# ASIA-PACIFIC FORESTS AND FORESTRY TO 2020

## Forest Policy Brief 02

# Back to basics: field-level forestry

**Institutional frameworks that fail to provide incentives to invest in forest management and a succession of high-level national and international priorities in forestry mean that field-level activities are often overlooked. The health and vitality of forests in the Asia-Pacific region and their productivity are often compromised as a result. With demands on forests increasing and climate change threatening, efforts to maintain ecosystem services and benefits from forests should focus attention on effective management at the field level.**

Many of the day-to-day field-level activities that physically determine the future of forests and forestry are often overlooked: monitoring of forest health and vitality; fire management; forest patrolling; silvicultural activities; reduced impact logging; and forest inventories among others **(Box 1, Box 2)**.

The enthusiasm at national and international levels for prioritization of development or sectoral objectives – poverty alleviation, devolution and decentralization, climate change mitigation, forest law enforcement and governance – although of great importance, can divert attention from field-level activities.

Often, the reality in the field is that forest management cannot keep pace with developments in national and international dialogues. In fact, high-level decisions may even go completely unnoticed by the grassroots. While theory, science and policy may advance, at the local level – where the trees are growing

and where demands for wood, non-wood forest products and ecosystem services are increasing – lack of capacity and knowledge are often highly constraining. For example, local-level fire management is rarely supported despite education and rapid response being the most efficient ways to control forest fires. Similarly, lack of forest rangers and guards means that biodiversity losses continue to occur and carbon stocks are at greater risk. Reduced impact logging is rarely practiced in the region despite its clear environmental and economic benefits.

The long life cycle of trees and forests means that in spite of current high-level priorities, long-term management activities must continue in order to ensure the sustained flow of benefits. Without focus on practical aspects of forestry, it is possible that, by the time changes agreed in international dialogues are translated to field levels, a protracted period of institutional strengthening and training will be required for results to be realized.

Among the challenges to implementing sustainable forest management, the International Tropical Timber Organization (ITTO) has drawn attention to the almost universal lack of resources needed to manage tropical forests properly: staff, equipment, vehicles, etc. (ITTO 2011). In relation to protected area management, WWF has highlighted the need for increased attention to field-level issues including management planning, monitoring and evaluation, budgeting and awareness raising, staffing and law enforcement (WWF 2004, 2007).

**Box 1. Reduced impact logging**

Because of the generally low quality of harvesting operations in the region, logging has perhaps the most significant impact on forest health and vitality. Associated degradation reduces not only the present value of forests, but reduces regenerative capacity and leaves a legacy of low forest productivity, reduced commercial viability and impaired ecological functioning. Reduced impact logging (RIL) significantly lessens damage to the residual stand and is economically justified by savings from reduced damage and future benefits resulting from increases in forest growth and yield.

Addressing forest health and vitality, and forest degradation in particular, has become a topic of much debate in anticipation of a global mechanism to reduce emissions of carbon dioxide from deforestation and forest degradation (REDD). Improving the climate change mitigation potential of forests and increasing stocking densities are closely allied goals and, as such, climate change funding could go far towards improving the health and vitality of forests in the region.

Adaptation of forest management is also likely to be necessary to achieve mitigation goals. For example, maintaining ecosystem integrity such that carbon is not lost through forest drying and fire, or ensuring the security of pollinators and reproductive capacity are likely to be necessary long-term measures in utilizing forest potential for climate change mitigation. Acting while ecologically conducive conditions prevail is likely to result in lower costs then under future conditions if degradation continues.

**Box 2. Fire management**

Since 1997/1998, when fires swept across large areas of the Asia-Pacific region, responses have been limited and the sources of problems have often remained unaddressed. For example, forest managers and local inhabitants are not usually responsible for fire control and land tenure arrangements may promote short-term strategies and excessive use of fire as a management tool. Weak governance and ineffectual legal and regulatory systems may also hinder law enforcement with respect to fire (Rowell and Moore 2000).

Due to increased opening and drying of the region's forests, changing weather patterns and increasing risks of anthropogenic ignitions, there is a strong need to improve fire management. Fire has to be tackled at the source, either through prevention or rapid response. Fire management can be improved through information and awareness campaigns, improved legislation and faster fire responses. Communication networks and monitoring schemes may also be necessary, as well as specific local-level management practices.

## The way forward

Greater attention needs to be given to building field-level capacities to bridge a growing gap between international dialogues, policies and field activities. In particular, efforts are required to channel the new financial resources available through carbon mechanisms (especially REDD+), and other payments for ecosystem services, into enhancing field capacities.

There will be increasing needs for responsive management systems and to improve ecosystem resilience. Forest monitoring to quickly detect and tackle outbreaks of pests and diseases, effective fire management, restoration of forest functions after disturbances and reduced impact logging, are all necessary elements of the improved forest management envisaged. However, field capacities in these elements fall far short of levels required to meet international standards.

Practical steps to improve on-the-ground forest management may include voluntary codes of practice, which seek to provide benchmark standards to guide forest managers. For example, codes of practice for forest harvesting, fire management and for planted forests have been developed and the economic and ecological logic of implementing these codes should act as the main incentive in encouraging their uptake and improving forest management. However, such guidelines and codes of practice are often insufficiently disseminated or adhered to and science and technologies, although developed, often do not make it to the field level.

Major attention to training, capacity development and enforcement of regulations is sorely needed if hopes are to become realities. Efforts to bridge high-level decision making with grassroots field practices are critically important. With these investments in forest management, a greener future with increased employment, higher production and improved environmental protection can be expected.

**References**

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