United Republic of Tanzania
MINISTRY OF NATURAL RESOURCES AND TOURISM
Forestry and Beekeeping Division

NATIONAL FOREST PROGRAMME IMPLEMENTATION:
COMMUNITY-BASED FIRE MANAGEMENT COMPONENT

17 August 2009

ACKNOWLEDGMENT

Many thanks for those who contributed their ideas, comments and provided me with moral support during writing of this proposal.

Title: **COMMUNITY–BASED FIRE MANAGEMENT COMPONENT**

Component Symbol: **UTF/../.../.....**

Country: **The United Republic of Tanzania**

Duration: **60 months**

Government Agency: **Ministry of Natural Resources and Tourism**

Starting Date: **01 January 2010**

Completion Date: **31 December 2015**

Donor contribution Total in US$:   US$ 10,472,954. (Tsh **13,614,840,000**/=).

Government Contribution (In-kind):   US$ 840,000   (Tsh **1,092,000,000**/=).

Grand Total   **US$ 11,312,954 (Tsh 14,706,840,000/=).**

1 US$=1330

EXECUTIVE SUMMARY

Forest fires have been increasing at alarming rate due to insufficient plans and programs to control fire; inadequate human and financial resources; insufficient extension programs that do not integrate indigenous knowledge in management of forest fires and increased effects of the climate change. Forest fire risks were and are given low priorities by Forestry and Beekeeping and the country at large.

Top-down approaches adopted by government of Tanzania from colonialist have failed to address the specific needs of vulnerable communities and ignored indigenous capacities and mechanisms. Local communities are knowledgeable of the hazards and causes of forest fires. Therefore, their involvement in management of forest fires is necessary for fire hazard reduction. Under community based fire management approaches local communities will share roles and responsibilities with professionals in fire management that can provide solutions to the problem of forest fires. It is anticipated that through Community Based Fire Management local communities will share responsibilities in fire management and raising awareness though peer-to-peer. On the other hand capacities will be built particularly in early fire warning systems, prevention, preparedness and suppression, and forest fire monitoring to strengthen fire risk reduction measures. Formed institutions in reducing forest fire risks will use integrated knowledge of forest fire management in addressing and mitigating the impacts of climate change, fire on environment and society. However, the lack of appropriate training, resources, integration of knowledge and specific organizations dealing specifically with forest fires made this initiative ineffective.

ABBREVIATIONS AND ACCRONYMS

CBFiM	Community Based Fire Management
CBO	Community Based Organization
DED	District Executive Director of a District council
DFO	District Forest Officer of a District council
FBD	Forestry and Beekeeping Division of the Ministry of Natural Resources and Tourism
NGO	Non Governmental Organization
VFiMC	Village Fire Management Committee
MTEF	Medium Term Expenditure Framework
NTFP	Non-Timber Forest Products
MTR	Midterm Review
NFBKP	National Forest and Beekeeping Programme

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1.0 Context and Justification
1.1   Background

Tanzania Mainland is endowed with large and valuable forest resources covering about 38.8 million hectares which represent 43.8% of the total land area. Forests are important for the provision of numerous goods and services both in the national economy and to the society at large.

Forest resources are however facing deforestation and degradation. One of the factors contributing to deforestation and degradation has been rampant fires. Forest fire is a very prevalent disturbance in Tanzania's landscape with several hundred million hectares of vegetation burning every year. Wild land fires have many negative effects on biodiversity, wildlife and vegetation, human safety, health, national economies and global climate change.

Forest fires are increasing at alarming rate due to insufficient plans, inadequate human and financial resources; insufficient extension programs for local community, especially cattle herders, school children and collectors of non-timber forest products (NTFPs) and lack of or weak integration of indigenous knowledge in forest fires management. It is estimated that about 29.6 thousands hectares of forests are completely burnt every year. Forest fires are also reported in many documents to be among the main causes of forest degradation that contribute to climate change.

In addition, increased effects of global climate changes that are associated with increased temperatures and prolonged dry seasons will create drier forests more susceptible to forest fires. According to FAO (2005), the rate of deforestation in Tanzania is estimated at 412,000 hectares annually. Due to this continued rate of deforestation in Tanzania, more forest areas are converted into grassland, which in turn puts more area susceptible to fires.

Moreover, due to inadequate capacities in assessing effects of forest fires, more information is on economic losses while other aspects associated with forest fires remained challenges, hence a need for interventions to reveal the unrecorded information. Effects of forest fires on human health, climate change and biodiversity are inadequately studied, particularly in Tanzania, leading to underestimation or not considered as losses. It is through quantification of effects of forest fires that is when causers of these fires can change their attitudes. This gap will be filled by the proposed project, hence justifying its relevancy. The findings of the interventions will be used to raise awareness of local communities.

Local communities have their indigenous knowledge of forest fire

management. The integration of such knowledge in managing wild fires has been poor or inexistence. Lack of integration of indigenous and conventional knowledge of fire management created gap in terms of perceptions and implementation. Local communities perceived that the role and responsibility of preventing and fighting fires were of the government only and that their indigenous knowledge had no role to play. This perception will be changed through the integrated approach, which will be used by the proposed intervention.

To mitigate these fire-related problems, the Forest and Beekeeping Division and other forest and land management agencies, as well as landowners and communities, require integrated forest fire management approach. Joint efforts should be intensified among the stakeholders to address the causes of ineffectiveness in averting forest fires and use the same to lay down the strategies for effective control of these forest fires.

However, clearly, measures are urgently needed to control the use of fire to ensure maintenance of biodiversity, protect wildlife and habitat and vegetation enhancement. This requires an understanding of the causes, effects and characteristics of bushfires in Tanzania and strategies that can be adopted to prevent and control the effects of bushfires on the ecosystem.

Thus, Tanzania is planning to launch the national forest fire prevention campaign which should kick-off immediately in July 2010 in order to raise the awareness of the public and other stakeholders and enhancing their capacities in forest fire prevention, preparedness and effective climate change adaptation.

In 1990 the first national forest fire prevention campaign was specifically designed to influence Tanzanians public behaviour change regarding forest fires. The incidences of fire were drastically reduced in two years after, since then the incidences of forest fire have been reportedly increasing. The following regions were involved in the campaign: Tanga, Morogoro, Lindi, Mtwara, Ruvum, Iringa, Mbeya, Rukwa, Kigoma, Kagera and Tabora.

1.2   Government Policies and Priorities

The Component is inspired by the long-term national economic reforms, including the country's Development Vision 2025; the Environmental Management Act (EMA, 2004), the National Strategy for Growth and Reduction of Poverty (NSGRP/ MKUKUTA), National Adaptation Programme of Action (NAPA), National Environmental Policy (1997) National Forest Policy (1998) and National Forest Programme (NFP 2001), Beekeeping Programme (NBKP 2001)as well as other cross-sector policies that provide a favourable

environment for forest fire prevention.

