

Participatory natural resource management planning in seven villages in Rufiji and Kilwa Districts

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Participatory Natural Resources Management Planning Project



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Front cover photographs: Marendego village planning team. Photo by Simon Mosha.

Executive Summary

This report documents seven participatory natural resources management plans developed by villages in Kilwa and Rufiji Districts. These plans were developed with assistance from the Tanzania Forest Conservation Group as part of the Songas-financed 'Participatory Natural Resources Planning Project'.

The Tanzania Forest Conservation Group is a national non-governmental organization whose mission is to conserve and restore the biodiversity of globally important forests in Tanzania for the benefit of the present and future generations. We achieve this through capacity building, advocacy, research, community development and protected area management, in ways that are sustainable and foster participation, co-operation and partnership.

Songas Limited is an energy company in Tanzania and through its work on a natural gas pipeline from Songo Songo Island to Dar es Salaam, Tanzania has committed to help develop communities living along this pipeline.

On behalf of Songas, TFCG is assisting seven villages along the Songas pipeline to manage their natural resources more sustainably. These villages are: Somanga Simu and Marendego in Kilwa district, and Kiwanga, Chumbi A and C, Mohoro, Muyuyu and Nyamwimbe, all in Rufiji district. All seven villages are adjacent to East African Coastal Forests containing endemic and threatened species. The East African Coastal Forest mosaic is a globally important biodiversity hotspot containing over 554 endemic plant species and 37 endemic vertebrates. The forests are also a valuable resource for local people as a source of building materials, fuel wood, timber and medicinal plants.

During June 2007, the Tanzania Forest Conservation Group worked with these seven villages to develop participatory natural resources management plans. The aim of these plans is to guide the villages and other stakeholders in addressing the natural resource issues considered as priorities by the communities. In particular, the plans will be used to guide Songas's investment in natural resource and community development activities in the area.

The plans were developed using an approach known as 'vision-based' planning whereby participants identify a vision of how they would like their natural resources to be managed over a specified time period, and then list the steps necessary to achieve that vision. The vision and the steps necessary to achieve it form the basis of the village plan.

In all villages, participants noted that if current levels of natural resource exploitation continue, then the outcome in 10 years will be a degraded landscape unable to support their livelihoods. Their visions for the future included a combination of improved agriculture, participatory forest management and improved awareness and education.

The steps necessary to achieve these visions can be grouped in six categories: improved village land use; participatory forest management; improved village governance; environmental education; improved agriculture and greater access to alternative economic opportunities. Some of these steps have been incorporated in a proposed 10 year plan for the Songas-financed project. It is anticipated that other stakeholders and initiatives will also support the communities to achieve their visions including the District Council, MACEMP and IUCN. As such we encourage these plans to be circulated widely.

The Tanzania Forest Conservation Group

The Tanzania Forest Conservation Group (TFCG) is a Tanzanian non-governmental organization established in 1985 whose mission is: *'to conserve and restore the biodiversity of globally important forests in Tanzania for the benefit of the present and future generations. We achieve this through capacity building, advocacy, research, community development and protected area management, in ways that are sustainable and foster participation, co-operation and partnership.'*

TFCG's vision

We envision a world in which Tanzanians and the rest of humanity are enjoying the diverse benefits of well-conserved, high biodiversity forests.

The Tanzania Forest Conservation Group currently operates five programmes focusing on: advocacy, environmental education, community development, research and participatory forest management. TFCG also supports a community forest conservation network known as MJUMITA. For more information on TFCG, please visit www.tfcg.org

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Songas Limited

Songas Limited is an energy company in Tanzania and through its work on a natural gas pipeline from Songo Songo Island to Dar es Salaam, Tanzania has committed to help develop communities living along this pipeline.

Participatory Natural Resources Planning and Implementation Project in Kilwa and Rufiji Districts

This project was initially a one year project implemented by the Tanzania Forest Conservation Group with the goal of improving natural resources management by communities living adjacent to the Songas pipeline. During the first year, the project identified priority villages for inclusion in the project, provided training on participatory forest management, supported a series of environmental education activities, conducted socio-economic and biological assessments of the project villages and developed participatory natural resource management plans. During the next phase of the project, TFCG will be supporting the communities to implement their natural resources plans. The project is guided by a Steering Committee which includes representatives from the District Councils of Kilwa and Rufiji, other non-governmental organizations, TFCG and Songas.

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1) Introduction

The Songas pipeline passes through or close to a number of biologically important coastal forests. Communities living in the vicinity of these forests are generally poor and dependent on agriculture, timber harvesting and charcoal production for their livelihoods. The high rates of forest exploitation currently being practiced in this area are ecologically unsustainable and are causing widespread deforestation. This forest loss threatens both the long term economic prospects of the communities and the biodiversity of the region.

