

Establishing New Forest Management Systems for the Dry Evergreen Forests of Borana, South Ethiopia - An examination of SOS Sahel's Borana Collaborative Forest Management Project¹. Learning and Achieving.

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Abstract

The destruction of the Dry Evergreen forests in Borana, South Ethiopia can be traced back at least a hundred years. The loss of these rare *Juniper procera* and *Olea europaea subsp cusidata* forests, characterised by floral and faunal endemism, is now understood to be due to complex processes which are influenced by a combination of political, economic and social factors. In order to address the forest loss situation SOS Sahel International (UK) Ethiopia Programme's Borana Collaborative Forest Management Project (BCFMP) was asked to join Oromiya Region, Department of Agriculture, Forestry Department in the search for new forest management systems.

Presented in this paper is an examination of the Collaborative Forest Management systems introduced by the SOS Sahel Project. The Project experience is shared in terms of what has been learnt and what has been achieved over the last five years of implementation (1999 – 2004).

The paper presents; the challenges and potential of introducing new forest management in to Ethiopia; the understanding of causes of forest destruction, the new roles and responsibilities of communities and foresters in new forest management; the emergence of traditional community based institutions as forest management groups; and the sharing and building of skills for the formulation and implementation of forest management plans for these ecologically unique forests.

The paper concludes with examples of practical forest management operations being developed and undertaken by the community forest management groups themselves. The examples not only show the functionality of the new forest management system, but also the use of traditional knowledge of local environments and ecology to develop appropriate dry land forest management actions.

Key words: forest destruction; collaborative forest management; new forest management Institutions, new forestry tools and techniques.

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Background:

Understanding the causes of forest destruction in the Borana Lowlands: Causes and Actors

The destruction of the Dry Evergreen forests in Borana, South Ethiopia can be traced back, in some detail, for at least one hundred years. The loss of these rare *Juniper procera* and *Olea europaea* forests, characterised by floral and faunal endemism, is now understood to be due to complex processes influenced by a combination of political, economic and social factors (Irwin, B. and Mitiku, T. 2003).

Current concerns and prevailing assumptions within the natural resource degradation debate place local rural communities at the centre of forest resource destruction. Such assumed wisdom, that local communities bear the full responsibility for the historic and continuing disappearance of Ethiopia's forest resources, has been the basis of discussion and formulation of Ethiopia forest policy and strategies. It is also the foundation of the main forest management activities of the different Government and NGO forestry actors in the country.

To combat the problems of forest resource destruction, the current key strategy of Government and NGO has been set out along traditional forest management and development lines. Forest conservation awareness raising campaigns, the promotion of forest protection using guards to stop local people using (destroying) forests, the set up of centralised seedling production nurseries, and incentive based (food / cash for work) tree planting campaigns. The aim of these activities is the restrictive protection of existing forests from local communities, environmental education of supposedly ignorant local communities, and forest rehabilitation. These activities and campaigns, designed with positive intent, and supported by Government extension services, traditional approach oriented NGOs, and natural resource

academic institutions alike, have failed to control continuing and alarming rates of forest destruction³ in Ethiopia.

This reality begs the question, why have all these forestry actions had such low and limited impact ?. Seeking an answer to such a question, and in order to address the forest loss situation in the Borana lowlands in South Ethiopia, SOS Sahel International (UK) Ethiopia was asked to join Oromiya Region, Department of Agriculture, Forestry Department⁴ in the search for new forest management systems. As a result SOS Sahel established the Borana Collaborative Forest Management Project (BCFMP) towards the end of 1999.

The first work carried out by SOS Sahel's BCFMP commenced by investigating, analysing, and building the required understanding of the causes of forest destruction in Borana. The answers that emerged on investigation and analysis of data gathered revealed the multiple factors that influence forest resource destruction. The results of the work contradicted the prevailing accepted knowledge, that assumes and accepts, the singular key factor of community level forest destruction. The BCFMP carried out extensive participatory investigative research into local forest uses and forest users within the project target areas of Negelle Dawa and Yabello/Arero Regional Forest Priority Areas⁵. This participatory action research work used a number of PLA tools and techniques, including semi-structured interviews, continuous community contact and more specifically, designed participatory forest investigation tools such as participatory forest mapping, historical forest condition trend analysis (historical matrices), and species / seasonal use matrices (SOS Sahel 2001)⁶.

³ Numerous studies have been carried out that look at the impact of traditional incentive driven forestry programmes, see Irwin BC (1997)

⁴ Now Oromiya Rural Land and Natural Resources Administration Authority (ORLNRAA)

⁵ The Negelle Dawa Forest Priority Area is found approximately 5km south west of Nagelle town. The Yabello/ Arero Forest Priority Area is in fact two distinct forests, 90km apart. The Arero is approximately 10km north of Megetafesa town, the Yabello forest is surrounding Yabello town to the south and east.

⁶ SOS Sahel 2001. Forest Investigation summary reports. Internal Project Reports. BCFMP.