Further, The National Forest Programme (NFP) and Beekeeping Programme (NBKP) were endorsed by the Government in 2001 have been merged/aligned and are now called National Forest and Beekeeping Programme (NFBKP). NFBKP is a strategic planning instrument to implement the National Forest and Beekeeping Policies of 1998 and putting into operation the commitments and obligations derived from international agreements and inter-governmental processes. It integrates wider objectives and strategies of sustainable development and poverty reduction with a cross-sectoral approach by taking into account the multiple functions of forests and bee resources, the variety of actors and interests and the linkages of the forest and beekeeping sector with other sectors, such as energy, minerals, agriculture, water and environment. NFBKP is also an instrument that enhances sustainable forest and bee resources management and improves the design and implementation of projects and programmes. NFBKP has the following five development programmes:

- (i)   Forest Resources Conservation and Management;
- (ii)   Institutions and Human Resources;
- (iii) Legal and Regulatory Framework;
- (iv) Forestry-Based Industries and Sustainable Livelihoods; and
- (v)   Beekeeping Development.

Specific objectives of the National Forest Policy include: Ensured ecosystem stability through conservation of forest biodiversity, water catchment and soil conservation and control of forest fires. Forest fires are among the major drivers of forest deforestation and degradation both in reserved (natural and plantations) and unreserved forestlands.

The component links closely with the priorities outlined in the National Adaptation Programme of Action (NAPA, 2007) of the United Republic of Tanzania which aims to develop community forest fire prevention plans and programmes to increase public awareness on mitigation of effect of forest fires to climate change.

The component recognise and support the UN Convention on Biological Diversity (CBD), the Convention to Combat Desertification (UNCCD), United Nations Framework Convention on Climate Change (UNFCCC), the Forum of Forests (UNFF) and the Ramsar Convention on Wetlands, the goal and joint endeavours of the Partnership on Environmental Emergencies, (led by the

UNEP-OCHA Joint Environment Unit), to protect the global vegetation resources and global atmosphere from negative influences by vegetation fires, as well as the promotion of knowledge and techniques to utilize the beneficial role of fire in ecosystem management.

In 2007, UNFCC COP 13 held in Bali- Indonesia saw firm commitments from the parties to include Reduced emission from Deforestation and Degradation (REDD) in the post -2012 regimes. It was widely recognized that reducing emission from forest fires, deforestation and encouraging reforestation is essential to enabling the world's poorest and most vulnerable people to adapt climate change. The livelihoods of the majority of poor people are reliant upon assets derived from natural resources that are affected by forest fires and current climate variability. The component will link up with other components of the component being supported by UN REDD.

1.3 Justification of the project

Tanzania's forest and bee resources are facing deforestation and degradation. The government has been implementing NFBKP since 2001 in order to address the following main sectoral issues:

(i) Management of the country's forestland and bee resources at all levels for sustainable and progressive development.

(ii) Management of forest and beekeeping based industries and other forest and beekeeping based activities to contribute to the national development and equitable benefit sharing between the stakeholders.

(iii) Conservation of the country's unique ecosystems and biological diversity, taking into account the needs of local populations and appropriate management and utilisation methods.

(iv) Adaptation of the institutional framework and arrangement of the necessary human resources and financial inputs to meet the pre-conditions for the desired development.

Implementation of CBFiM is expected to evolve around in addressing the following issues:

a) In Tanzania, the livelihoods of the majority of poor people depend on forest resources for food security, provision of revenue, timber and wood-energy, pharmaceuticals and water supply. It is estimated that the combined annual value of forest goods and services in Tanzania is US$ 2.2 billions. It is further estimated that forest sector contributes above 10% of the total GDP at current price 2006. Globally, forest ecosystems store about 2,300 $GtCO_2$ which is more CO_2 than in the entire atmosphere. About 1,000 $GtCO_2$ is stored in tree biomass (FAO, 2005). The forest has

been important in the increase of carbon storage and climate change.

b) Forest resources have been enormously threatened by forest fires. Forest fires have been increasing at alarming rate due to insufficient extension programs for local community, especially cattle herders, school children, and collectors of non-timber forest products (NTFPs), loggers, charcoal makers, animal and honey hunters, fisher men and off-road vehicle users. This is also contributed by lack of pertinent information related to effects of forest fires; particularly in Tanzania. The forest fires have effects on forest resources that directly and indirectly pose effect on poor people's livelihoods and consequently acceralate rural poverty.

c) Forest fires cause damage to approximately 29.6 thousands hectares of Tanzania forests annually. Forest fire occurs both in reserved and general land forests that are rich in biodiversity, resulting into change in ecosystem structure and functions.

d) Tanzanian carbon markets will probably be affected due to increase of forest fires. This is because the sequestrated carbon will be released into the atmosphere during the forest fire event and hence scaring the investment on carbon.

e) FBD is lacking of information on forest fires, which highlight the location of the incident, time and day of occurrence, causes of the fire, and financial losses incurred.

f) FBD have inadequate capacity to generate, manage, update and use the information. The existing capacity is very low. The FBD needs both internal and external assistance to provide the proper training to a core team of foresters in the forest fires management.

g) Tanzania has invested nothing or very low in management of forest fires as compared to other sub Saharan countries. It is not true that as a country it is safe and not experiencing problem related to fires, but forest fire a given low priorities in forest management. The proposed intervention will be of its kind in addressing forest fires in the country and mitigating effects of forest fires on climate change.

h) FBD and some stakeholders lack correct data on forest fires for planning and informed decision-making.

Successful implementation of this component in support to NFBKP implementation will thus play a great role in fostering sustainable forest and bee resources management in the context of poverty reduction, combating environmental threats, good governance, gender equality and democratic decision making at national, regional, district, ward and village levels. Community participation is therefore to fundamental to success.

2.0   Beneficiaries

The component beneficiaries are categorized into direct and indirect:-

2.1   Direct Beneficiaries

Local communities: The main beneficiaries of the component will be the targeted local communities in areas prone to forest fires and at high risk of negative impacts from climate change.

Private sectors: Involved in forest-based industries (Beekeepers, forest investors). The private sector has a role in implementing and sensitizing forest fire prevention and forest management through a partnership that exist between them, government and NGOs.

2.2   Indirect Beneficiaries

Generally should the new component succeed in its goal of reducing incidences of forest fires and optimising the contribution of natural resources on a sustainable basis, to economic growth, poverty reduction and livelihoods, then the government and society at large would be major indirect beneficiaries. These include the:-

1. **Ministry of Natural Resources and Tourism: Forestry and Beekeeping Division** manages forestry resources and is instrumental in implementing the forest fire prevention.
2. **Ministry of Agriculture:** through its Rural Development Strategy the Ministry of Agriculture is responsible for implementation of the proper land use planning which will in turn reduce the incidences of forest fires and loss of agricultural crops due to fire.
3. **Ministry of Water:** The ministry is responsible for managing water in Tanzania. The management of forest fires will enhance the water availability due to protection and conservation of catchment areas.
4. **Vice President's Office (Environment):** This is responsible for the formulation of environmental policies, policy guidelines, coordination, promotion, protection and sustainable management of environment in Tanzania

5. **President's Office, Ministry of Regional Administration and Local Government (PORALG):** This is responsible for implementation of forest fire prevention and forest management from the lowest government level village/sub-village to the regional level.
6. **Ministry of education and vocational training:** The school programme will increase public understanding and attitude towards the role and use of fire and forest management. These in turn will re-educate adults.
7. **Tanzania Metrological Agency:** It is responsible for weather forecasting in Tanzania.
8. **Non-Governmental Organisations and Community Based Organisations:** These may play a significant role in lobbying and advocacy, facilitation of forest fire prevention, coordination, planning, and capacity building programmes both at national and local levels.
9. **International communities:** The international communities will benefit from the component through the reduced emission from deforestation and degradation.
10. **Private sector and other related bodies**

The componentis thereof consistent with the objectives and priority areas of Government policies and strategies, that support social programmes, which aim to poverty reduction, foundation of effective system of social security and sustainable economic growth through sustainable use and management of natural resources. The component aims among other objectives to contribute to sustainable and lasting management of the forest and tree resources which role is to improve soil fertility, food security, forest ecosystem productivity and ultimately contribute to climate change.

