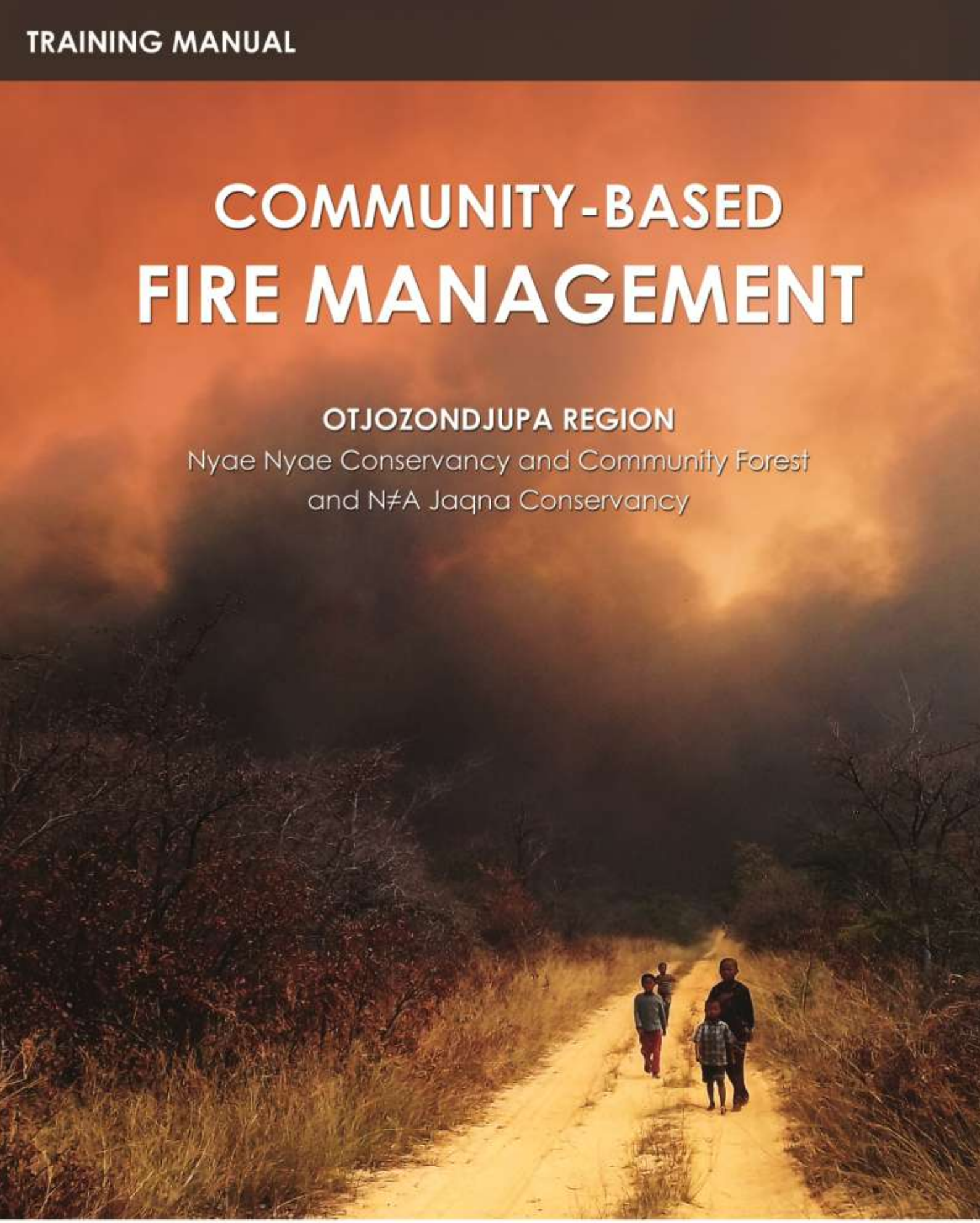
TRAINING MANUAL

COMMUNITY-BASED FIRE MANAGEMENT

OTJOZONDJUPA REGION

Nyae Nyae Conservancy and Community Forest
and N≠A Jaqna Conservancy



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INTRODUCTION

INTRODUCTION

The Community Based Fire Management Training Manual is developed as a component of the natural resource management capacity building programme of the Nyae-Nyae Conservancy and Community Forest and N≠a Jaqna Conservancy in the Otjozondjupa Region of Namibia.

Community Based Fire Management (CBFiM) is where the community play an integral role in the management of fire throughout the landscape. As the majority of Otjozondjupa Region is communal land effective fire management depends on the Otjozondjupa Community.

This manual is a guide for communities to Plan, Develop and Implement a Fire Management Program on communal land in Otjozondjupa Region.

1 Veld and Forest Fire in Otjozondjupa Region

Perceptions of Fire

Forest fires are an emotional issue throughout the world and are usually centred on destruction with loss of life, property and environment. A common perception of forest fires is of disaster and they should be prevented. This perception has been the motivating force for conventional management approaches to forest fires in many other parts of the world in recent years.

Conventional Fire Management Approach

Otjozondjupa Region's fire management approach has been based on prevention and suppression tactics in the past decades. The approach relies upon legislation and threat of punishment through law enforcement to prevent fires and focuses efforts toward maintaining firebreaks and reactive suppression of uncontrolled veld and forest fires (Wildfire) when they occur. This fire management strategy is requiring considerable resources and capabilities to implement.

Fire Management Ownership

Custodianship of fire management on communal land has existed, almost entirely, with the government administrators Directorate of Forestry. Lack of understanding and *ownership* of fire management by communities on communal land has lead to a lack of concern to fire issues beyond the individual's immediate resources.

