

**Wetland  
Action**



**WETLANDS  
INTERNATIONAL**



**Self Help  
Africa**



**Striking a Balance (SAB):  
Maintaining Seasonal Wetlands  
& their Livelihood Contributions in central Southern Africa**

**Kasungu District Workshop  
on  
Sustainable Wetland Management for  
Livelihoods Benefits and Environmental Functioning**

**Kasungu Inn  
9<sup>th</sup> December 2008**



**The SAB Project is implemented in Malawi and Zambia  
by  
Wetland Action, Self Help Africa, FAIR, MALEZA and NLWCCDP**

**Lilongwe, Malawi**

**December 2009**

The SAB project is a demonstration project of the Wetlands and Poverty Reduction Project of Wetlands International and it is carried out with financial support from Wetlands International under its Wetlands and Poverty Reduction Project financed by the Dutch Ministry of Foreign Affairs (DGIS).



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## Acronyms

CBO	Community based organisation
DADO	District Agricultural Coordinators
EIA	Environmental Impact Assessment
FAO	United Nation's Food and Agricultural Organization
MALEZA	Malawi Enterprise Zones Association
NGO	Non Governmental Organisation
OPV	Open pollinated varieties
SAB	Striking a Balance Project
SWC	Soil and water conservation
TA	Traditional Authority
TLC	Total Land Care
WFP-JEFA	World Food Programme
WVI	World Vision International

## **1. Opening**

### **a) Welcome Speech**

The meeting started at 09.30 with a welcome speech from Harold Msusa, Executive Director of Malawi Enterprise Zone Associations (MALEZA).

He noted the growing pressures on wetlands as a result of population growth and the increased valuing of wetlands for various livelihood benefits. These pressures are seen especially in the form of water extraction through the use of treadle pumps and stream diversions. He noted that this was driven in part by drought, but also by support for wetland utilisation which comes from government agencies and NGOs. At the same time he recognised that wetland have a diverse range of benefits which include environmental services and functions, as well as economic or livelihood ones.

In this situation, when maximising the value / benefits from wetlands is the goal, he stressed that the key was how to sustain wetland production and services. This is important, he stated, for a variety of reasons including the dependence on wetlands for food security, the provision of health supporting nutrients from wetland produce by HIV/Aids victims and the long term value of wetlands in helping address the challenges of climate change.

In conclusion he noted that there is government advice and policy on the exploitation of wetlands for livelihood benefits but as yet no policy on the sustainable use of these areas, which would strike a balance between exploitation and conservation. The need for such a policy was increasingly clear and immediate.

### **b) Opening Speech**

The workshop was formally opened by Mr James Bambe, the Kasungu Acting District Commissioner. In his speech the DC noted that there is now a serious partnership between the government departments and the NGOs in development issues and that the interaction between these two groups is very important. He thanked MALEZA for organising the meeting and for the way in which it brings together all the stakeholders involved in wetland management issues. He encouraged other organisations to emulate the MALEZA example and help develop more such multi-stakeholder meetings.

The DC pointed to the importance of food security which was the number one priority in the “2006-09 District Development Plan”, and hoped that by 2009 this would be lower down the list of priorities. However, he noted that with population growth of 3.6%, above the national average, giving an increase of 60,000 people in the district in the last 4 to 5 years there was great pressure to increase food production. This is already leading to conflicts with the large estates in the district and encroachment onto this land.

He noted that in this situation, the expansion of cultivation into wetlands is thus a clear opportunity to address the food security situation. This is particularly important, he said, because wetland soils are rich and do not need fertiliser. He reported that he had not heard of land conflicts in wetlands and he concluded that as yet these are still underused resources.

In concluding the DC pointed out the great potential of wetlands for production in the other 7 months of the year when upland farming is not taking place and labour is available for this activity. He stressed the importance of wetland agriculture in Kasungu District where drought is a recurrent problem. However, he stressed that catchment protection is needed for wetlands to function properly, and that this should be part of a strategy which sees all land resources used wisely in order to improve standards of living of all people in a sustainable manner.

Finally he declared the meeting open.

## **2. Presentation Highlights - Part I**

### **MALEZA, Simlemba Programme – Mr Patrick Thawe**

The first presentation was about the work undertaken within the Simlemba Rural Livelihoods Programme to address the issue of sustaining the use of wetlands. The presentation focused on the functional landscape approach which is being used. This stresses the need to understand how the upland areas or catchments, collect water which can be stored and released slowly to the wetlands provided there is good land use and water infiltration- rather than runoff and erosion. The series of land management methods for the uplands and the wetlands were outlined, as well as the institutional development to support this – Village Natural Resource Management Committees. (Full details are available in the Technical Guide prepared by MALEZA).