3.0 COMPONENT DESIGN

CBFIM component Implementation will adapt the programme design elements of overall NFBKP. NFBKP comprises a goal and four overall objectives, at the programme level, there is one goal while overall objectives are at the developmental programme level and purpose are at the sub-development programmes. Indicators have also been adapted from NFBKP Logical Framework Analysis (LFA) matrix. Furthermore impact indicators are linked with a goal, overall objectives and purpose while performance indicators are at the output or main activity levels.

2.1 Goal

The Goal of NFBKP is: "Conservation and sustainable utilisation of forest and bee resources to meet local, national and global needs promoted".

2.2 Overall objectives

Four overall objectives formulated in accordance with the following main NFBKP development programmes:

2.2.1 Forest Resources Conservation and Management

Overall objective: Sustainable supply of forest products and services ensured to meet the local needs that contribute to national development

2.2.2 Institutions and Human Resources

Overall objective: Enhanced national capacity to manage and develop the forest sector in collaboration with other stakeholders

2.2.3 Legal and Regulatory Framework

Overall objective: Enabling and effective legal and regulatory environment for the sector; and

2.2.4 Forestry-based Industries and Sustainable Livelihoods

Overall objective: Increased economic contribution to GNP, employment and foreign exchange earnings through sustainable forest - based industry development and trade of forest products and services.

The Component is planned to mitigate effects of forest fires on climate change through participatory approaches. In this regard, it is expected to reduce incidences of forest fires through community based fire management for poverty alleviation. Thus the overall component elements will be linked with 2.2.1

The component is designed to facilitate detection, prevention and suppression of forest fires in such a manner that forest resources optimizes their contribution to economic growth and poverty reduction. To achieve this, the community based fire management (CBFiM) approach will be adopted in the implementation of this programme due to inadequate funds and staff resources to protect the forests. **The emphases should be on behavioral change particularly in areas that are chronic to forest fires.**

Integrated forest fire management approach is crucial in order for natural resources to truly make economic sense. Increased contribution of natural resources to economic growth must also be reflected in increased benefits to those who are either responsible for or affected by the management of natural resources particularly local communities.

Nevertheless, Forest fire monitoring and damage assessment using remotely sensed data and geographical information system (GIS technology) would be carried out each year in order to provide reliable and up to date information about the recent forest cover area and its quality in Tanzania.

The Advanced Fire Information System (AFIS) is the first near real time operational satellite fire monitoring system of its kind in Africa. The main aim of AFIS is to provide information regarding the prediction, detection and assessment of fires using Remote Sensing and GIS technology through an automated near real time Web GIS portal. AFIS forms part of the Wide Area Monitoring Information System (WAMIS) which aims to deliver relevant sensor based information (sensor web) to the local and regional user community in support of effective decision-making in the monitoring of the environment.

Additionally, the component shall install a CBFiM that database entails all relevant information that provide a full picture of occurrence and impact of vegetation fire, including changes of fire regimes as a consequence of global climate change from micro-databases (Villages-Districts). The database will greatly benefit public and private forestry sectors by increasing the forest fire information. The CBFiM micro database will be linked up with NAFOBEDA in order to scale up dissemination of forest fire information and assist in setting up a coherent strategy for improving the overall management and use of fire as management tool.

The Component design comprises five outputs are presented below and its Logic Framework (LFA) is shown (Table 1).

3.1   Outputs and Activities

(i)   **Created general public awareness on effects of forest fires on environmental integrity and livelihoods**
   ✓ Establish district forest fire committees (DFCs)
   ✓ Component inception
   ✓ Hold joint meetings at district levels with DFCs, NGOs and CBOs
   ✓ Radio programmes
   ✓ TV programmes (Comedy and drama)
   ✓ Video shows

✓ Print outs (brochures, booklets, posters and stickers)
(ii) **Capacity building on wild fire management**
  ✓ Train on forest fire prevention, preparedness and suppression
  ✓ Train on fire early warning systems
  ✓ Install Advanced Fire Information System (AFIS)
  ✓ Train on AFIS
  ✓ Train on forest fire report writing, record keeping (database) and human safety
  ✓ Forest fires risk reduction Programme
  ✓ Forest fire damage assessments
  ✓ Forest fire communication and networking
  ✓ Form forest fire management institutions
(iii) **Networking and linkages**
  ✓ Form Nation Forest Fires Advisory Committee
  ✓ Hold forest fire stakeholders workshop
  ✓ Conduct multi-stakeholders workshop and review fire management strategy through a facilitated workshop.
  ✓ Launch national forest fires campaign
  ✓ Conduct regional forest fire campaigns
  ✓ Conduct consultancies on forest fires
  ✓ Conduct exchange visits
(iv) **Research and publications**
  ✓ Indigenous knowledge on forest fires management
  ✓ Socio-economic assessments of forest fires
  ✓ Forest fires on biodiversity
  ✓ Forest fires on climate change (Carbon market)
  ✓ Integrate indigenous knowledge and conventional knowledge on forest fire management.
  ✓ Develop Forest Fire management plans
(v) **Enforce forest fires legislations**
  ✓ Formulate /Review village forest fire by-laws
  ✓ Forest fire patrols
  ✓ Enhance enforcement of forest fire laws
  ✓ Forest management plans

4 Organization and Management

The Director of Forestry and Beekeeping (FBD) will be the overall responsible person for coordination, monitoring, reporting and evaluation of the implementation. At the district level, the District Executive Director (DED) will be responsible for planning, budgeting and implementation. Village Committees for Forest Resources Management will be responsible for facilitation of implementation of activities at the site level. Regional Natural

Resources Advisor will be responsible for coordination, monitoring and evaluation of the implementation in collaboration with FBD. Other collaborators include Private Sector, Non Governmental Organizations (NGOs), Community-Based Organizations (CBOs) and other related projects. NFBKP management, coordination and communication structure will be as shown in figure 1, 2 and 3.