Where Does the Fire Come From?

People ignite most uncontrolled fires. Many uncontrolled fires are incidental and occur through the use of fire as a tool, such as honey collection, grazing and harvesting management. Others are accidental occurring through mismanagement of cooking fires, cigarette smoking and clearing firebreaks. Lightening starts a small number of fires.

Slash and burn land clearing for subsistence agriculture is a common practice and the source of the majority of uncontrolled fires in Otjozondjupa Region. Preparing land for ploughing and planting crops occurs between August and October in time for ensuing rains. Efforts to contain these fires are minimal.

Occurrence of Fire in Otjozondjupa Region

Otjozondjupa Region is dominated by a Late Dry Season (August – October) fire regime. Uncontrolled fires at this time of year (very hot, dry and windy) reach disastrous proportions in scale and intensity. Suppression tactics are ineffective and fires tend to be intense, travel quickly and burn extensive areas at a time.

Effects of Uncontrolled Fire

Certainly uncontrolled late dry season fires have obvious immediate consequences, particularly as a hazard to life, property and natural resources. However, fire plays a far more complex role in the ecology of the landscape, land use and its sustainability. Operating over longer term periods the effects of fire are becoming increasingly apparent and involve changes in the vegetation. This in turn affects land use and community livelihoods such as cattle grazing, harvesting of forest products and habitat for wildlife.

2 National Fire Management Framework

Legislation

Through its Directorate of Forestry, the MAWF is responsible for protecting Namibia's forests and people's right to use forest resources. The Forest Policy and Forest Act enable DoF to protect the forests. The basic aim of the Forest Policy is to protect and make the forests productive to improve the economic welfare of rural communities as part of the national poverty reduction plan.

The Forest Act (No. 12 of 2001), as amended by the Forest Amendment Act (No. 13 of 2005), is the law through which the Forest Policy is implemented. Basically, the Act stipulates how forest resources may be used and the responsibilities of the users.

Fire Management

In terms of fire management the act stipulates the following:

No person shall light a fire in a community forest unless the lighting of the fire has been authorised by the management authority of the community forest in accordance with the relevant management plan. Forest Act 2001, section 40 (2)

In other words you may only light a fire in a community forest if the management authority and the management plan permits it. If you light a fire without this permission, you could be fined, imprisoned and held liable for damage caused by the fire.

In order to light a fire or implement controlled or prescribed burning in a community forest, 3 things need to be in place:

- ✓ The community forest needs to be formally established (gazetted).
- ✓ The community forest's management plan needs to make provision for the lighting of fires e.g. for the purpose of controlled burning.

- ✓ The actual lighting of the fire/implementation of the controlled burn needs to be authorised by the management authority.

What is the management authority?

The Management Authority (MA) is established under section 15 (1) of the Act, as part of the establishment of a Community Forest (CF). This MA is required to manage the CF in accordance with a management plan. Section 15 (1)(e). See below from the Nyae Nyae Community Forest Constitution, dated 2nd March 2010:

> 3.2 At the time of the establishment of the Nyae Nyae Community Forest, there exists the Nyae Nyae Conservancy, gazetted under the Nature Conservation Amendment Act, No. 5 of 1996. After consultations with the Nyae Nyae Conservancy, whose boundaries are identical to the boundaries of the Community Forest, it is the common desire of both the Nyae Nyae Conservancy and the Nyae Nyae Community Forest, that the appointment of the Management Committee of the Nyae Nyae Conservancy and the appointment of the Forest Management Committee of the NNCF should result in the appointment of the same group of persons. The desired practical effect of this will be that the same group of persons that have the daily management authority over game for the Conservancy, will be the same group of persons who have daily management authority over the forest resources, thus making integrated resource management of both game and forest resources easier. Both of these daily management authorities are appointed by a Board which has been elected by its general members, and to whom the daily management authorities are accountable. The Board is itself accountable to its general members who elected them.

Therefore the Nyae Nyae Conservancy and Community Forest committee are the **Management Authority** for the Nyae Nyae Community Forest

With respect to N#jacna Conservancy which is not a gazetted Community forest, the act allows for **FOREST MANAGEMENT AREAS** to be created by agreement between the Minister and the owners or legal occupiers of land that is not part of a classified forest. The agreement will include a management plan, and may allow for technical or other assistance from the MAWF. Needs input from DoF

3 Integrated Fire Management

Integrated fire management (IFM) is an approach that addresses the issues of bad fires and good fires in different natural environment and socio-economic settings.

IFM is an approach to balance the beneficial and harmful effects of fire on lives, property, land use, resources and the environment.

Bad Fire

Conventionally, fire management is focussed upon managing the harmful effects of fire on lives, property, resources and environment. Approaches are based upon prevention and suppression strategies, such as discouraging the lighting of fires, construction of firebreaks and focusing efforts to extinguishing fires when they occur.

Good Fire

Managing fire for its beneficial effects is based on using controlled burning to manage wildfires, land use and the environment.

Wildfire Hazard Reduction

Controlled burning is used to minimise the occurrence, intensity and extent of wildfires by reducing and fragmenting fire fuel loads. This decreases the available area for uncontrolled wildfires to burn later in the year.

Low Intensity Controlled Burn

Patchwork Mosaic Burn Pattern

Enhancing Land Use

Controlled burning is used to enhance land use by increasing productivity and sustainability of livestock grazing, natural product harvesting and agriculture.