### **District Agricultural Development Officer - Mr H.M Yotamu,**

The focus of this presentation was on the fact that there are different stakeholders interested in wetlands and that they have different views about wetlands, depending on their interests. For instance, farmers have different views to fishermen, or crafts people or livestock farmers. Hence the conclusion was that there is a need to engage all wetland stakeholders in discussions about the utilisation of wetlands, and for a consensus to be sought through dialogue.

### **Simlemba Farmers**

The third presentation was from a group of six farmers who had been involved in the SAB programme in Simlemba district. They reported how they had benefitted from the programme, the advice from MALEZA and the better use they now made of wetlands. However, they noted that in some of the activities where they are trying to improve upland or dambo soil with organic matter, transporting the compost to the wetlands is tiresome and a wheelbarrow or similar is needed.

**Care, Programme Manager – Mr Aldwini Mtembezeka, ,**

The food security programme which Care has started in the district is in its early stages at present and focuses only on upland areas, where OPVs, ground nuts and pigeon peas are the main crops supported. However, in future wetlands will be explored to address how to use a more diverse resource base. Before this work is started, it was proposed that Care should bring their farmers to Simlemba so that they could learn from their fellow farmers on utilisation and management of wetlands.

### **3. Discussions – Part I**

#### Scaling-up of the work in the three Simlemba sites.

- It was reported that there are plans to extend the work to nearby villages, so that complete stream valleys and their multiple wetland systems are covered, thereby improving the impact of the catchment and wetland management measures.
- Farmer Exchanges are also planned both within the Simlemba area and with farmers on other MALEZA projects, for instance those in the Lilongwe river valley.

#### Sugar Cane and Eucalyptus and their impact on water availability in wetlands

Farmers confirmed that it is not easy to reduce the area of sugar cane in wetlands as this is a crop which can produce year round income. However, they are aware that it can dry out wetlands and realise that they cannot expand both irrigated vegetables and sugar cane. The relative profitability of sugar cane versus vegetables needs exploring so that the optimal use of land is achieved.

Eucalyptus is needed for building, but it can be grown higher up in the catchment where it will have less impact on the wetland. The only impact will be in terms of slower growth of the tree.

The need for facts based on the Malawian situation on the impact of these two plants was noted, although the general understanding of the water loss problems with these crops from international data and farmers experience in Malawi was reported.

It was also noted that river bank areas needed stabilisation and that sugar cane could perhaps do this as well as natural grasses and generate more income.

#### Organic Manure Use

The importance of organic manure use in uplands as well as wetlands was stressed because it reduces the pollution in water courses. This is a further benefit besides the cost issue compared to inorganic fertiliser and the role of organic fertiliser in helping improve soil structure, resistance to erosion and water infiltration.

However, the need for some inorganic fertiliser, in order to keep a balance in the nutrient status of soils under intensive use was also noted.

#### River Bank Cultivation

The need for clear, practical and realistic guidance about the distance away from a river bank that cultivation should occur was raised. Some guidance in the new water policy suggested no cultivation below the flood level, even in the dry season, but this is unrealistic. Sensitization of farmers about the dangers of river bank cultivation and of the solutions to these challenges – through tree planting at stream edges were reported as on-going activities in some cases.

#### **4. Presentation Highlights - Part II**

##### **World Vision International - Mr Rodrick Nkhoma**

It was reported that WVI has been involved in wetland use in Malawi for 15 years. This work includes irrigated cultivation of maize and potatoes as well as the development of fishponds. Some 400 farmers are involved in these activities. It was noted that the fishponds are often just a little upslope of the wetland edge to avoid flooding.

##### **Total Land Care, Agriculture Coordinator - Mr Arthur Mhango,**

Mr Mhango reported that TLC works in 13 districts in Malawi and in 4 TAs in Kasungu District. It works with communities at the village level and uses the existing village committees. It also focuses on individual farmers, or groups of farmers, who use the treadle pumps and package of inputs it provides on credit.

TLCs work is not solely on irrigation with treadle pumps, but also addresses soil and water conservation, soil fertility improvement, afforestation, agroforestry, woodlots, tree regeneration, crop diversification, marketing and water harvesting.

The package of inputs for a farmer, including the treadle pump is MK5,000, and includes seeds for maize, bean and vegetables, as well as a tree nursery package. In addition, where water is scarce drip irrigation methods, with a tank of 1000 litres is being trialled.

In some cases treadle pumps draw water from wells, but these are not dug in stream or river beds.

Stream diversion is being used in a few places, e.g. North Doha, although the environmental impacts of this are also being assessed. In west Kasungu, where there are no streams a new technical package is being explored.

While TLC started with irrigation, it began to realise, some 3-4 years ago, that land degradation was a major underlying threat. This led to the introduction of the tree nursery package, and also more recently to the development of improved mud stoves to try to reduce the demand for wood. However, it was noted that charcoaling is a growing problem, which provides a livelihood for the poor but worsens land degradation and erosion.