Regular and timely meetings of the NFBK SWAp SC will be secured, and adequate participation of relevant stakeholders ensured. Hearings of wider stakeholder groups are organized to get feed back on progress made in NFBK planning, implementation and M&E. Documentation will be available to stakeholders on the regularly updated NFBKP website.
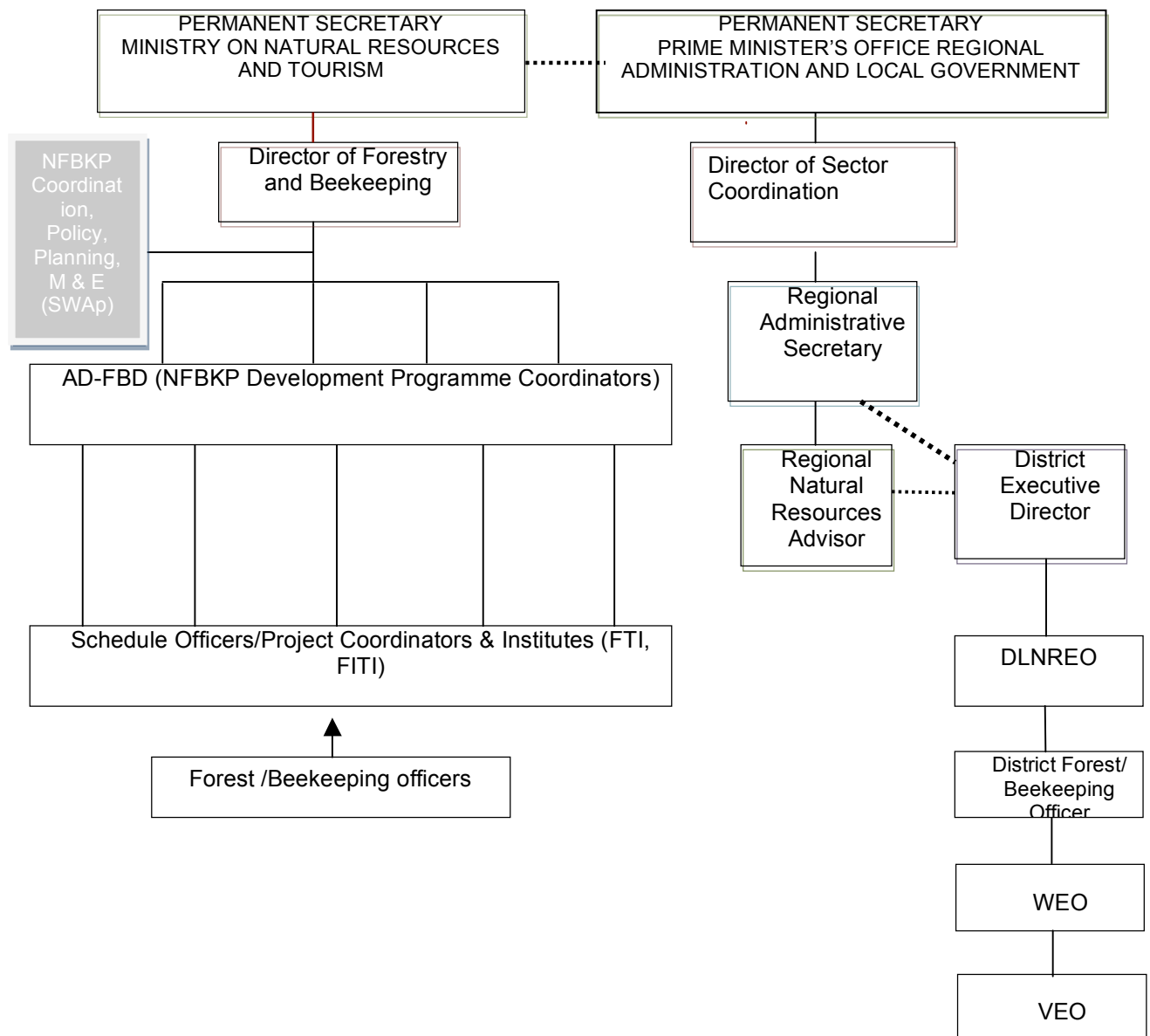
Figure 1: MNRT and PMO-RALG Programme Management Position Structure under SWAp
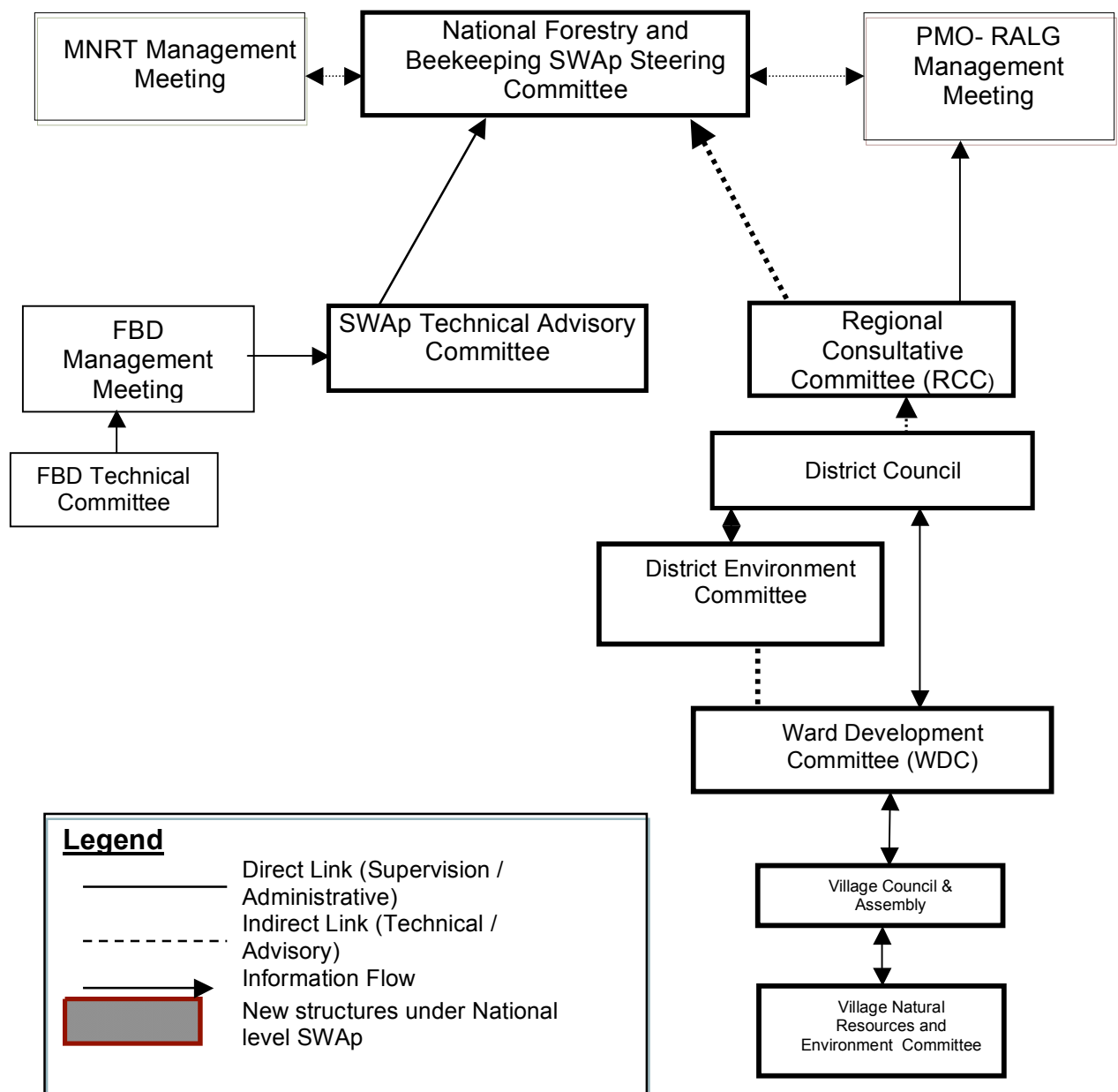
Figure 2: MNRT and PMO-RALG Programme Decision Making Organs under SWAp
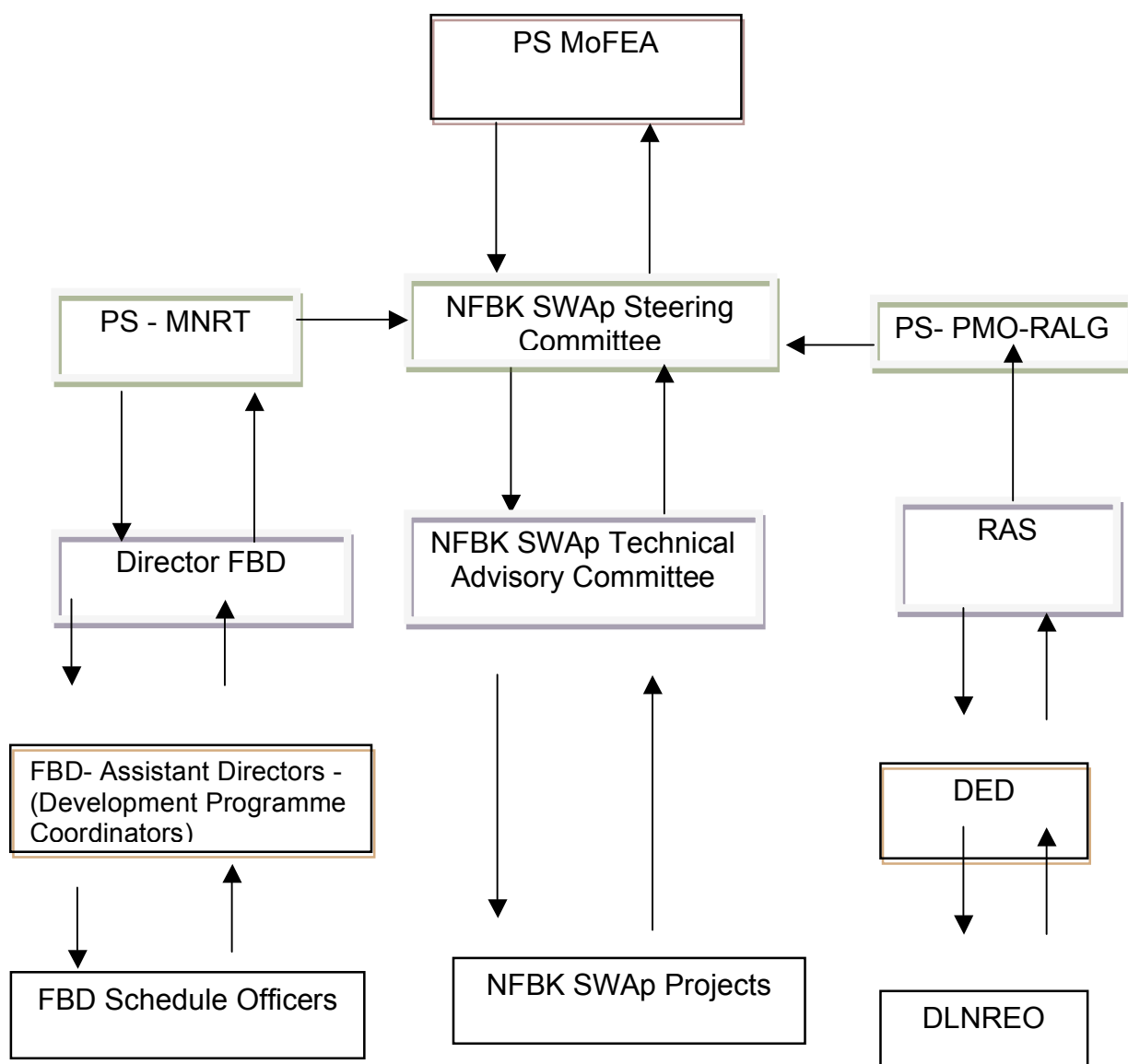
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│ FBD- Assistant       │                       │      DED         │
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Figure 3: MNRT and PMO-RALG Programme Management Positions and Decision Making Organs under SWAp