Wildebeest Grazing on Burnt Area

Cattle Attracted to Greenbite

Enhancing Environment

Controlled burning is used to reduce fire intensity and diversify fire regimes throughout the landscape to enhance habitat and biodiversity.

4 Permit to Burn System

To facilitate IFM a Permit to Burn System administered by the DoF is used to regulate fire management within legal requirements, and involves:

Fire Management Area

A Fire Management Area has defined boundaries registered with DoF that the community residing in, and neighbouring to, agree to manage fire within.

Fire Management Committee / Team

A Fire Management Committee Team are the people selected by the community or land manager to manage fire within the Fire Management Area.

Fire Management Plan

The Team develops a Fire Management Plan, through close liaison and coordination with community and adjoining landholders, to manage fire in the Fire Management Area.

Permit to Burn

The Fire Management Plan is an application to DOF for a Permit to Burn. This enables the Team to implement controlled burning within the Fire Management Area according to the Fire Management Plan.

5 Community Fire Management Committee / Team

Each Fire Management Area selects a Community Fire Management Committee / Team as a functional group who manages fire and fire related issues within their Area.

Who Selects

The Traditional Leaders and other relevant community members appoint the Fire Management Committee.

The Right People

The Committee / Team is usually composed of one Community Fire Controller and a number of Community Fire Officers. As a functional group centred on coordination and implementation of Fire Management Activities, the Committee / Team members are required to have an appropriate level of Field Based and Communication skills and experience.

The Community Fire Controller is responsible for leading the Committee and coordinating all activities involved with the Fire Management Program. The Fire Controller is required to

have a high level of Field Based skills and experience, particularly related to fire, as well as Leadership, Organisational and Communication capabilities.

From Where

One Community Fire Officer is to represent each village area within the Fire Management Area. The number of Community Fire Officers will depend on the size of the community and the number of distinct village areas.

Role and Responsibility

The Committee is a functional group whose primary role is to manage Fire and Fire Related Issues within their Fire Management Area. The Committee does this through a strategic and structured Fire Management Program that involves:

6 Training and Skills Transfer

This Fire Management Training Manual is a guide to plan, develop and implement an Integrated Fire Management Program in communal lands.

Fire Management Facilitators from the DoF assist in the training, coordination and support of the IFM Programs. An important emphasis is on how communities work together.

The Team is required to undertake **Fire Management Level I** Training Course that provides basic fire awareness and management techniques. The Course consists of General Theory and Practical Training that is the basis of this training manual.

General Theory Training

Practical Training

Skills and knowledge in fire management activities are only be acquired through first hand experience. The training uses an '**On the Job Training**' modular approach of the main components of a fire management program and these are delivered at strategic stages throughout the fire season as:

Module 1 - Fire Behaviour

What you need to know to manage fire

Module 2 - Fire Management Equipment & Safety

Your fire management equipment and how to use it safely

Module 3 - Fire Management Planning

The planning activities to develop your Fire Management Program

Module 4 - Fire Management Implementation

Implementing the fire management activities in your Fire Management Plan

Module 5 - Fire Management Monitoring

Improving and adapting the Fire Management Program

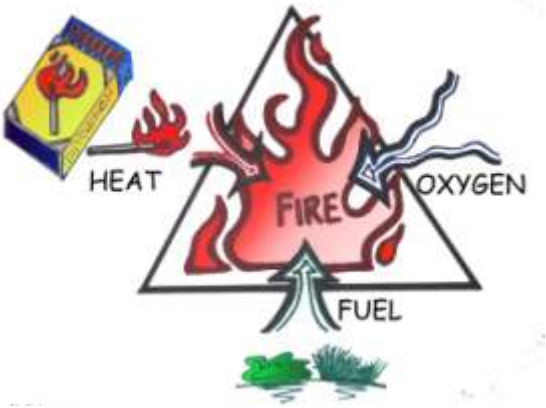
MODULE 1

FIRE BEHAVIOUR

MODULE 1 - FIRE BEHAVIOUR

1 What is Fire

Fire is a chemical reaction between Fuel, Air (Oxygen) and Heat. This reaction is represented as the Fire Triangle.



The Fire Triangle

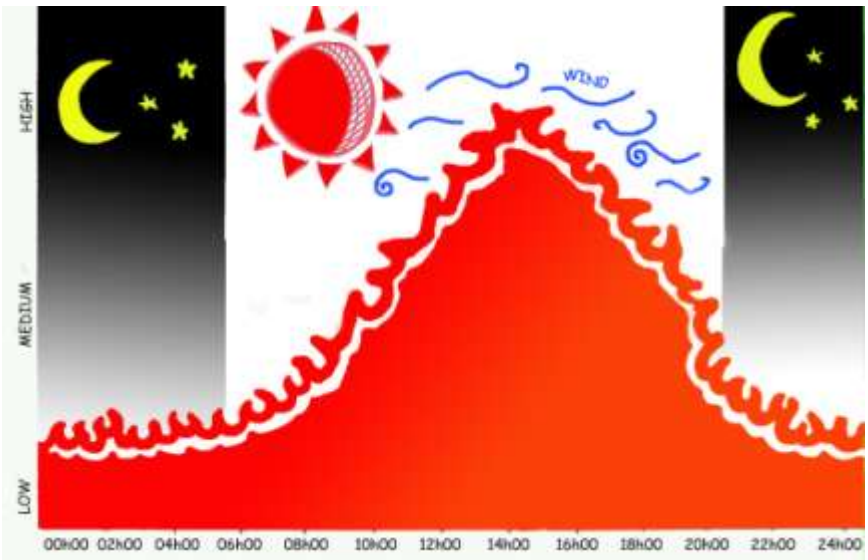
Fire can only occur when there is enough of each of the three elements. To extinguish fire you need to break the Fire Triangle by removing one of the elements.