The results of this initial work, in sum, reveals forest destruction and natural resource degradation to be complex processes, which are influenced by a number of political, economic and social contexts. Of particular significance is the changes over time in political, economic and social contexts, which all combine to impact on forest resource destruction. These are the historical dimensions of forest destruction. The influence of political change on forest resources, the impact of economic livelihood factors, and the social conditions of local management. All these factors are linked to unsustainable local resource exploitation, and are the major influences on forest destruction. All these factors also show an interplay, in different ways, at different levels, and at different times. The consequence has been continuing forest loss, sometimes at accelerated rates, sometimes at reduced rates (Irwin, B. and Mitiku, T. 2003).

The actors in forest destruction, again related to time specific political, economic and social contexts, are equally diverse. From the Italian set up of sawmills at the turn of the last century, to timber use for the Garrison construction of Ethiopia Army, to urban centre growth at Negelle and Yabello towns, to deliberate forest burning during the Ethio-Somali war. The historical causes of forest destruction, and the main actors involved, were anything but the responsibility of the local communities.

In light of the results of early project field study, it became clear that a lack of understanding of the inter-related multiple factors affecting forest resource destruction has had the consequence of inappropriate forest policy and ineffective forestry sector action. It therefore follows that an improved understanding of the real processes and causes of forest resource destruction forms a far more appropriate basis for developing appropriate and workable forest policies and practical strategies, to address the problem.

When focusing on the more recent causes of forest destruction. The data shows that forest destruction accelerated and/or became common amongst forest adjacent communities during the political era of the Derg regime.

Surprisingly, this recent forest destruction coincides with the establishment of formalised forest management systems. During the Derg regime, the Negelle Dawa and Yabello- Arero Forest Priority Areas were established. This process saw the traditional ownership⁷ of the forests, by local community structures, transferred to government ownership.

The data gathered by the project clearly shows, that the change of management systems coincidences with the involvement of communities and the acceleration in forest resource destruction. This suggests a critical relationship between forest ownership and forest destruction. In reality it is only possible to state that the change in ownership and management of the forest resources, from community to government, is one of a number of variables affecting increased forest destruction. What the data has clearly demonstrated however, is that when the forests were under community ownership and management, forest condition and status was far better. Local systems of forest management were functional and practical.

It is realistic to recognise that the exploitation and destruction of forest resources carried out by Ethiopian Army groups, severe forest damage during the Ethio-Somali conflict, rapid urban growth resulting in high construction material demand, and the related expansion of agriculture (practiced by the in migrating urban population), are processes over which the forestry sector has little influence or control. In fact the only variable over which the forestry sector has control, is the institutional arrangements for forest management. That is, the ownership and management system under which the forest resources are held.

At the present time period (since 1990's), the trends of forest destruction have continued. Urban demand for forest products remains high, agricultural land continues to expand, resettlement of refugee returnees in and around forests and local towns has been carried out, pastoralist livelihood sustainability is in decline, and re-expansion of Army camps has occurred. All these factors,

⁷ Forests were managed under the *Gada* system and as part of a functional pastoral landuse system

have seen continuing clearance and use of the remaining, remnant forest resources in the project area. Continued government ownership of the forests and the failure of the protectionist management system has resulted in the forests being regarded as open access and, in practical terms, unmanaged resources.

Acute decline in local pastoralist livelihoods has now put sections of the local the community at the centre of forest destruction. Rising levels of poverty amongst pastoralists represents a livelihood crisis for pastoral lifestyles. This livelihood crisis is however, again closely linked to the same external factors that have caused forest destruction. The undermining of traditional resource management systems and ownership, agricultural expansion reducing grazing land availability⁸, inappropriate development policies, restricted mobility of pastoralists, and armed conflicts, have all combined and contributed to the deterioration of pastoral livelihoods. Increasing numbers of local people have been falling out of pastoralism as a livelihood practice. Significant numbers of these people have settled in and around the forest resources in order to secure the new livelihood opportunity offered by selling forest products to the urban markets. Forest adjacent communities are now heavily dependent on the sale of forest products, as well as high risk subsistence agriculture⁹. The refugee returnees that have also been settled in and around urban centres and forests, are in the same position. These groups too have seized new livelihood opportunities offered by selling forest products to the urban markets (see Boku, T. and Irwin, B. 2003).

⁸ Agriculture tends to be practiced in valley bottoms on wetter soils, these areas were previously dry season grazing and fodder reserves in the pastoral land use system

⁹ Agriculture is described as high risk due to highly erratic rainfall patterns which frequently result in crop failure.

Methods and Approaches:
**Introducing the Collaborative Forest Management process,
the importance of changing roles, and community based
institutions as forest management groups.**

On learning that the causes of forest destruction, in the Borana case, are related to a complicated web of political, economic and social factors. The unpacking of these factors enables the identification of entry points for intervention. Specifically, based on this new information and understanding, it was identified that, albeit a number of destruction factors such as conflict are beyond the control of development intervention, the introduction of different or a new system of forest management held potential. On closer analysis the identification of, and argument for, the re-establishment of traditional systems of forest management was identified.