4.1 Component Location

The Community Based Fire Management component will be located in Dar es salaam, Forestry and Beekeeping Division Head Quarters. The component will cover five regions at very high risks of forest fires during the first phase namely, Rukwa, Ruvuma, Tanga, Morogoro and Kigoma. In the second phase subject to availability of funds there will be additional of six

regions that are at high risks.

4.2 Collaboration

The component will collaborate with local institutions and international communities in forest fire research, monitoring and damage assessment. The collaboration is the base for the establishment of mechanisms for sharing information, resources and fire management techniques with other partners and decision-making process. Also, would eliminate the repetition of previous mistakes, improve ongoing forest fire risk reduction capability, assist in reducing vulnerability to forest fire disasters, and stimulate forward-looking concepts for the future.

5.0 Sustainability and Risks

5.1 *Sustainability*

The sustainability of the component will be ensured by developing an exit strategy from the very beginning of implementation. An exit strategy will ensure the component activities are mainstreamed in the relevant institutions processes and programmes. This will include the replacement of donor funds with own funds either through MTEF, community ownership and contributions. Also, the CBFiM will make sure the forest fire protection activities are incorporated in central and local government management plans for forest plantation, nature reserve, forest reserves, national parks and general lands.

The component sustainability will depend on the institutional, financial and human resources, and capacity building including strengthening and empowerment of communities and district councils to actively participate in component implementation as a whole. Institutional sustainability will be enhanced by ensuring the component is operating within the government structure and procedures at all levels of implementation. Enhancement in Institutional sustainability is expected through increased governance, accountability and financial management.

5.2 Risks and Assumptions (External Factors and Risks)

Main risks that could affect the success of the programme include:

(i)   Political stability prevails
(ii)   Inadequate information sharing amongst stakeholders
(iii)   Inadequate participation by some of the stakeholders especially in Community based fire management could also affect the component performance.
(iv)   Political willingness to use data and information for decision-making
(v)   Supportive policies, laws and regulations continue to be in place
(vi)   Increased number of staff and improved working facilities that will increase staff commitment.

6 Financial management system

The programme will use Government of Tanzania Financial Management system including planning and budgeting arrangements, rules and procedures for procurement, disbursement, accounting and auditing for effective implementation of programme activities. This will enhance and strengthen national ownership, internal capacity, and sustainability of the Program. Specifically, the attached Joint Financing Agreement and its stipulations will be followed. For effective financial management, the Government (i.e. MNRT, PMO-RALG, and LGAs) will adhere to the following guidelines:

(i) Preparation of comprehensive work plans and budgets;

(ii) Accounting for all funds received and disbursed, where funds imply all monetary and non monetary values received and disbursed;

(iii) Tracking all fund transfers to ultimate beneficiaries including transfers to lower levels;

(iv) Tracking and accounting for all funds generated both as transfers or internally generated fund, whether government sources or any funding agency;

(v) Proper reporting and feed back mechanism; and

(vi) Conducting both internal and external audits.

6.1 Planning and Budgeting

Planning and budgeting will be guided by the following principles:

The planning and budgeting process for the programme will follow the national Government budget cycle; the planned annual activities of the Programme will be integrated into the Medium Term Expenditure Framework (MTEF) aligned with MKUKUTA targets and objectives as well as the Ministerial Strategic Plans and District Development Plans;

Annually, all implementing MDAs (MNRT, PMO-RALG and LGAs) will prepare work plan and budgets using the Government Medium Term Expenditure Framework (MTEF);

This will be followed by preparing detailed annual work plans and budgets to be translated into operational plans in line with the annual budget guidelines; the ministerial plans and budgets will follow SBAS system while districts and regional plans and budgets will follow PLANREP system;

All programme funds will properly be reflected in government budget books under the respective votes and sub-votes;

At the beginning Financial Year (FY), each MDA (MNRT, PMO-RALG and LGAs T) will prepare Action plans including procurement plan, training plans for the approved expenditures to be made on a quarterly basis during the FY and submit to the Treasury; and

Each Accounting Officer is not allowed to over spend more than their budgetary allocation and they have no mandate to alter any funds from one activity or item within their votes but with the approval of Ministry of Finance and Economic Affairs (MoFEA).