Planting tree seedlings along riverbanks is being explored to try to stabilise the banks where cultivation is present. However, there are a number of problems caused by flood damage to these seedlings. Certainly this needs addressing as cultivation close to river banks is a growing problem.

**COPPI - Mr Raymond Mwalughali**

It was explained that COPPI is an Italian NGO which partners with MALEZA in some projects. In Kasungu district they have some 51,000 beneficiaries who are involved in projects such as WFP-JEFA, micro-projects, and small- scale irrigation and crop diversification, food for assets, and food distributions for at risk groups.

In the creation of assets work a number of measures relate to wetlands including water empoundment, embankments, well digging and gully reclamation. These, and other assets such as tree nurseries and vetiver nurseries, all aim to support the sustainable food production and income generation. However, there has been some problems faced in the maintenance of the assets and in ensuring clear ownership and care for the assets.

Other challenges faced are the contrast between a short-term and fast set up relief programme approach and the need for a longer term approach for afforestation. There is a mismatch between short term construction of dams before afforestation has taken effect and can stop siltation.

Other problems include tobacco nurseries coming down to near the dams, chemical pollution from the tobacco seed beds, and the poor road network impacting on the relief activities.

## **5. Discussions – Part II**

### Soil and Water Conservation (SWC)

There was recognition of the need for SWC within catchments in order to ensure that fishponds in wetlands are not filled with eroded sediment.

### Catchment Management

The need for good follow up with afforestation activities was noted with fire and goats major challenges.

It was questioned whether afforestation alone is enough, and questions raised about the need for better land management and husbandry as per the MALEZA approach.

### Mudstoves

There can be problems with these as they are reported to be slower at cooking and cannot accommodate big poles and beer brewing. However, 1500 were produced last year in the district although the uptake was slow and some form of policy support is needed. This has the potential to reduce catchment degradation and so impact positively on the environmental condition of wetlands.

## 6. Presentation Highlights - Part III

### **District Forest Officer – Mrs E.G. Gondwe**

The role of forests in livelihoods and in protecting catchments for water storage and infiltration was reported. The maintenance of the forests is being assisted by the protection of National Forests, establishment of Village Forest Areas, and afforestation measures. In addition, it was noted that certain species, such as *Sigyzium*, are associated with water and are seen to hold water. Forests were noted as being important for flood control, erosion control, sediment and nutrient retention, and providing habitats for wildlife.

Where forests are not maintained there is siltation, which threatens wetlands, while poor farming is a further threat, especially when it occurs into the centre wetlands, along side streams.

### **FAO, District Manager - Mr B. Chidaya**

The experience of FAO with supporting food security and nutrition in Kasungu District since April 2008 was presented. It was noted that the focus is on policy implementation and programme outreach in three EPAs. This work includes irrigation at 27 sites with 33.5 has of maize the main crop to date with 100 tons of grain expected. Some 14,500 farmers are to be involved with a wide range of activities planned including CBO development, mainstreaming gender and HIV/Aids, conservation and sustainable use of natural resources, diversifying incomes. The work includes a specific element on the off-season cropping in *dambos* / wetlands, with assistance in the form of seeds, inputs and treadle pumps. A total area of 201.5 ha has been identified as suitable for wetland cultivation, but there could be more as this initial assessment is based on farmers' estimates. Other planned activities include aquaculture, for which 16 groups have been formed – but no ponds dug, and afforestation and fruit tree planting, for which 14 groups have been formed.

Concern was expressed by the speaker about the level of dependence by the farmers on handout and the lack of honesty in their relations with FAO. It almost seems as if the people do not want to get out of the poverty and handout dependency trap they are in.

A review of the situation for wetland use has identified the following:

Strengths: Land is available and it is rich, farmers are willing to develop these areas, chiefs are prepared to give this land for group use, markets exist for wetland crops, water is available and free (although the water rights legislation should be respected.)

Weaknesses: Flooding lasts too long (but beware of drainage and its impacts), farmers are not clear on the crops to grow where it stays wet, farmers will not spend their own resources on crop in these areas – unless this is tobacco nurseries, scaling up is difficult as there is limited experience, business skills also are needed for selling these wetland crops – such as vegetables, and farmer always want chemical fertiliser when organic is better in wetlands.

Opportunities: FAO project will assist with inputs, and skill training, guidance about market opportunities, and diversification of crops which is possible.

Threats: Declining water resources in some places, cultivation along river banks, need for conservation and sustainable use of wetlands not appreciated, continued deforestation in the catchment, lack of understanding of the impacts of this and of some farming practices, impulse production and use of land without a long term sustainable use plan.