Having understood that local communities are by no means the sole actors in forest destruction. And that before traditional management systems were displaced, they were important actors in sustainable forest management. The policies and strategies that have prevailed, based on the assumptions that local communities cannot and do not manage forest resources responsibly, are brought into question. Equally, the assumption that Government bodies can effectively manage local forest resources has also proved incorrect. These assumptions have all supported the formulation and operation of past protectionist forest policies and actions. However the assumptions are incorrect, and forest policies and actions have failed.

Such understanding of the causes and effects of forest destruction provides compelling evidence and argument for the growing lobby, both national and international, to put local communities back at the centre of forest management (Shepherd, G. 1992, Hobley, M. 1996, Ingles, A. 1999, et al, Dubois, O. and Lowore, J. 2000, Kerkhof, P. 2000.).

In Borana, over riding traditional management systems and structures with protectionist forestry approaches has had a number of significant negative impacts. Examples of these impacts include;

- ❖ Underestimating the importance of local resource management and ownership, and the negative impact of transferring these roles and responsibilities from local communities to Government forestry departments,
- ❖ The undermining and loss of indigenous management systems, knowledge and actions in sustainable forest management,
- ❖ The denying of local people access to local resources in terms of sustainable use, devaluing the value of forests to communities, and thereby increasing the pressure and propensity to change forest land to other landuses

These factors have directly contributed to forest destruction. And represent a potential entry point, by reversing them, to build improved systems of forest management. Such evidence leads to the conclusion of the need to recognise traditional and/or establish new¹⁰ community based forest management systems and structures. Collaborative Forest Management (CFM) was the approach methodology taken up by SOS Sahel BCFMP. In selecting such a strategy, it is important to emphasise that the proposed action is one of the few options that is within the mandate and scope of influence of the forestry sector.

Introducing CFM

So what is CFM ?. CFM is used as a broad term to describe systems in which communities (forest users) and government services, work together to define rights of forest use, ways of sharing management responsibilities, and of dividing forest benefits. Forms of collaborative natural forest management have been pioneered in India, Nepal, South-east Asia and Latin America, and there is a growing body of experience in Africa.

¹⁰ In the absence of Traditional NRM structures it may be necessary to promote and facilitate the creation of new structures

Such new systems of management can be built out of traditional systems of controlled resource use that existed in the past, and this is the potential of CFM in Borana. A key challenge of the process, is to put in place systems of resource management that are effective in today's context of increasing resource demand and landuse competition. It is important to recognise that, in practice, this dictates the need to modernise traditional resource management systems. Traditional resource management systems can be seen as the foundations on which to build new systems of forest management.

The promotion of any new system is a process of joint learning and adjustment that requires an experimental, learning by doing approach. It takes time to re-establish community based management systems and to redevelop community roles and capacity. To establish CFM systems the project started with a basic concept of shared management of common property resources. During the process of establishment the project developed the ideas within the concept as we learnt about the actual management opportunities and constraints, and the site specific requirements, of each of the forest priority areas.

CFM is a new approach, particularly in the Ethiopian experience. As with any new approach, many professionals view CFM with some suspicion and concern. This is due mainly to a lack of clear knowledge and understanding of the processes being promoted. There is an uncertainty about the new roles that forestry professionals and community members, will take up. It is important from the outset of CFM promotion to dispel the myth that the process simply entails the handing over of forest resource control to local communities, leaving them to manage the resources in any manner they see fit. CFM is a working management partnership between two key parties; local communities and government forest services.

The importance of new roles

In introducing a new CFM approach much discussion focuses on community based forest management institutions, often with less attention given to Government forestry departments. This bias of focus is problematic. Some

professional's resistance to community based systems is borne out of the belief and suspicion that communities will replace the role of foresters, and thus render them redundant. This notion is far from the truth. As the project has worked on the establishment of CFM, the new roles of both Community and Government Institutions have been demonstrated.

The subject of changing roles is given significant attention because of the importance of the changes that occur in the roles of key actors. Changing community roles, the forest management activities that the community undertake, and how the government forestry department supports them, will be key in determining the success of CFM. In Borana CFM is being set up as an on going partnership between the Woreda Natural Resources department and local community forest management groups. It is a working partnership where each party is inter-dependent on the other. The box below identifies the type of new roles and activities each actor needs to take up. The list of roles and actions is not exhaustive and should be developed as the community Forest Management Groups (FMGs) and the Forest Department develop and understand their roles through learning and practical experience.

New Roles for Forestry Professionals	New Roles for Community Managers
<ul style="list-style-type: none"> -investigators of local forest uses -identifiers of local management systems -moderators of different local interests and of conflict and competition -negotiators of management rules / regulations -monitors of PFM processes / forest management agreements. -advisors and silvicultural experts. -facilitators of community to community extension, exchange and learning - trainers in community management -analysts of forest management problems -generators of new technologies -providers of information to complement local knowledge -documenters/analysts of methods of PFM - disseminators of PFM results. 	<ul style="list-style-type: none"> -forest resource managers and legitimate resource users -forestry operations actors -resolvers of conflict and competition -implementors of forest management plans -protectors and controllers of forest resources -evaluators of new ideas and technologies. -silvicultural experimenters. -communicators of own knowledge and findings to others. -analysers of own situation -selectors of tree species for nursery production and planting -assessors of forest resources - marketers of forest products - monitors of forest condition

after Van Veldhuizen *et al.* 1997, & Van Gelder, B and O'Keefe, P. 1995.