2 What Influences Fire

The factors that influence fire act upon the three elements of the Fire Triangle and can either increase or decrease the **Fuel**, **Heat** or **Air**. This will change the behaviour of fire.

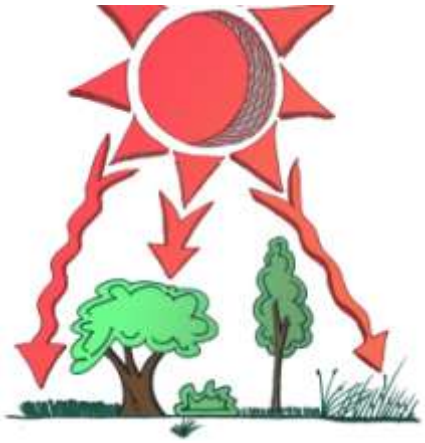
2.1 *Time of Day*

The Time of Day influences fire through the heating of the sun in the day and the cooling of the night. Fire is usually hottest and fastest from midday to early afternoon.



Fire Intensity and Rate of Spread throughout the Day

A hot sunny day increases the **HEAT** and dries the **Air** and **FUEL**.

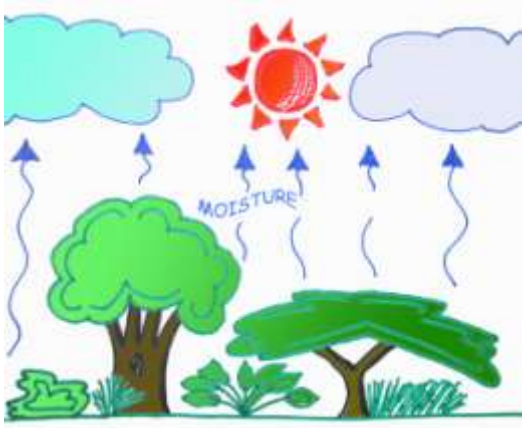


The Sun HEATS the Air and Fuel

As the land heats up during the day it creates wind. The wind increases the **AIR** and increases the **FUEL** by blowing the fire onto it.

Wind increases the AIR and FUEL

The night reduces **HEAT** and wets the Air and **FUEL** through condensation or dew.



The Sun dries the Air and FUEL

Night COOLS and Moistens the AIR and FUEL

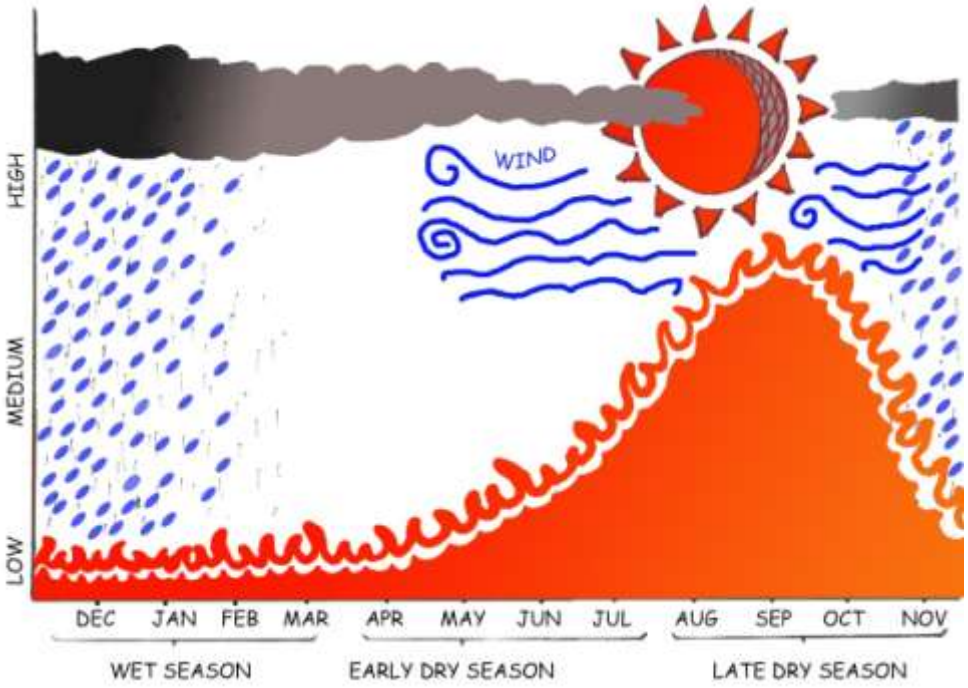
2.2 *Time of the Year*

The Time of the Year influences fire through the changing weather of the seasons.

Fire generally occurs in the Dry Season between April and October. Based on weather conditions two **Fire Seasons** can be used:

Timing	Fire Season	Weather
April, May, June and July	Early Dry Season	Low Wind (July Medium) Cool Days Cold Nights
August, September & October	Late Dry Season	High Wind Hot Dry Days Warm Nights

Fire Intensity and Rate of Spread change throughout the Fire Seasons being highest in the Late Dry Season (August – October).



Fire Intensity and Rate of Spread throughout the Year

2.3 *Fuel Characteristics*

The type and density of **FUEL** influences the intensity and rate of spread of fire. Fuel (grass, leaves, sticks etc) is continually added with each growing season (rainy season) and builds up over the years.

Areas with no fire for many years have high fuel loads. Areas that burn regularly have low fuel loads. A fire in high fuel load will be intense and spread quickly.