At the beginning of the programme, MDAs will prepare a three years work plan and its respective budgets. This will be followed by annual work plans and budgets to be translated into operational plans using MTEF. The planning and budgeting process will follow the GoT cycle; however, for effective planning and budgeting MDAs will prepare draft work plans and budgets before MoF gives the budget guidelines. Other budgeting and approval processes will follow NFBK SWAp budgeting processes.

6.1.1 Disbursement and Transfers

Support to NFBKP will be channelled through the Ministry of Finance and later to MNRT and respective regional secretariats and district councils as proposed under the JFA. Disbursements will be made twice a year based on the approved annual work plan and budget. For effective management of funds, MNRT, PMO-RALG and the district councils will be required to operate separate accounts.

6.2 Accounting and Record Keeping

Both MNRT and PMO-RALG will be required to maintain all the necessary records and accounts as per the International Accounting Standards (IAS). They will also be required to keep all documentary evidence related to the all transactions made under the support. For transparency, MNRT and PMO-RALG will be required to maintain computerized accounting systems in line with GoT Integrated Financial Management Systems (IFMS). At the end of each quarter, MDAs will prepare quarterly financial reports based on the funds budgeted, disbursed and spent.

6.3 Auditing

MNRT and PMO-RALG will be required to conduct both internal and external audits annually. The Internal Audit sections in MNRT and PMORALG will carry out internal audit of the Programme according to prepared and approved audit plan. Both Audits will follow the regular Government of Tanzania auditing procedures where internal audits will be conducted by the respective appointed Internal Auditor of the respective MDAs. External

audits will be conducted by the Controller and Auditor General (CAG) who is the overall auditor for the GoT. However, at any time and specifically at the end of the programme a special external audit will be carried out by requesting CAG who will select an independent external auditing firm. This should however be agreed by parties to this support. The costs of such special external audits will be covered by the MFA- Finland.

6.4 Systems Audit

On annual basis, MNRT, PMO-RALG will agree on the need to conduct a joint systems audit by the National Audit Office (NAO) and/or an independent body in order to review the Programme systems and recommend areas for improvement. In principle, the system audit will ensure credible financial management system for the whole Programme and the Ministries. The audit coverage will include reviewing:-

i)   The programme management structure at the levels relevant for the objectives of the systems audit.

ii)   Decision making procedures, in other words the management information systems for decision-making.

iii) Accounting systems.

iv)   Control procedures.

v)   Reporting procedures.

vi)   Management procedures.

vii) Team and implementation process.

7.0 REPORTING, MONITORING AND EVALUATION

7.1 Monitoring and Reporting

Monitoring will involve systematic and continuous, sometimes periodic, collection of data as specified in the related indicator of specific activity/action (result) planned in the support. This often includes development of monitoring performance indicators for assessing outputs and activities; systematic and continuous reporting, development of database and conducting joint annual reviews.

During the preparation of work plans and budget, MDAs will be required to develop monitoring indicators based on the overall NFBKP indicators. Periodically, MDAs will also be required to prepare activity and financial reports. However for effective monitoring and evaluation of the sector, the support should assist MDAs in the development of up-to-date database. Both narrative and tabular activity reports will be prepared. Reports will be

prepared at all levels and will follow the budgeting process. However, details of the reports will differ from the village to the national level.

Partners to this support will also conduct a joint annual review (JAR) of past performance and future financial needs. However, this review will be part of the NFBKP joint annual review to be conducted in October/November. The component will also include a budget for conducting annual joint reviews. The annual joint review will be considered as an internal monitoring process whereby members of the review team will be from GoT and DPG-Forest. The review team will be appointed by the NFBKP SWAp Steering Committee. On agreement by all parties to this support, a Consultant could be appointed to facilitate the annual review process.

Monitoring reports at village and ward levels will be done on monthly basis, while district and regional levels will be monitored quarterly and annually. Monitoring at FBD and National (MNRT) levels will be on quarterly, semi-annually and annually. The overall programme reports will be presented semi-annually to the development partners and donors who support the forestry and beekeeping sector. The District Forestry/Beekeeping Officers and Natural Resources Officers will be responsible for consolidating progress reports at the districts and regional levels respectively. An annual review which is part of the monitoring process will be done once in a year between October/November. Common reporting formats will be necessary in order to facilitate compilation and consolidation of reports. It will also facilitate comparability of different sub-programmes and /or level of implementation.

7.2 Evaluation

Component evaluation will assess systematically and objectively the relevance, efficiency, effectiveness and sustainability of the support. For effective evaluation there is also need to use the existing impact and performance indicators of NFBKP.

During implementation there will be both internal and external evaluations. The evaluation at the village, ward and district levels will be done at the end second year of the support. While evaluation at the programme level will be done at the end of support as part of the regular NFBK programme at end of three years, the external evaluation will comprise of team members from all stakeholders in the sector.

8.0 Duration

The proposed duration for the support is three years (2010 – 2015).

9.0. WORKPLAND BUDGET

9.1 Aligning Work Plan and Budget Process with National and MDA Strategies and Strategic Plans

According to the Paris Declaration (2005), there is a need for development aid to be integrated into government planning and budgeting mechanism and create more ownership of the programmes designed by the recipient countries. This is also inline with the Joint Assistance Strategy for Tanzania (JAST) which requires Development Partners to fully align their support with the MKUKUTA and other national as well as sector strategies, policies and programmes and local government plans and the following of the Government budgeting processes.

NFBKP Development Programmes and activities will therefore be aligned with MKUKUTA targets and objectives as well as the MDAs Strategic Plans objectives, District Development Plans. In this respect, planned annual activities of the Programme will be integrated into the Medium Term Expenditure Framework (MTEF) which translates the MKUKUTA into implementable activities and addresses the Strategic Plans and programme of the respective MDAs (MNRT, PMO-RALG strategic plans, and District Development Plans) as recognition of Decentralisation by Devolution (D by D) policy. The districts and regional will follow the PLANREP as required by PMO-RALG.

At the beginning of the programme, MDAs will prepare detailed annual work plans and budgets to be translated into Action plans based on the approved Medium Term Expenditure Framework (MTEF) format. In this case, Development Programmes will be treated as Targets under the MTEF Format. Where appropriate, the targets will be aligned under respective Strategic plan Objectives of the implementing agencies. The planning and budgeting process will follow the GoT cycle.