In order to successfully manage CFM, all these new roles will be part of the new and developed skills of community forest managers and professional foresters. This implies considerable investment in skills development. The community will be reliant on the Forest Department for technical advisory services, legal support and overall facilitation of set up and establishment. The Forest Department is relying on the community to carry out forest management activities, such as tree planting and fire protection. If either party is unable to fulfil its new role, the system is vulnerable to failure.

An indepth knowledge of key new development subject matter is essential; participatory development processes; community planning and organisation; negotiation and mediation skills; institutional support; are all new skills required by forestry professionals and development workers. In addition new forestry technical capacity is also essential; for example in subjects such as; Participatory Forest Resource Assessment; Participatory Forest Management Planning; Participatory Monitoring and Evaluation; Conflict Management.

Community based institutions as Forest Management Groups

The decision of whether traditional or new institutions are the most appropriate for the promotion of community based resource management is a very important issue to resolve as early as possible. As a general rule, if a traditional institution exists that has previously fulfilled an natural resource management role, then there are distinct advantages to revitalising these roles. This is the case in Borana. The Oromo *Gada*¹¹ system is still functional in Borana and therefore became the obvious choice for re-developing community level forest management systems.

Community based institutions have their strengths and weaknesses, and careful institutional development work is a prerequisite to success. Many questions need to be asked, and answered. At the early stages of promotion of CFM there is a need to work with communities concerning what shape the

¹¹ The Oromo *Gada* is a traditional governance system, a generational class that assumes ritual, political and religious responsibilities for an eight year term of office (see Legesse, A. 2000).

forest management groups should take. The community should be the key decision makers in this process.

In Borana the following questions were explored with the community in order to understand the potentials and constraints of community management;

- ❖ the relevance and functionality of existing indigenous / traditional institutions ?,
- ❖ what existing institutions have responsibility for resource management ?,
- ❖ their relation to existing Government structures ?,
- ❖ How representative - particularly in terms of gender and ethnicity ?,
- ❖ their ability to implement rules, regulations and controls ?,
- ❖ would an institution set up for forest management be the same as existing institutions, partially different, or completely different ?.

(Boku, T and Irwin, B. 2003)

This information fed into a process of building a strong, representative and effective community institution.

Results:

Borana's new forest management institutions, forest management tools and techniques

As stated above, in the case of Borana, the project began negotiating with the traditional *Gada* systems in order to understand and agree how the *Gada* could be revitalised to take back resource management roles. How will the different levels of the *Gada* institution relate to, and interact with, Zonal and Woreda Administration offices, Forestry Offices, and PA committee structures ?. Who will be involved in community based forest management groups, and how can women, youths and the poorest be involved ?. What area of the forest would different groups manage ?. How would the overall forest management institution ensure sustainable management of the forest ?. How would the forest management groups manage problems and conflict.

The resulting institutional development process has been community driven, highly dynamic, and based on negotiation and community decisions. The *Gada* and local communities have established an institutional set up for forest management beyond the project's initial vision, in terms of its dynamics and its coverage. Continuous interaction and discussion has encouraged the Borana *Gada*, other Oromo clan elders, and the wider community (all local Oromo clans), to discuss and articulate their problems and needs, with and through their own institutions, and then engage with wider development actors, from the regional to local Government structures, as well as other NGO stakeholders, operating in the area. Below is a description of the institutional set up, for forest management, of community and *Gada*. The project team has played a facilitative and supporting role in all these events, and has encouraged and assisted government Forest Department and Woreda and Zonal Administration office involvement, as far as possible.

The forest management system set up is rooted in the traditional cultural systems of NRM, with modern perspectives, with a view to linking customary resource management with modern day realities. The new management

system takes a conical shape, with a narrow top and wide base. This shape is indicative of role reversals, as the system moves from the conventional top heavy (top down) resource management approach, to being broadly based, based with the local community as a whole (bottom-up). The highest proportion of the forest management work and decisions take place at the base, the community level. The wide base of the structure represents the whole community involved in management of the resource. *Gada* and community have stated that it is fully desirable to make the whole community share the responsibility for forest management. This aims to involve all, from herds boys and girls, to women collecting firewood, to the more formal management committees. The whole society has a role to play in the new CFM work.