High Fuel Load – Very Dry

Low Fuel Load – Not dry

The Time of Year influences the curing or dryness of the fuel with fuel drying out as the Fire Seasons progress. Fires in dry fuel will be intense and spread quickly.

2.4 *Topography*

Topography is the 'lay of the land' and includes slope and aspect.

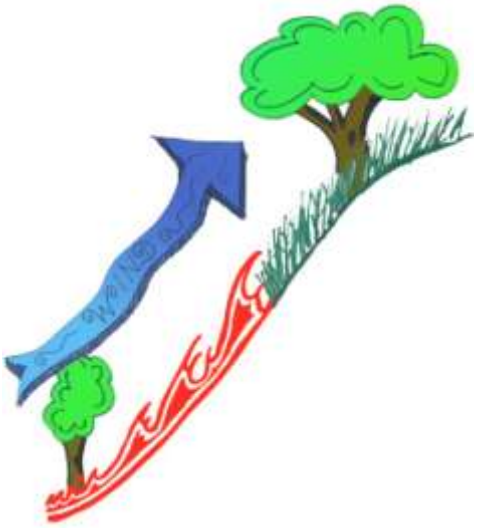
Slope

Slope influences fire by creating different wind directions during the day. Wind direction is generally up hill during the day and downhill during the night.

Wind travels Uphill in the Day

Wind travels Downhill at Night

Fire on a slope increases in intensity and spreads faster as the fire pre**HEATS** the fuel faster and creates an up hill draft of wind that blows the fire onto the fuel.



Fire is more Intense and Spreads Faster Uphill

Aspect

Aspect is the direction of the slope and influences fire through exposure to the sun and heating of the land. North facing slopes will receive more sun. Wind facing slopes (East) experience more intense fire through stronger winds.

3 Fire Behaviour

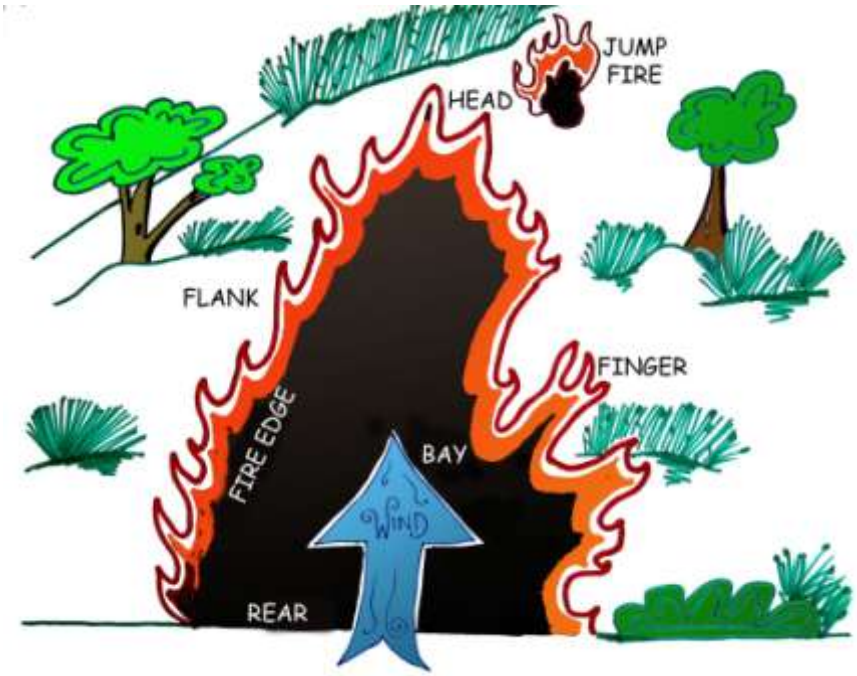
The influences of fire described above act together to determine how any fire behaves.

The Factors Influencing Fire Combine to Determine Fire Behaviour

There are many combinations of the different factors that influence fire.

EVERY FIRE IS DIFFERENT!

A Fire can be described as follows:



Components of a Fire

Head – The most intense and rapidly spreading part
Finger – A long narrow strip of fire projecting from the main body
Bay – The part of the fire edge between two fingers
Rear – The back
Flanks – The sides
Edge – The boundary of the fire at any time
Jump Fire – Fire started in front of the main fire by sparks or burning embers.

MODULE 2

FIRE MANAGEMENT EQUIPMENT AND SAFETY

MODULE 2 - FIRE MANAGEMENT EQUIPMENT & SAFETY

1 Fire Management Equipment

The Team uses an assortment of equipment to implement different fire management activities. The following details an ideal set of equipment

Personal Protective Equipment

Safety is the most important aspect of fire management. Each Community Fire Team member and Fire Management Facilitator receives Personal Protective Equipment.

Personal Protective Equipment
Fire Retardant Worksuit
Leather Boots
Hat
Eye Protection

Fire Equipment

Each Community Fire Team receives the following fire equipment to be stored in a designated and readily accessible place at all times.

Fire Equipment	
Knap Sack Spray Unit	Drip Torch
Fire Beater	Matches
	Jerry Can

2 Fire Management Safety

FAO information to input.

MODULE 3

FIRE MANAGEMENT PLANNING

MODULE 3 - FIRE MANAGEMENT PLANNING

1 Coordination, Liaison and Awareness

The Community Fire Management Team extend the skills and knowledge they acquire throughout the Program to the wider community to facilitate effective fire management.

Fire Management Area Community

The Fire Management Team informs all community members living or utilising resources in the Fire Management Area about the Program.

