote alternatives for livelihood income entirely without fire use or with reduced/controlled fire use in the smallholder agriculture sector.

It therefore seems appropriate to specify the role of the agriculture and estate crop department in designing zero-burning policies and practices for large and small scale purposes and even more importantly in generating fire-free income opportunities for local people in the agricultural sector. The agricultural department has already taken action by organising a workshop at the national level. Main topic next to the zero burning policy was again the question of mandates, roles and responsibilities of the relevant sectors in the fire management.

5.2 Provincial level

At the provincial and district level there is the tendency to involve too many players in fire management activities and assign less relevant parties with duties, which they can hardly accomplish since they have only a minimal understanding of them in the context of a functioning multi-agency fire management structure and the related activities. This results from the fact that fire management itself and the inherent tasks to it are not yet understood. There is an obvious lack of human resources in all aspects of fire management. More important, however, there is a lack of fire management understanding at the higher decision making level. This in turn constrains the discussion about institutional needs and structures at provincial level.



The application of fire management can be achieved through its integration into development plans, strategic plans and land management planning at each level of government. The head of the Nation Unity and Civil Protection Agency requested the participation of SSFFMP to work on a fire management master plan for South Sumatra. In combination with the existing draft concept of a provincial fire management structure (section 4.4.) this can be seen as good pre-condition for a political commitment to develop fire management and support its implementation under a legal framework incorporating the relevant sectors. However the structure needs soon to be refined and questions about the coordination position clarified to continue the discussion about the individual tasks of the implementing agencies. The existing concept of a rotating leadership is not in correspondence with the current Indonesian institutional framework and might therefore not necessarily operational. If one favours a multi-agency concept the most realistic structure at the current moment must be established under the existing disaster management structure. Furthermore structures for fire management have to practical and long bureaucratic ways and long decision making process through high-level decision makers hamper the effectiveness of a fire management system. As already mentioned the identification of an institutional structure for fire management must be based on the functions of fire management actually carried out in correspondence with the already existing roles and tasks of the respective agencies.

5.3 District level

At the district, as well as at the provincial level, one can observe that the role of the governmental agencies as civil servants for good public services is underdeveloped and not really understood. The poor public services that have existed for decades are only slowly starting to change in the course of decentralisation. The resulting new roles of the governmental agencies at the regional/district level have to be learned and filled with partly new tasks, functions and job descriptions. As fire management is a relatively new term and field in Indonesia's institutional framework, the institutional capacities and expert knowledge are not yet available. The governmental agencies will need (long-term) advice, support and guidance in understanding and applying fire management and the related activities.

In this respect the multi-stakeholder forums established in the three priority districts each with four working groups, are an important platform, not only to establish a framework for sustainable natural resources management including fire management. It also serves towards a better understanding of how the new roles and resulting tasks of the



governmental agencies can be executed in the sense of good public services. The draft concepts existing for the districts (see section 4.5) are the basis to continue the discussion about a clear and satisfying concept for fire management in the Indonesian context. These concepts have to further developed and supported in the diversification of institutional structures and mechanisms to empower/enable land management agencies for the implementation of their fire management task, in particular timely actions for fire prevention and the combat of associated problems. The training in and application of important elements of integrated fire management with its five major components is a prerequisite to not only make efforts of fire fighting training operational, but more importantly to find appropriate strategies for fire prevention and mitigation.

5.4 Main recommendations

- Advocate the agreed roles of the main fire agencies players (Environmental agency and forestry department) at provincial and district level, to be in line with the national fire policy hence avoid overlapping tasks and functions and support the on-going decentralisation process and Therefore the appropriate agencies should be selected in the first place, not the personnel. This is an on-going process of institutional diversification, which will become part of the fire management master plan for the province and districts. The working concepts of the province and the districts (4.4. and 4.5) should be used as basis for on-going work meetings to further elaborate on the institutional diversification and clarification on rules, functions and tasks.

The coordination function should remain with the Disaster Management board System. Under this system the respective parties have to clarify their roles (see report No 1, institutional development). Annex 3, figure 4.

- Advocate the inclusion of the agriculture and estate crop department as one of the most important players for fire prevention and extension work and also investigation on alternatives on smallholder fire use practices.
- Advise district work groups and decision makers to always include forestry, environment and agriculture sector as main and equal players and actors, by carefully selecting the supporting and receiving agencies in an iterative process.
- The capacity building process for fire management needs to be focused on the few main players. It might be useful to assess the needs prior any action in a semi-structured way with tailored fire management assessment tools.
- As soon certain institutional structures are granted a kind of “on the job training” shall change concepts into daily routine work of fire



management activities especially at organisational and competency level. This might require that national and international experts sit and work on a rotation basis in the respective departments.