The communities in the forest impacting *Madda*¹² have been given the practical responsibility for management of the resource. Representatives are selected to form a *Madda* level management groups. This is done through community meetings and participatory field work. Selection of representatives is made using the community's own criteria, often related to recognised responsibility and capability of members within the community. These groups are titled *Jaarsa*¹³ *Madda ka Finna Baddaa*¹⁴. The groups are made up of selected traditional leaders / *Gada* councillors, men, women and youths, drawn from the respective *Madda*. The whole *Madda* is not necessarily involved. The community determine the number of *Arda*¹⁵ cluster representatives to be involved in the *Jaarsa Madda ka Finna Badda*, according to the closeness of the *Arda* cluster to the forest. Therefore forest proximity and the numbers of the representatives are directly correlated. The *Jaarsa Madda ka Finna Badda* are the ground level forest management group or unit.

¹² *Madda* is a traditional land unit, equivalent to the PA or Peasant Association

¹³ The term *Jaarsa* literally means a masculine elder. But there is a wider social meaning; meaning any person recognised for certain competence. So women and youth members in the *Jarsaa* groups all take up the role of competent elders.

¹⁴ *Jaarsa Madda ka Finna Badda* is the traditional name given to the *Madda* (PA) level forest management groups.

¹⁵ *Arda* is a sub-unit of the *Madda*

On the next level, and with the management objective of bringing together different *Jaarsa Madda ka Finna Badda* groups who are working in the same forest block, an inter-*Madda* forest management body, *Jaarsa Finnaa Ejjaa Baddaa*¹⁶ has been set up. These groups are forest block level forest management bodies (a forest block is made up of a number of *Madda* forest units). A key focus of these groups is on issues such as settling possible disputes over resource use that may occur between adjacent *Madda*.

The *Jaarsa Finnaa Ejjaa Baddaa* also participate within the District (Woreda) CFM Working Groups (*Jarsaa Aanaa Finna Badda*). These Working Groups have been established to form the management interface between Community – Government. They involve all relevant stakeholders, and are designed to support the community forest management activities on the ground. On the community side, members are drawn from the *Jaarsa Madda ka Finna Badda* groups, and *Gada* representatives. On the government side, District Administration, District Rural and Agricultural Development Co-ordination Office (RADCO), District Natural Resource and Rural Land Administration Authority (NRRLAA), District Courts and Police, Cooperatives Promotion Office, the Ethiopia Defence Forces (where applicable), District Agricultural Development Office (DoA), and the District Finance Office are all involved. The main function of the District CFM Working Group is to provide legal backup and to mediate and resolve forest management issues that cannot be dealt with at the ground level.

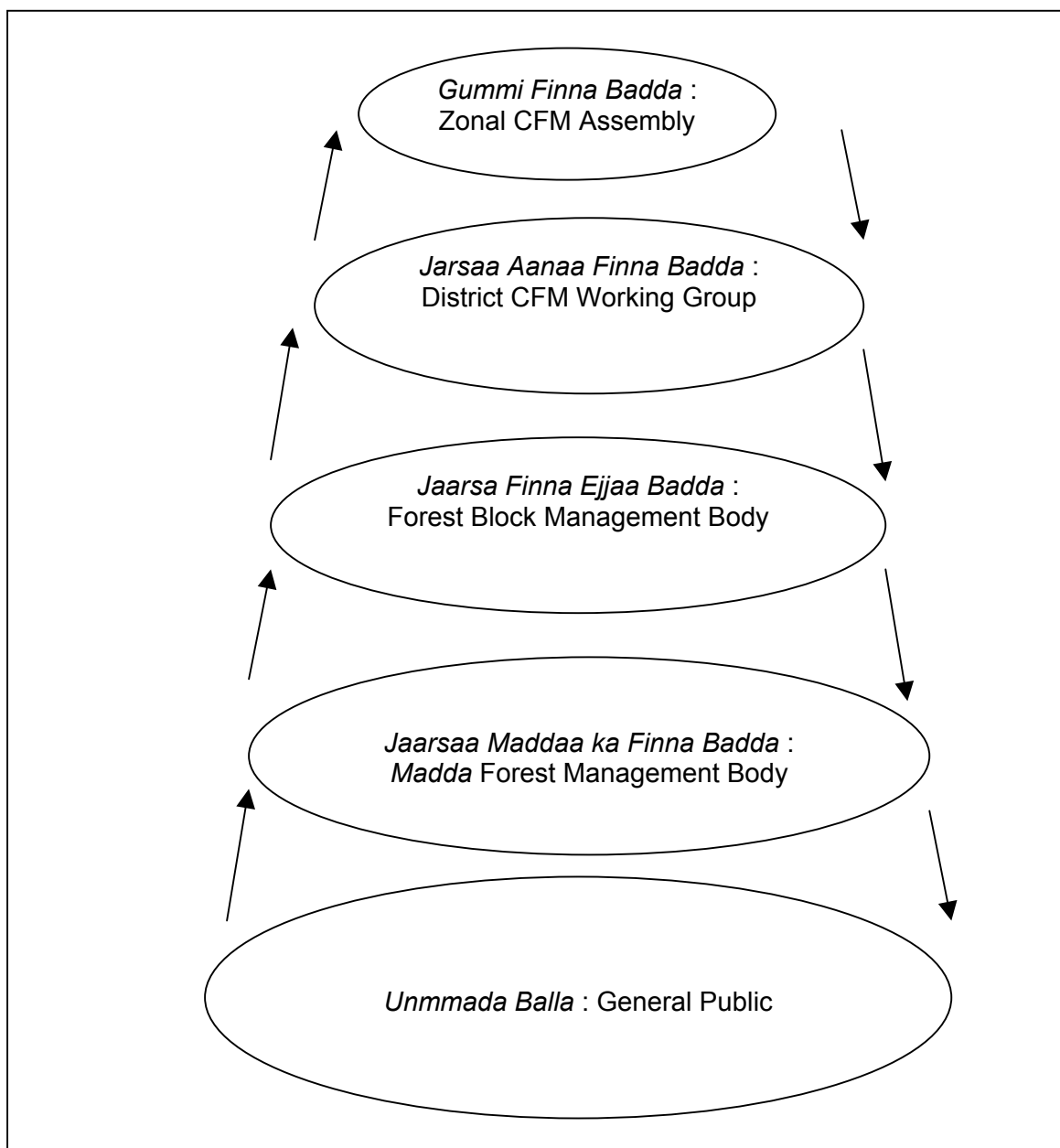
At the top of the new forest management institutional structure is the *Gumii Finna Baddaa*¹⁷, the Zonal Participatory Forest Management Assembly. This group meets every 6 months. The objective of having the *Gumii Finna Baddaa* is to provide wider support and understanding, engage in policy dialogue, and to review PFM implementation. The Assembly is attended by all levels of CFM