### **UNDP Project with District Environment Office**

It was reported that this initiative has 17 clubs engaged in winter cropping and seed banks. Agricultural extension advice does exist with respect to river bank cultivation with a 10-15m margin of unused land between the bank and cultivation. However, there is need for technical advice on how to use wetlands and on what high value crops are suitable for these areas.

## **7. Discussions – Part III**

### Community Involvement

It was noted that the local communities and their involvement should be central to the sustainable use and management of wetlands and their catchments. In particular, the local communities should be involved in developing byelaws about the use of these areas and the issues of stream bank protection. The Forest Act can guide this to some degree as it seeks to ensure forest management by communities. Rivers are more difficult for community management as they involve different communities on different banks as well as upstream and downstream linkages. Hence a group of villages needs to work together on this.

The attitude towards villagers should not be one that sees them as the problem. Rather agencies should work with the communities to develop their capacity to formulate and enforce appropriate byelaws. There is even experience from Zimbabwe where District Chiefs and Sub Catchment Councils manage catchments and wetlands, fining farmers in the case of bad land management.

A key gap is how to get policies down to the community level and turned into guidance which can be implemented. The role of the Village Natural Resource Management Committees is important here.

### Water Rights and EIA Legislation

FAO is working with the Dept of Irrigation and wants to apply the water rights legislation in all wetland use schemes as they involve some water extraction.

Further the EIA legislation should be applied to any scheme which involves more than 10 ha.

FAO will not provide support for farmers or farmer groups which are not operating with water rights approved and are using land which is over 15m from a riverbank.

### Sustainability

The problem is how to root improved behaviour in the communities so that they do not rush to the river banks and clear all the trees once the project is over. This needs local ownership of the projects and local democracy so that communities can decide, with technical assistance, the appropriate byelaws.

In this respect, the point from the MALEZA's work about increasing the value obtained from wetlands to such an extent that people want to sustain it is important. It is also vital that there is the development of a sound understanding in communities (and NGOs) about how wetlands work.

## **8. Concluding Discussions and Recommendations**

1. Clear policies are needed and they must be implemented concerning cultivation in *dambos* and wetlands.
2. The policies of different sectors which apply to or affect these areas need to be harmonised.
3. There is a need for increase sharing of wetland management experience amongst the NGO community and between NGOs and government departments. A six monthly meeting is proposed and this should be coordinated by the DADO.
4. There is a need for greater empowerment of local leaders and communities in the management of wetlands and their catchments.
5. There is a need to support the development of local CBOs such as Village Natural Resource Management Committees to improve the management of natural resources and farmland, and this includes wetlands and catchments.
6. There is a need for greater supervision and technical support of wetland use by the District Agricultural Extension Coordinating Committee.
7. A Committee should be formed to take this work forward first by reporting this workshop to the District Development Committee. That Committee should include:

MALEZA,  
Total Land Care  
Irrigation Dept from Agriculture  
Forestry Department  
FAO  
District Community Development Officer

## **9. Closure**

The meeting was closed by Mr Harold Msusa, the Executive Director of MALEZA, who thanked people for their active participation and time. He also thanked FAIR,

Wetland Action, the SAB project and the DADO's office for their support in running the meeting. The meeting closed at 16.15.

## Annex 1 – List of Participants

<b>NAME</b>	<b>POST</b>	<b>Organisation/Dep</b>
1. Mr Harold Msusa	Executive Director	MALEZA
2. Mr James Banda	District Commissioner	Kasungu Assembly
3. Mr H.M. Yotamu	DADO	Kasungu RDP
4. Mrs Dalitso Kafuwa Project	Co-ordinator	FAIR Malawi
5. Mr Sekani Kateta	Project Manager	MALEZA
6. Mr Festone Chimphamba	BDO	MALEZA
7. Mr Rodrick Nkhoma	Project Officer	World Vision Malawi
8. Mr Arthur Mhango	Agri Coordinator	Total Land Care
9. Mrs Gondwe	District Forest Officer	Forestry Department
10. Mr Yona Chawanje	Agriculture Coordinator	MALEZA
11 Mr Abel Nyirongo	Farmer	MALEZA/Katema vge
12. Mrs Agness Banda	Farmer	MALEZA/Malawira vge
13. Mr Bosco Mtika	Farmer/Village Head	MALEZA/Katema vge
14. Mr Matundu	Farmer/Village Head	MALEZA/Malawira vge
15. Mr Aldwin i Mtembezeka	Programme Manager	CARE Malawi
16. Emelda Virgina	Irrigation Expert	FAO
17. Mr B. Chidaya	District Manager	FAO
18. Mr W. H. Moyo	EMO	Kasungu RDP
19. Mr Patrick Thawe	NRC	MALEZA
20. Prof Adrian Wood	Project Manager	Wetland Action
21. Mr L. Mwalughali	Agr Coordinator	COOPI/MALEZA