- Organise a national workshop (3 days) on institutional development for fire management with focus on South Sumatra. This shall create material and to further elaborate the respective roles of the various land management agencies and move towards interagency standards, cooperation and coordination mechanism.



Appendix 1

Terms of References



Terms of Reference / Work approach For International Short-term Institutional Development

Institutional Development for Integrated Fire Management in South Sumatra

Background:

- Fire history in South-Sumatra and SSFFMP goals.
- The EU program in Indonesia.
- To create institutional conditions to allow the implementation of effective fire management and to address the complex issues of the underlying fire causes and the resulting fire management activities the current understanding of the term “fire management” needs to be expanded and developed to go beyond the consideration of mere fire suppression activities. By supporting and facilitating a common understanding of an integrated fire management concept that includes all five key elements of fire management: 1.) analysis (of the fire problem), 2.) prevention, 3.) preparedness and information (to respond to fires), 4.) response (to actual fires, suppression), and 5.) recovery (rehabilitation and other impact measures) SSFFMP attempts to enable stakeholders to organise and apply fire management mechanisms in their specific area.
- To actively involve important governmental land management agencies, the private sector, and the local communities SFFMP organizes and facilitates workshops/ seminars/ meetings/ training to enable and stimulate stakeholders to elaborate on their respective roles, functions and responsibilities in fire management and identify training needs in the specific areas/levels of the concept of integrated fire management.
- To improve and implement fire management plans of involved stakeholders by introducing the Incident Command System and Incident Control Centre in the priority districts.
- One international short-term institutional development experts will support and be involved in the implementation.

Main Tasks:

- Facilitate the dialogue between the existing (fire management) agencies in order to develop a common and agreed upon understanding of a comprehensive fire management strategy for South Sumatra and to strengthen co-coordinated/joint fire management activities and planning.
- Facilitate the establishment of a (provincial) core group on fire management to specify SOP for an efficient and effective Fire management system in South Sumatra. The group shall be selected from the already existing SATKORLAK/SATLAK fire management task force members comprising about six to eight members and necessarily including the three major government agencies that are Forestry, Environment and Natural Disaster Management. The overall goal and product in the long term should be a fire management master plan for South Sumatra.
- Support the establishment of a working group on the district level within the existing multi-stakeholder fora to socialize the concept of integrated fire management and related activities



with the long term goal of co-operative agreements for appropriate institutional management arrangements.

- Support at the national level the lobby process and dialogue of the Fire Control and Prevention Directorate towards the Forestry Minister in order to establish the “Mangala Agni” Fire Brigade(s) in South Sumatra.

Duration and Time:

- The International expert shall cover the tasks within one-person month (1PM).
- The assignment should start on July 2004 and be finished before end of September 2004.

Results and Outputs of the Assignment:

- Main stakeholders of South Sumatra have a common understanding of the concept of Integrated Fire Management and its principles.
- Work group on fire management SOP/masterplan consisting of SATKORLAK/SATLAK members is established on provincial level.
- Work group on institutional development of fire management within the district multistakeholder fora is being facilitated.
- The establishment of the “Mangala Agni” fire brigade in South Sumatra is being support.
- Incorporate the results of institutional development into the planning, implementing, monitoring and evaluation of the project.
- Report with recommendations for further steps on the institutional development and the integration in SSFFMP’s upcoming Annual Work Plan 2005.

Profile:

- He/she should have a master degree in natural resource science with experience in tropical fire management and its related issues. Additional experience in organizing and facilitating seminars, workshops and presentations as well as multi-stakeholder processes.
- The expert must have a thorough knowledge and understanding of the the existing fire management concept and activities ongoing in Indonesia including the Indonesian government activities as well as other (donor-supported) fire projects. Additional knowledge and understanding of the Indonesian decentralisation processes is desirable.
- The expert must have excellent interpersonal, professional and diplomatic skills, a clear understanding of the advisory role in a technical cooperation project and should be used to acting in the role of mentor and trainer.
- The expert should be able to work productively with a broad range of professional counterparts, including governmental and non-governmental organizations, EU officials.
- Outstanding writing skill is required with the ability to meet deadlines, and provide concise report.
- Written and oral fluency in English is required, and understand Indonesian language is desirable.
- Basic computer skills.



Experience:

- A minimum ten (10) years of professional work experience, including at least five (5) years in Asian, in the content of the tasks and responsibilities as described above.
- Experience in integrating tropical fire management issues into all aspects of project planning.
- Proven ability to work effectively in a team environment and productively work to achieve results.
- A good understanding of technical cooperation, society, government in Indonesia is desirable.
- Familiarity and experience with EU and / or GTZ systems is desirable.



Appendix 2

List of fire management poster provided



Figure 4: Poster about multi-stakeholder agency concept



Figure 5: Poster about fire management institutions in Indonesia



Figure 6: Poster about cooperation and multistakeholder approach in fire management



Figure 7: Poster about the five fire management components