¹⁶ *Jaarsa Finnaa Ejjaa Baddaa* is the traditional name given to the inter *Madda* (PA) forest management group

¹⁷ *Gummii Finnaa Baddaa* is the traditional name given to a biannual Zonal Forest Assembly

management groups, the *Raaba Gadaa*¹⁸ and *Qaalluu*, Zonal Administration and relevant offices, as well as other invited guests, such as the Oromiya Pastoral Development Commission (OPDC) and Regional NRRLAA. This is a gathering of higher level actors, and is essentially a monitoring and evaluation body. A diagrammatic representation of the institutional structure is presented below.

Diagrammatic representation of the new forest management institutional structure in Borana



¹⁸ *Rabaa Gada* and *Qalluu* are the *Gada* Council and Borana Spiritual leaders respectively

The diagram shows the new forest management system, rooted at the ground level, with the general public. This mirrors the basis of Oromo, and specifically Borana, Guji and Gabra¹⁹, common resource management systems. In such systems all have rights, and all have responsibilities.

The system is then seen to work its way up through a series of geographical territorial units, from *Arda* to *Madda*, to *Ejjaa Badda*, to *Aanna*²⁰, reflecting the socio-political organisation of the people. The arrows at either side of the diagram show both roles of responsibility and accountability, and the channels of information flow.

Forest management tools²¹

The Participatory Forest Resource Assessment; the Forest Management Plan; the Forest Management Agreement²². These are both the tools and also the key documents that enable communities to take up the legal management of a specific forest resource area.

One of the key questions asked by government and forestry professionals, at the beginning of the process of establishing CFM, concerned the capacity of the community as proposed forest managers. A central part of this concern has been the discussion and debate on how to monitor forests, which are under community management. Forest monitoring is seen as a key requirement in order to track community management and ensure against further forest resource destruction. The question of how to monitor community forests posed one of the main methodological challenges to developing this new forest management system. After carrying out various resource inventory

¹⁹ Guji and Gabra are other Oromo clans living in the area

²⁰ *Aanna* is the Oromifa language of Woreda

²¹ See FARM Africa / SOS Sahel The key steps in establishing Participatory Forest Management. A Field Manual to Guide Practitioners in Ethiopia. FARM Africa / SOS Sahel Participatory Forest Management Programme (in draft).

²² Forest Management Plans and Agreements are still under formulation in the BCFMP, this section of the paper also draws upon the experience of other FARM Africa / SOS Sahel on going forest projects in south west and central west Ethiopia.

activities, the project developed a Participatory Forest Resource Assessment (PFRA) methodology (Jordan, G. 2003)²³.

The PFRA has four key stages;

- the initial planning of the PFRA, including forest block and unit mapping,
- the actual carrying out of the PFRA,
- the production of the PFRA report,
- the development of forest management prescriptions for a forest management plan.

Carrying out a PRFA is a core part of the CFM process. The PFRA involves mapping of forest block and unit boundaries, and then the physical assessment of the forest resources within the identified boundaries. It is highly important that the PFRA is carried out jointly by Government foresters and the community forest management group, working together as a team. In undertaking the assessment together government foresters and community gain a critical knowledge about the resource. This identification and merging of common knowledge, held by both parties effectively sets up the community /government forest management partnership.