Meetings are held with the wider community including the Traditional Leadership.

Further meetings in villages and **Individual** liaison is carried out to ensure land use and resource availability is enhanced (ie cattle owners) throughout the Program.

Neighbouring Communities / Land Manager

Working together makes fire management easier. The Team liaises and coordinates with Neighbouring Communities / Land Managers to facilitate an efficient Program. This is very important when implementing fire management activities along boundary areas.

Fire Management Facilitators

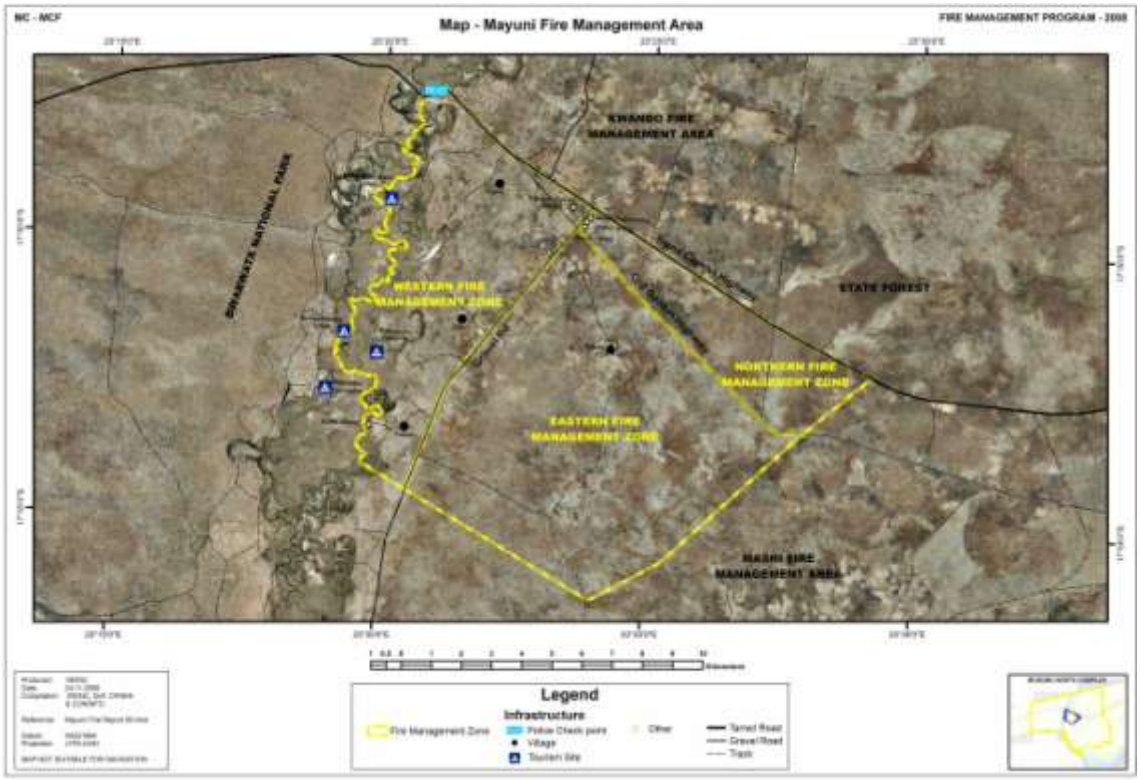
The Team liaises and coordinates closely with the Fire Management Facilitators to integrate the Program with neighbours and source technical assistance and resources to implement.

2 Field Surveys

The Team undertakes field surveys throughout the Fire Management Area to determine:

- Agree boundaries with wider community and Traditional Leaders
- Settlements and Infrastructure
- Community Resources
- Community Land Use Type and Intensity
- Fire History and Issues
- Existing Roads, Tracks and Firebreaks

To assist planning and implementation the Fire Management Area is divided into a number of Fire Management Zones based on the information from the field surveys, for example:



Example Fire Management Area and Zones – Mayuni Conservancy & Community Forest

3 Fire History and Fuel Load Mapping

Description of information available and how to access / use it.

4 Fire Management Plan Development

The Team is responsible for preparing a Fire Management Plan every year. The Plan focuses on operational aspects of fire management. It is based on Recent Fire History, Field Survey and Liaison with Community, Neighbours and Fire Management Facilitators.

Fire management requirements are developed for each Fire Management Zone to integrate wildfire hazard, land use and environment. Land use objectives are the primary element that determines the fire management activities to be employed.

Fire Management Plan Format Sheets are attached (**Appendix**) to assist you in recording the required information and develop your Integrated Fire Management Plan.

5 Permit to Burn Application

The Fire Management Plan represents a Permit to Burn application from the Team to the DoF. The Permit to Burn is authorised and issued by the DoF District Forestry Officer usually within the period of 1st April to 31st July.

MODULE 4

FIRE MANAGEMENT IMPLEMENTATION

MODULE 4 - FIRE MANAGEMENT IMPLEMENTATION

Implementing the **Fire Management Activities** in Your **Fire Management Plan**

Fire management activities within each Fire Management Area are implemented in accordance with the Fire Management Plan. The Community Fire Controller leads and coordinates firebreak maintenance, controlled burning operations and wildfire management.

It is important to continue Coordination, Liaison and Awareness (**Module 2**) throughout Fire Management Implementation.

1 Firebreak Establishment and Maintenance

Firebreaks are designed to provide access and a safe environment for Teams to implement controlled burning and manage wildfires. Firebreaks alone are not designed to stop uncontrolled fires.