10.   LOG FRAME FOR COMMUNITY-BASED FIRE PROJECT

Componentsummary	Objectively Verifiable Indicators (OVI)	Mean of Verification	Assumptions
Goal: Mitigating effects of forest fires on climate change through participatory approaches	Incidences of forest fires reduced by 75% by the end of the project	Surveys of knowledge, attitude and practice (KAP)	Local communities willing to change behaviours and beliefs on forest fires
Purpose: To reduce incidences of forest fires through community based fire management for poverty alleviation	Reduced forest fires through community based fire management	Number of villages effectively involved in CBFiM Reported cases of forest fires	Forest fires are caused by inadequate involvement of local communities.
Output 1: Created general public awareness on effects of forest fires on environmental integrity and livelihoods	90% of targeted local communities reached and are aware of the negative effects of forest fires by end of project.	Surveys of knowledge, altitude and practice	Local communities willing to change behaviours and beliefs on forest fires
Activities: 1.1. Establish district forest fires committees (DFCs)	25 DFCs established in year 1 of project. Established DFCs meetings held once a year.	Minutes of meetings. Meeting attendance lists	Formed institutions at district will effectively accept roles and responsibilities
1.2 Componentinception	Componentlaunching will be held at the beginning of the componentin year 1.	Documentaries	
1.2. Hold joint meetings at district level with DFCs, NGOs and CBOs	Meetings carried at district levels with District forest fires committees, NGOs and CBOs yearly	125 Minutes of meetings	Formed institutions at district will effectively accept roles and responsibilities No changes in government

			policies
1.4. Radio programmes	15 minutes air time through TBC and Radio Free Africa covered every week during dry seasons of the year	25 radio coverages made yearly. Behavioural changes of local communities	Chosen radio media will be listened by most targeted audiences
1.5. TV programmes (Comedy and drama)	15 minutes TV airtime through ITV, TBC and Star TV once a week from June – December every year.	140 documentaries produced	Targeted communities will have access to TV
1.6. Video shows	500 video shows in rural communities by end of year two of componentlife	Interviews / KAP survey reports	Chosen video cassettes will be preferred and impact collect messages into communities
1.7 Print outs (brochures, booklets, posters and stickers)	Produce and distribute 5000 booklets, 5000 brochures and 5000 posters to targeted communities by end of year 2	Number of print outs produced Distribution lists Issuing vouchers Delivery notes

100 x 65000/= Tanga 400 | Targeted communities know to read Print outs bear correct information |
| **Output 2: Capacity building on wild fire management** | 80% of targeted local communities trained in fire management by end of project | Training reports | Targeted local communities will apply the impacted knowledge |
| **Activities:** 1.1 Train on forest fire prevention, preparedness and suppression | At least 1000 district councillors and decision makers in componentareas trained in fire management by year 3 of project

At least 10000 local communities in targeted regions trained in forest fire management by year | Training reports Training attendance lists KAP report | Acceptance of target communities that fire is a problem. Communities will be ready to share and learn new ideas |

	3 of project		
1.2 Train on fire early warning systems	25 DFOs trained in early warning systems by the end of the year 2 of project. At least 10,000 local communities in componentareas trained in fire early warning systems by end of year 2 of project	Fire training report Fire training attendance lists District forest fire reports	Reliable weather data Availability of most recent satellite imageries
1.3 Install Advanced Fire Information System (AFIS)	One centralized AFIS purchased and installed at FDB HQ by end of year 1 of project	AFIS in place and working	Resources (financial and personnel) to buy and operate will be available
1.4 Train on AFIS	At least 10 FBD staff trained and operating AFIS by end of year 1 of project	Training report Number of FBD staff knowledgeable of AFIS	Selected FBD staff will be interested and willing to learn AFIS
1.5 Train on forest fire report writing, record keeping (database) and human safety	At least 50 district staff trained in forest fire reporting and record keeping by end of year At least 250 members of village environmental committees (VECs) in componentsite will be capable in writing forest fire reports and record keeping by end of year 2.	Quality of produced forest fire reports Training attendance lists Forest fires database established	Agreed reporting format will be established earlier
1.6 Forest fires risk reduction	At least 85% of primary and secondary school	KAP survey reports	Beneficiaries willing to learn

Programme	students in componentareas knowing effects and impacts of forest fires by end of year 4.	Forest fire report Programme report	and sharing new ideas on forest fires
1.7 Forest fire damage assessments	75% of Forest fire damages assessed and recorded in componentsite by end of year 3. 80% Training on damage forest fire damage assessment by the end of year 3	Forest fire damage assessment guideline Assessment reports	Assessment criteria developed prior Availability of competent fire damage assessors
1.8 Forest fire communication and networking	Established radio communication centres connected to all villages in each district by year 2. All districts having and using forest fire communication facilities by end of year 2	Number of walk talk radios Number of mobile handsets Distribution lists Issuing vouchers Delivery notes	Funds available to buy and install communication tools and infrastructure
1.9 Form forest fire management institutions	25 district forest fire committees made of 10 will be established in year 1 At all village level, VECs will take over the role and responsibilities of fire management	Number of committees both at district and village levels	No changes in government policies Beneficiaries will be willing to take new roles and responsibilities
Output 3: Networking and linkages	Enhance institutional collaboration in forest fire management from year of component	Number of institutions, private sector, NGOs and CBOs participating in forest fire management	
Activities: 1.1 Form nation forest fires advisory committee	12 board members appointed by DFoB by year 1	Name of board members in place	Expertise in fire will be ready to take new roles and

			responsibilities
	Board meetings held once yearly from year one	Minutes of board meetings 4.	
1.2 Hold forest fire stakeholders workshop	Stakeholders' workshops to share information on forest fires be held annually through componentlife	5 workshop reports produced List of workshop participants	Stakeholders willing to share and learning new ideas
1.3 Launch national forest fires campaign	Launch national forest fire campaign prior to fire danger seasons in one of fire prone regions in year 1	Launching Presidential speech Documentaries	Availability of financial resources
1.4 Conduct regional forest fire campaigns	5 Annual forest fire campaigns be carried out at regional levels in 5 targeted regions from year 1	5 regional speeches on forest fires given by top government officials	
1.5 Conduct consultancies on forest fires	Conduct baseline survey in year 1 Conduct MTR in year 2.5 Conduct final componentevaluation in year 5 Conduct Tanzania Forest Fire management strategy.	Consultancy reports (Baseline, MTR and Final evaluation reports) Tanzania Forest Fire management strategy report	
1.6 Conduct exchange visits	25 exchange visits for sharing knowledge and experiences in fire management be conducted yearly from year two of project	Exchange visit reports Documentaries	Targeted groups would gain new ideas and be ready to change their behaviours

Output 4. Research and publications			
Activities: 1.1 Indigenous knowledge on forest fires management	Conduct researches on local communities' knowledge of fire norms and knowledge conducted twice in year one and year 4	Research reports/ publications	Local communities have their own norms and knowledge of fire management
1.2 Socio-economic assessments of forest fires	Carry out two researches on socio-economic effects of forest fires in year 1 and year 3	Research reports/ publications	Competent researchers will be willing and ready to conduct named researches
1.3 Forest fires on biodiversity	Carry out two researches on effects of forest fires on biodiversity in year 1 and year 5 of project	Research reports/ publications	
1.4 Forest fires on climate change (Carbon market)	Establish the link between high and low fire risks in Carbon marketing	Research reports/ publications	
1.5 Integrate indigenous knowledge and conventional knowledge on forest fire management	Conduct blended researches integrating local and conventional fire management	Research reports/ publications	
Output 5: Enforce forest fires legislations			
Activity 1.1 Formulate /Review of village forest fire by-laws	Initiate formulation of relevant forest fire by-laws and signed by authorities in all villages by end o f year 2. Facilitate the review of the existing by-laws on forest fires in villages by end of year 2	Signed Village Forest fire by-laws in place	
1.2 Forest fire patrols	Conduct Community based fire patrols using trained local fire	Forest fire patrol teams in place	

	patrol teams during dry seasons of the year in all villages in 5 pilot regions, by end of year 1	Fire reports	
1.3 Enhance enforcement of forest fire laws			