In addition, it is obviously very difficult to manage a forest effectively unless you have detailed information about the resource base, information that allows appropriate management prescriptions to be identified, and a relevant management plan to be developed. The PFRA provides the community forest management group with information to develop and carry out the appropriate management of the forest resource. The PFRA also provides the Government foresters with detailed information of the forest resource at the time of the assessment. The information, compiled into a PFRA report, can be used to determine any changes in the resource over time by repeating the PFRA at defined intervals, i.e. at 2-5yr intervals. The PFRA report is part of the key documentation that enables CFM. The community should be supported to use

²³ Jordan, G.2004. Participatory Forest Monitoring System for Community Managed Forests. Participatory Forest Resource Assessment Methodology. Version 3. FARM Africa / SOS Sahel Participatory Forest Management Programme.

the PFRA exercise and report as a key forest management tool.

Once detailed information about the forest resource has been generated, by the PFRA, it can then be used to move into forest management planning. The result being the production of the communities' Forest Management Plan (FMP).

The project is experimenting with forest management planning. Within the wider FARM Africa / SOS Sahel Participatory Forest Management Programme the need for simplification and uniformity of FMP are being addressed. A FMP template has now been developed in order to provide an easy format to follow. There are seven basic sections to the Plan.

Forest Management Plan Template

1. INTRODUCTION
2. DESCRIPTION OF THE FOREST
3. OBJECTIVE OF THE FOREST MANAGEMENT PLAN
4. FOREST MANAGEMENT PRESCRIPTIONS
5. MONITORING AND EVALUATION
6. REVISION OF THE PLAN
7. APPROVAL OF THE PLAN.

The FMP has also been designed and set out to contain the key management information under 4 main management themes;

- *forest protection;*
- *forest utilisation;*
- *forest development;*
- *forest monitoring.*

Forest management activities are developed under each theme, using the PFRA information, and working through participatory planning and discussions with the community forest management groups. Plans are kept relatively simple and brief and need to be reviewed and built upon over time. Management activities have to be carried out to test their effectiveness and impact. Skills and knowledge need to be built through the practical operation

of the management plan. The most important issues is that the plan must be made by the community, involving their decisions of how to management the resource. Foresters must resist the urge of imposing their ideas and activities, the foresters role is principally to advise.

Once the FMP has been developed the final step before forest handover is the formulation of a Forest Management Agreement (FMA). The project has also developed this as a template in order to provide an easy format to follow. There are 8 basic sections to the Agreement.

Forest Management Agreement Template

- | |
|---|
| 1. INTRODUCTION |
| 2. ARTICLE 1. DEFINITIONS |
| 3. ARTICLE 2. OBJECTIVES OF THE AGREEMENT |
| 4. ARTICLE 3. LOCATION AND CONDITION OF THE FOREST |
| 5. ARTICLE 4. DESCRIPTION OF AGREEING PARTIES |
| 6. ARTICLE 5. BENEFITS OF THE AGREEING PARTIES |
| 7. ARTICLE 6. RIGHTS AND RESPONSIBILITIES OF THE AGREEING PARTIES |
| 8. ARTICLE 7. CONDITION, LEGALITY AND DURATION OF THE AGREEMENT |

The signed FMA becomes the legally binding contract between Government and Community Forest Management Group. The proposed signatories are the District Administration and NRRLAA offices, on behalf of the Government, and the *Gada* representatives within the *Jarssa Madda Finna Badda and Jarssa Edjja Finna Badda* forest management groups, representing the community.

The core part of the FMA is the clear specification of the rights and responsibilities of the two parties. Rights and responsibilities are linked to the various management actions, rules and regulations developed in the management plan. FMA formulation is done in a series of participatory agreement formulation meetings held between the community and the Woreda NRRLAA, facilitated by the project.

FMA is also kept as simple and clear as possible and appropriate. It is of great importance that all statements contained in the Agreement are without

ambiguity and are not open to different interpretations. The project uses legal professionals in order to review drafts of the FMA's, as they are being finalised. Again an important issue is that the Agreement must be understood by the signing parties, and particularly the by the community. This is likely to be the first, of this type of Agreement, that the community have entered in to. It may be particularly challenging if there are high levels of illiteracy in the community. They must clearly understand their rights and responsibilities, and the legal implications and actions should they, or others, abuse those rights and responsibilities.

Discussion:

Examples of practical forest management operations being developed and undertaken by the community forest management groups in Borana.

The examples of community forest management presented below not only show the functionality of the new forest management system, but also the use of traditional knowledge of local environments and ecology to develop appropriate dry land forest management actions. The activities are being undertaken by communities as the forest management systems are still being established, and formal management planning and agreement signature finalised.

The communities have show a deep awareness of the locally relevant ecological factors that effect natural regeneration, particularly of the dominant forest species, *Juniper procera*. Using their knowledge of actual and potential sites for *Juniper procera* regeneration, specific areas for regeneration management are being demarcated by community forest management groups. These areas are now managed as enclosed areas with reduced grazing. The communities are of the clear opinion that regeneration management is a far more effective strategy for forest rehabilitation than re-planting. As a consequence much of their management actions aims towards regeneration protection. This type of local ecological understanding and knowledge has led to discussions on improved tree planting / plantation development strategies. The new community forest managers have rejected the classical tree planting / plantation development strategies of traditional forestry approaches. Preferring to use intricate local ecological knowledge to determine potential regeneration sites.