Existing roads and tracks are the foundation of any firebreak network. They provide considerable access to implement controlled burning and other fire management activities. Firebreak establishment and maintenance is a very intensive activity and requires substantial resources and time. Firebreak necessity needs to be minimised.

Firebreak Placement

It may be necessary to maintain firebreaks along some boundaries. Where firebreaks are required around infrastructure or resources (ie fields with fences) the Team can provide technical and resource (equipment) assistance to owners. Generally, firebreaks are established where fire intensity will be the lowest (ie low fuel load).

Methodology

A vegetation free or slashed firebreak 4m wide is sufficient to provide unrestricted vehicle access and implement controlled burning safely. Manual maintenance involves clearing vegetation using slashers, rakes, axes and spades.

Community Firebreak Establishment and Maintenance

2 Controlled Burning Season

Controlled burning requires a permit from the Fire Management Authorities and is usually implemented in the Early Dry Season. Favourable weather conditions and fuel characteristics cause most fires to extinguish themselves during the cold nights.

Controlled Burning Coordination

The Community Fire Controller supervises and coordinates all controlled burning operations. The Community Fire Officers assist the Fire Controller in doing this.

Close liaison with Community Members who use resources or own infrastructure in the area is essential to agree and notify prior to commencing burning.

Many factors influence controlled burning (see **Module 1**) and it is not possible to cover all eventualities in a step-by-step guide. Timing of the year and timing in the day are the most important aspects to consider. Flexibility is required to adapt to conditions at the time to ensure controlled burning meets the objective. The most important guide is:

Your Knowledge and Experience of Fires in Your Area

Start Early in the Season

As soon as a target area is dry enough to burn, organise to burn it. With a mix of dry and green grass, light winds and cool temperatures fires are of low intensity and easier to control.

Early Controlled Burning is the Key to Effective Fire Management

Start Late in the Day

Anybody can light a fire. Not many people can **control** a fire.

If You Start This Fire Where will it Go?

Are **you** prepared for the control of **this** fire in all possible eventualities? Commencing controlled burning in the **mid – late afternoon** reduces possible eventualities of the controlled burn.

You will need to assess the elements that influence fire (see **Module 1**) in your judgement:

- Fuel Type / Load
- Time of Year
- Time of Day
- Wind Direction & Speed
- Topography
- Location of Infrastructure (ie Villages)
- Location of Resources (ie Thatching Grass)
- Location of Tracks or Firebreaks

2.5 *Resource and Infrastructure Protection Burning*

Protecting infrastructure and resources from fire.

Removing Fire Fuel Load

Resource and infrastructure is secured by removing fuel loads through controlled burning to establish buffer zones. It will not be possible for fires later in the year to reach resources or infrastructure with no fuel to burn around it.

Burn Against the Wind

When implementing protection burns start **Burning Against the Wind** on the down wind side of the resource or infrastructure. Burning against the wind creates a fire of low intensity and low rate of spread = **Easy to Control**.

Burning Against the Wind

Fuel Load Removal Next to Village

Resource and infrastructure protection burns, where necessary, are established around:

- Villages
- Cattle Posts
- Crop Fields and Fences
- Other Infrastructure.

Follow up surveillance is conducted to ensure infrastructure has been completely secured. Additional protection burns are implemented as required.

2.6 *Controlled Mosaic and Land Use Burning*

Land use objectives determine fire management requirements. Controlled burning is implemented in specific areas to enhance land use and establish a mosaic of burnt and unburnt patches throughout the Fire Management Area. Additional mosaic burning is implemented in the Early Dry Season and in the early afternoon to create a cool fire regime and increase the mosaic burn pattern as required.

Create a Patchwork Mosaic of Burnt and Unburnt Areas

3 Wildfire Management Season

The Wildfire Management Season commences on 1st August at the end of the Controlled Burning Season. Late Dry Season weather conditions and fuel characteristics cause intense fires that spread quickly. Fires at this time of year will not stop until they reach an area with no fuel (ie road, river etc) or are manually extinguished.

The strategic burning established in the Controlled Burning Season provides the foundation for managing uncontrolled fires.

3.1 *Prevention*

Fire prevention reduces the number of unwanted, uncontrolled and escaped fires.

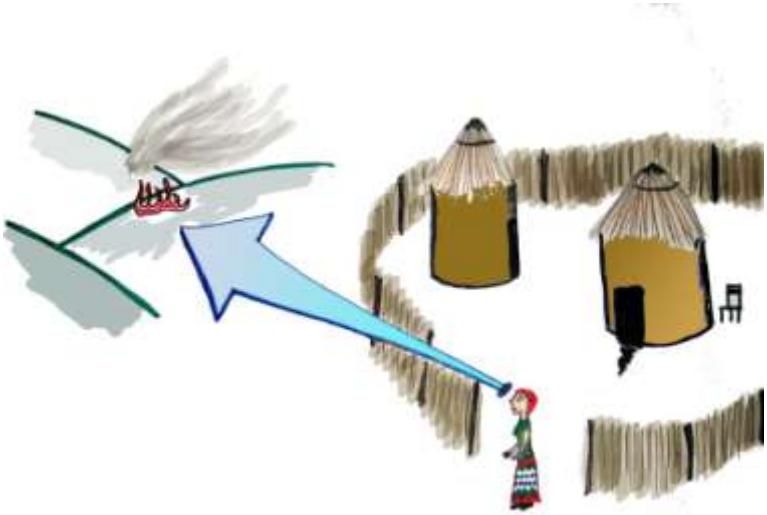
The Coordination, Liaison and Awareness Program (see **Module 3**) is relied upon to inform the wider community of the hazards of uncontrolled fires and how to prevent the outbreak of wildfires, particularly from honey gathering, slash-and-burn agriculture and grazing management.

