Introduction

Agriculture practices such as slash and burn and/or shifting agriculture by local communities have long been implicated as one of the main cause of wildfires. However to be considered is that communities are also part of the solution as they often use fire positively to manage the landscape. The issue of fire was especially high-profile in 1997 and 1998 when damaging fires occurred on every continent and attracted global attention, generating a series of reports, donor interventions and regional strategies. Community engagement in fire management (in many cases continuing the already-existing management of fires by local people) was also an attempt to balance the interventions in response to large, damaging or high-profile fires, which were overwhelmingly focused on suppression (fire fighting).

FIRE MANAGEMENT – CONCEPTS, CONTEXT AND SYSTEM

The core and elements of fire management have been evolving and been clarified through adaptive approaches in recent decades This process has been undertaken simultaneously in a number of nations and regions by a number of agencies and institutions at various levels, sometimes working in collaboration. The key ideas are set out here for reference and are dealt with in the guidelines prepared under the aegis of FAO (FAO Voluntary Fire Management Guidelines).

Dealing with fires, including the history of fire "management", has often been focused on putting out fires or increasing the capacity to put out fires; yet consensus is that this approach is less effective than it could be. Often an oversimplified version of a complex situation is conveyed to decision-makers and the public:

- Forest fires are caused by extreme weather (not necessarily true).
- All forest fires are harmful (not true).
- All fires need to be prevented and extinguished (not true).
- Forest fires are periodic events best dealt with when they occur (definitely not true).

These overly simplistic explanations of forest fires tend to encourage decision-makers to conclude that fire fighting is the main solution to harmful forest fires, so they tend to react to short-term, recurring crises rather than focusing resources on long-term, sustainable solutions that integrate fire management. To date, inadequate attention has been paid to addressing underlying causes and to preventing a damaging pattern of recurrent fire and degradation in burnt areas.

Integrated approaches to fire management place greater emphasis on addressing underlying causes and seek long-term, sustainable solutions that incorporate the same five essential elements (the five Rs) that have been adopted globally in

dealing with disasters and their management:

RESEARCH – analysis of the fire issue and identification of options for positive change;

RISK REDUCTION – prevention, focusing resources on the underlying causes of fires;

READINESS – preparing to fight fires;

RESPONSE – ensuring appropriate responses to unwanted damaging fires; and

RECOVERY – community welfare, repairing infrastructure and restoration of fire-damaged landscapes.

Resources need to be redirected to support research that improves the understanding of the causes of fire, identifies existing management practices that encourage harmful fires and promotes management systems that take advantage of well-established fire use. Key stakeholders, especially local communities, need to be involved in fire management planning.

At present, analysis is often done only when a fire begins; it is then mainly influenced by political pressures created by dramatic fire images and by the immediate responses needed to protect people and assets or to respond to criticism. A better response would be to start analysis in fire-prone areas before a fire begins and consider rebalancing management, if required. Although understood in theory, this response is not often carried out for various reasons:

- In most cases there is no overall fire management framework available.
- The view that all fire is negative and fearsome leads, in turn, to the view that fires are a suppression challenge rather than a symptom of underlying management problems.
- The most dramatic part of fire management is response, or fire suppression. Fires are an obvious "enemy", and clear consensus about addressing burning fires is more socially and politically expedient than addressing the complicated questions involved in long-term fire prevention and management. Sources of ignition and fuels are local; thus, the systems and frameworks of fire management are often best established at the provincial level, while monitoring and analysis are usually best dealt with at the national level. Yet discussion and debate often take place without reference to the appropriate scale of intervention.

To ensure that suppression occurs effectively at the local level, that is, that unwanted and undesirable fires are kept small, everything else in the fire management equation must occur at higher levels, including effective coordination and cooperation of all fire management agencies. To enable effective fire management, the key principles must be established at a landscape level to keep unwanted and untimely fire at the local level. The local level is where actions will be taken, but those actions must be considered at the landscape level to ensure consistency, effectiveness and clarity for fire managers, land managers, government agencies and civil society.

Local people and communities, therefore, play a pivotal role. This is particularly the case where the administration, agencies and other systems (communication and transportation, for example) are not able to fill the requirements for coordination of systems and frameworks necessary for routine, rigorous and effective fire management.