A further interesting ecological relationship has been suggested by local community managers is the understanding and association of regeneration to recognised mother trees. The Community have stated that only trees not subject to fire damage produce viable seed. This they relate to the fact that

burnt forest areas do not exhibit *Juniper procera* regeneration. The community also talk about *Juniper procera* regeneration being linked or associated with other species, particularly *Olea europaea* and with shade. Further study is needed to fully understand the scientific basis of the actual ecological processes underway. Developing joint research, and or community based research, based on these initial community observations and understanding is recommended. Such a strategy both utilises the existing community knowledge and understanding of their environment, as well as potentially building on it, improving levels of local knowledge and community forest management capacity.

Improved fire management has been another very significant feature of improved forest management in Borana. As SOS Sahel arrived in Borana, fire damage was reported as one of the key causes and problems in the management of the Borana Forests. Forest loss to fire damage was noted as an annual problem. The project experienced this at first hand during the forest fires in the year 2000. During the 2000 fires the forest adjacent communities reaction to the outbreak of forest fire was one of complacency. A case of it is not our forest, so it is not our problem. Since the commencement of discussions about handing management responsibility to communities the forest fire problems of the area have dramatically reduced. The community management groups have recognised a number of forest uses that contributed to the regular outbreak of fire. The collection of wild honey using fire, the mobile camps of dry season forest grazers, and the clearance of farmland at the forest edge or within the forest using fire. Community forest management actions are being developed to address all these problems and have had an almost immediate impact. The reduction in regular fire outbreaks is already being recognised in terms of improved environmental condition and rehabilitation. In Negelle forest areas, previously subject to repeated burning, community management groups have reported the reappearance of seasonal springs for areas under new management. Such rapid and tangible environmental improvement has added impetus to the already enthusiastic forest management groups.

Improved forest management and improved wildlife residence in forest areas has been another tangible impact in the short period of the promotion of this new systems of forest management. The increase in wildlife can be described as a mixed blessing in terms of reported increase in large predator populations, Lions, Leopard and Cheetah, and a negative impact on local livestock. However the longer term view of the potential for managing Wildlife as a resource is also strongly held. The return of wildlife is also seen as an indicator of improving environmental condition. Reports of Elephants returning to the Arero forest has been seen as particularly positive by the local community.

Grazing management is a topic close to the top of the agenda in forest management. During the PFRA activities comparisons between open grazing areas and the traditional system of *kallo*²⁴ management were observed to be significant. The *kallo* reserves contained a noticeably greater number of seedlings and saplings, and higher species diversity. The identification of this existing traditional grazing management system has been very important in developing a dialogue between professionals and community over the contentious issue of grazing within forests. It has been proposed to manage all forest grazing under the *kallo* system.

The revitalisation of traditional rules and regulations regarding forest resources have also been very significant as the tradition authorities respond to the recognition of their traditional roles in natural resource management. Traditional authorities have culturally banned the indiscriminate cutting of *Juniper procera*, particularly pole stage trees. They have also banned the production of charcoal as a high damage activity. Linked to the revitalisation of traditional management roles is an emphasis on the Borana ritual use of forest areas, species and products. The traditional authorities have stressed the importance of ceremonial sites within forests and ritual uses of forest products to the overall health of the Borana culture and society. In their emphasis on the need for conservation of such sites, similarities and parallels

²⁴ *Kallo* is the traditional system to enclosing areas as dry season grazing reserves

can be drawn with the recent interests and attention on the conservation roles of forested church compounds in the Ethiopia highlands. Ceremonial sites are now being designated as special conservation areas within community forest management plans.

As well as the above practical examples of community forest management action, it is important to mention the ability of the community to identify different tree species, and their knowledge of physiological dynamics of different species, such as flowering / seeding cycles. This again is a knowledge source often over looked by forestry professionals. The recognition of such knowledge is the basis of recognition that rural communities are intrinsically linked to the local environments upon which they depend for their livelihood.

The examples represent what we know to date about the existing knowledge and skills of communities as forest Managers. One of the main areas where the project works with communities to further build their capacity as forest managers is in the development of monitoring and evaluation systems of planned forest management activities. Monitoring and evaluation of forest management plans is a critical part of the overall management of the forest resource by communities. Understanding of the need for different types of monitoring and evaluation, with an emphasis beyond the measurement of success or failure, is very important. Monitoring and evaluation must be seen as much more than a checking mechanism over community forest managers. The monitoring and evaluation we are talking about in CFM needs to be recognized as part of the management practice. Enabling the community to carry out monitoring, and to evaluate their forest management practices is a key area of capacity building to improve and develop community management skills and systems. Developing the skills of community forest management groups will utilise the knowledge and experience that the community already hold. The new monitoring and evaluation activities will build and develop those skills, in turn strengthening community forest management systems.

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