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TIME SCHEDULE OF FOREST FIRE ACTIVITIES FOR 2009/2010-2014/15

Output	Activity	Year1	2	3	4	5
1. Created general public awareness on effects of forest fires on environmental integrity and livelihoods	1.1. Establish district forest fires committees (DFCs)	cyan				
	1.2 Componentinception	cyan				
	1.3**.** Hold joint meetings at district level with DFCs, NGOs and CBOs	blue	blue	blue	blue	blue
	1.4 Radio programmes	blue	blue	blue	blue	blue
	1.5 TV programmes (Comdy and drama)	blue	blue	blue	blue	blue
	1.6 Video show		green			
	1.7 Print outs (brochures, booklets, posters and stickers)		green			
2. Capacity building on wildfire management			green			
	1.1 Train on forest fire prevention, preparedness and suppression		green			
	1.2 Training on fire early warning systems		green			
	1.3 Install Advanced Fire information System	blue				
	1.4 Train on AFIS	blue				
	1.5 Train on forest fire report writing, record keeping (database) and human safety	blue				
	1.6 Forest fires risk reduction programme	cyan				
	1.7 Forest fire damage assessments				orange	
3. Networking and linkages						
	1.1 Form nation forest fires advisory committee	cyan				
	1.2 Hold forest fire stakeholders workshop	blue	blue	blue	blue	blue
	1.3 Launch national forest fire campaign	cyan				
	1.4 Conduct regional forest fire campaigns	cyan				
	1.5 Conduct consultancies on forest fires	cyan				
	1.6 Conduct exchange visits		green			
4. Research and publications						
	1.1 Indigenous knowledge on forest fire management	cyan			pink	

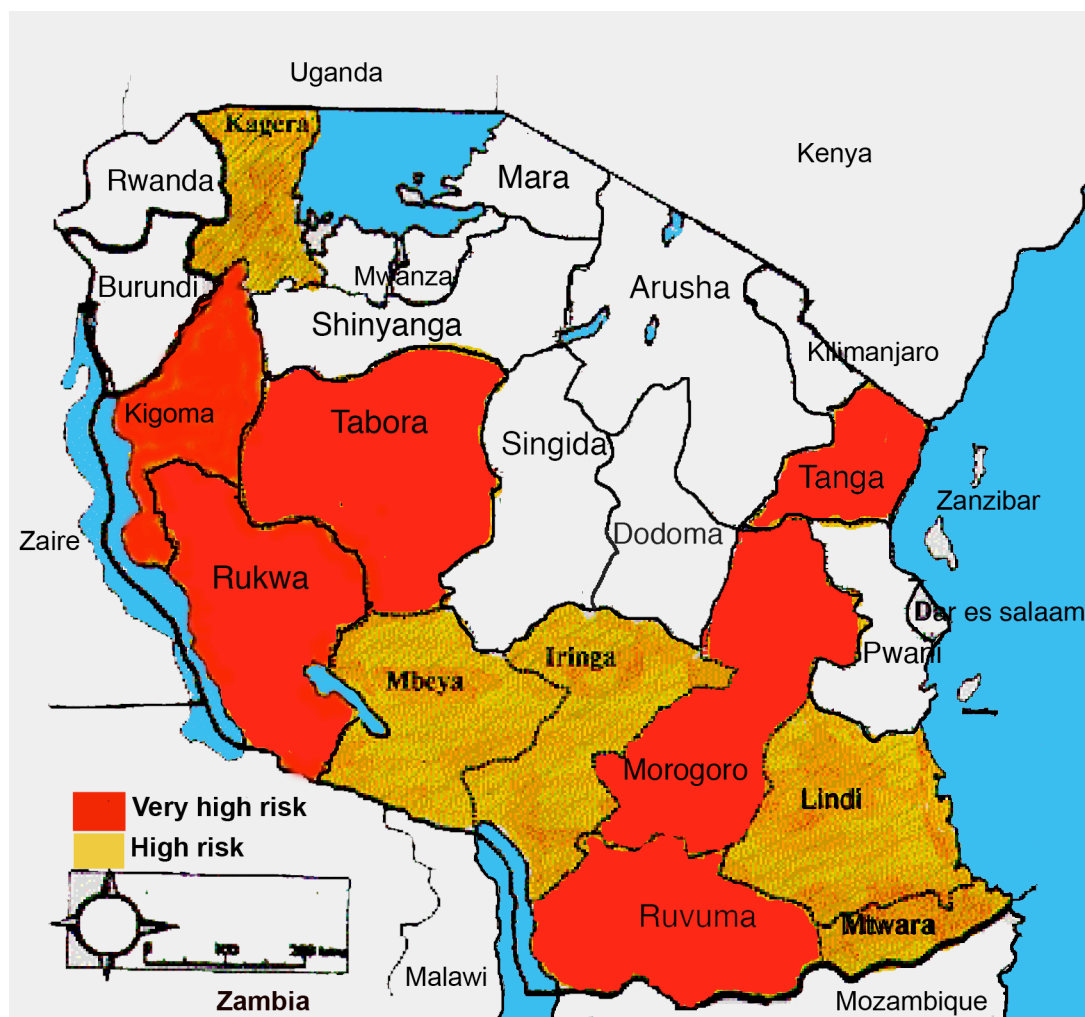|						
	1.2 Socio-economic assessments of forest fires					
	1.3 Forest fires on biodiversity					
	1.4 Forest fires on climate change (Carbon market)					
	1.5 Integrated indigenous knowledge and conventional knowledge on forest fire management					
5. Enforce forest fire legislations						
	1.1Formulate/Review of village forest fire by-laws					
	1.2 Forest fir patrols					
	1.3 Enhance enforcement of forest fire laws					

Figure 5 : The Map showing the areas that are critical to forest fires

Appendix 2

Figure 6: Programme Management Structure

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                    ┌──────────────────────────┐
                    │  PERMANENT SECRETARY     │
                    │ Ministry of Natural      │
                    │ Resources and Tourism    │
                    └──────────────────────────┘
                                │
                    ┌───────────┐        ┌──────────────────┐
                    │   DFoB    │········ │  DEVELOPMENT     │
                    └───────────┘        │  PARTERNERS      │
                                │        └──────────────────┘
                    ┌───────────┐
                    │   ADFD    │
                    └───────────┘
                                │
                    ┌───────────────┐
                    │  FOPU/FOFP    │
                    └───────────────┘
                                │
                    ┌───────────────┐
                    │     DED       │
                    └───────────────┘
                                │
                    ┌───────────────┐
                    │  DFO/ZOE/DCO  │
                    └───────────────┘
              ┌───────────────────────────┐
    ┌──────────────┐              ┌──────────────────────┐
    │  VILLAGERS   │              │ NGO/CBO/PRIVATE      │
    │              │              │ SECTOR               │
    └──────────────┘              └──────────────────────┘
           │                               │
    ┌──────────────┐              ┌──────────────────────┐
    │ FIRE FIGHTERS│              │  FIRE FIGHTERS       │
    └──────────────┘              └──────────────────────┘
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