3.2 *Detection*

Early detection of unwanted, uncontrolled and escaped fires is the responsibility of all community members in the pilot Focal Fire Management Area.

The Community Fire Management Team conduct regular patrols within their Area during the Wildfire Management Season.

The National Fire Information System uses satellites to remotely detect fires. This information supports fire detection on the ground.



Community Member Detecting Wildfire

3.3 *Communication*

Community members who detect unwanted, uncontrolled and escaped fires need to communicate this to the Fire Management Team as soon as possible. This is important for responding to the fire whilst it is small.

Community Member Communicating with Fire Management Team

Communication methods available to relay fire management information, include:

- Meetings
- Messenger on foot, bicycle or vehicle
- Cell Phones
- VHF Radio Network.

The methods available and the urgency of the message determine how the Fire Management Team communicate with each other; with neighbouring Fire Controllers, Land Managers and communities and with Fire Management Facilitators.

As a general rule messages should be clear, concise and as brief as possible.

3.4 *Assessment*

The Fire Controller and Team need to **Assess** the wildfire and determine if it is a:

a. Hazard to Life and Property

b. Threat to Land Use, or

c. Threat to Environment.

The Fire Controller has reliable knowledge and understanding of the area, particularly previously burnt areas, for the safe and efficient management of the unwanted fire.

Hazard or Threat	Action
NO	**Monitor** wildfire
YES	**Respond** to the wildfire to minimise the hazard or threat

3.5 *Response*

Minimising the threat or hazard of a wildfire involves directing resources and tactics to:

a. Protect Infrastructure and Resources

b. Contain the fire within a controlled area

c. Suppress and extinguish the fire.

Early detection, swift communication and sound organisation of response are essential to manage uncontrolled fires effectively.

The Fire Management Team to manage must notify neighbouring land managers or communities, particularly if it is beyond their capabilities to manage, and also request assistance from the Fire Management Facilitators.

5 Dispute Resolution

Facilitating the **Resolution Process** of **Fire Related Disputes**

Cultural Ethics

Description of cultural and personal ethics relied upon to maintain a sense of community.

Ownership of Fire Management

Ownership of fire management brings many *benefits* to the individual in the community. Ownership also involves assuming the *responsibility* of issues and disputes of fire management.

It is important that the individual community member takes ownership of fire management to ensure all other members of the community act responsibly with fire.

Dispute Resolution

Issues and disputes are first dealt with at the Fire Management Area level. The Fire Management Team mediates the resolution process and the Traditional Leadership arbitrates settlement.

Disputes unresolved at the Fire Management Area level or disputes between neighbouring areas can be brought to the district level through the Fire Management Facilitators.

MODULE 5

FIRE MANAGEMENT MONITORING

MODULE 5 – FIRE MONITORING

Improving and **Adapting** your **Fire Management Program**

The Fire Management Team implement Monitoring and Reporting of the Fire Management Program annually.

The framework of Monitoring and Reporting is designed to assess the Program within two different Fire Seasons.

1 Follow up Monitoring

Follow up monitoring the next morning was important to demonstrate when, where and how self-limiting low intensity controlled fires are established in different landscapes, fuel types / loads. Many IFM implementation activities involved camping for several days in remote areas to facilitate this.

2 Satellite Monitoring

The National Remote Sensing Centre collates, organizes and disseminates fire related information to facilitate effective fire management implementation in Namibia.

The African Monitoring of the Environment for Sustainable Development (AMESD) Project Advanced Fire Information System (AFIS) terminal provides the foundation of remotely sensed information from satellites.

Information and maps are disseminated as monthly fire reports to assist fire management planning and implementation.

Early warning of active fires and high fire danger is communicated to the Fire Management Facilitators, Community Fire Teams and key stakeholders when required.

3 Community Perceptions

A Post Fire Season Community Evaluation Workshop (November) is carried out to assess community attitudes towards the Program and review the fire management objectives.

Key members of the Community, particularly the Traditional Leadership, are invited together with the Team, key Focal Area stakeholders and Fire Management Facilitators.

This provides for community and stakeholder input and development of future fire management programs.

6 Fire Management Report

Upon completion of implementation and monitoring, a post fire season evaluation is conducted.

This review addresses objectives of the Plan and document the outcome of implementation.

Assessment of the effectiveness of the Program and the identification of inadequacies provide recommendations for future fire management programs.

APPENDIX

FIRE MANAGEMENT PLAN FORMAT SHEETS

(Name)_____

INTEGRATED FIRE MANAGEMENT PROGRAM

FIRE MANAGEMENT PLAN - 2015

COMMUNITY FIRE TEAM / COMMITTEE

The_____ Fire Management Team:

Name	Position	Village Area	Cell
	Community Fire Controller		
	Community Fire Officer		
	Community Fire Officer		
	Community Fire Officer		
	Community Fire Officer		

COORDINATION, LIAISON & AWARENESS

Community Meetings		
Where	When	Comment

Community Member Liaison and Coordination		
Who / Where	When	Comment

Neighbouring Communities / Landholders		
Who / Where	When	Comment

Firebreak Maintenance

What	When	Comment
Existing Roads / Tracks		
Field / Fences Firebreaks		
New Firebreaks		

FIRE MANAGEMENT PLANNING

Fire Management Zone

Fires May – July 2013	Where	Comment
Land Use	**Where**	**Comment**
Fire Management Requirements 2013	**Where**	**Comment**