A project has been initiated - 'Natural resource management planning and implementation for selected villages in the vicinity of the Songas Pipeline, led by TFCG (Tanzania Forest Conservation Group) with funding from Songas through the Songas Community Development Programme – to assist these communities to manage their natural resources more sustainably. The project focuses on seven villages that were selected on the basis of their proximity to the Songas pipeline; their proximity to high value forests and their willingness to participate (Moshia and Doggart 2006). The seven villages that are included in the project are: Somanga Simu and Marendego in Kilwa district, and Kiwanga, Chumbi A and C, Mohoro, Muyuyu and Nyamwimbe, all in Rufiji district. With Songas support, TFCG have conducted a one-year planning process to ensure that future support from Songas has strong 'buy-in' from the communities and other local stakeholders. As part of the planning process, villages have also received training in certain aspects of natural resources management including an introduction to participatory forest management and awareness raising activities on the importance of sustainably managing forest resources.

Between January and May 2007, the Tanzania Forest Conservation Group conducted socio-economic and biodiversity assessments of the seven villages (Forrester-Kibuga et al. 2007 and Moshia et al. 2007). These assessments highlighted the need for natural resources management planning in the area. The socio-economic assessment found that most households depend on traditional agriculture, timber harvesting and charcoal production; institutions charged with the management of the communities natural resources were weak and there was little awareness amongst the community as a whole on natural resources laws or policies. The biodiversity assessments recorded widespread forest destruction in forests that contain endemic and threatened species. Other recent research carried out in this area has highlighted the potential revenue to communities and the Tanzanian government that are being lost as a result of poor forest management and governance shortfalls (Milledge et al. 2007).

Using the results of this research, the Tanzania Forest Conservation Group has worked with seven villages to develop participatory natural resource management plans. This report documents these plans. The report includes a brief description of the vision-based planning method that was used to develop the plans, a summary of the various plans and some recommendations for the future of the project. Appendix 1 includes a detailed account of the development of each of the seven plans. The plans that were developed describe the communities vision for the natural resources and the steps that are needed to achieve that vision. The plans do not include detailed prescriptions about how to manage specific resources. It is envisaged that more detailed management plans will be developed in the second phase of the project.

The plans were developed between 11th and 17th June 2007 by members of the respective communities facilitated by Simon Moshia of the Tanzania Forest Conservation Group, Kate Forrester-Kibuga a natural resources consultant and Hussein Harry, the Coordinator of the PAMS project.

It is anticipated that Songas Ltd will partially support the implementation of the plans outlined in this report. However, given how extensive the plans are, it is hoped that other stakeholders, not least the communities themselves, will also adopt the plans and use them to guide investments in the area.

The Tanzania Forest Conservation Group is a national non-government organisation committed to the conservation of the Eastern Arc and Coastal Forests of Tanzania. This project complements other work undertaken by TFCG in the coastal forests.

2) Methods

The method used to develop the participatory natural resource management plans outlined in this report, was adapted from an approach used by the Tanzania Forest Conservation Group in the South Nguru Mountains as part of the PEMA programme (Boesen 2005). The approach is based on communities agreeing a 'vision' for their natural resources i.e. defining how they would like to see their natural resources being managed. Having agreed where it is that they want to be, in terms of their natural resources, participants can then work out ways to achieve that vision. This approach differs from the more traditional problem oriented approach in which participants identify ways to address specified problems. The vision-based planning approach can be more empowering to participants and can encourage people to 'think outside the box' more readily.

Prior to conducting the visioning, the project had introduced some ideas regarding natural resource management, such as participatory forest management and had visited key natural resources on the village's land with some of the participants. The project had also conducted research on the socio-economic status of the communities; the biodiversity of key forest areas in the vicinity of the village and on rates of forest disturbance.

Participants who were invited to the meetings included the village governments, village environmental committees and forest users including bee keeping groups, timber harvesters and dealers, charcoal producers and fire wood collectors. Particular effort was made to ensure that both men and women participated.

Each meeting followed a series of steps.

1) *Self introductions*

Each participant introduced herself or himself.

2) *Outlining the aim of the meeting*

The project officer explained the background to the project and clarified the aim of the meeting. This step is important in providing a rationale for the meeting and in highlighting that these plans are not just for the project but can be used by the communities directly.

3) *Presenting the results of the project's research*

The Project Officer and facilitator presented the findings of the project's research on the socio-economic status of the village and the condition of its natural (mainly forest) resources.

4) *Validating the results of the research*

The participants were then asked to comment on the findings of the research and in particular to comment as to whether they considered this to be an accurate portrayal of the area.

5) *Identifying current trends*

Based on the research findings and the participant's own experiences, the facilitator encouraged people to consider what the current trends were for the natural resources in their village; any changes that they had observed over the last 10 years and the implications of these trends in terms of the future of the village's natural resources.

6) *Identifying a vision*

After talking about the future and picturing the future of the village based on its current trajectory, the facilitator then encouraged the participants to talk about how the village could be if they changed their course. Participants reflected on how they wanted their village to be in ten years' time, taking into account the research results and the list of changes that had taken place in the last ten years. They sat in two groups, a group of women and a group of men, in order to discuss their vision for the future of their village. Each group came up with a vision, and a representative from each group came to explain their vision to the other participants.

7) Identifying supporting and opposing forces

After completing the village vision, we began to think about how to attain the vision, and to identify important forces supporting and opposing their desired future scenario. It was clear that there were things that could help people to reach the vision (supporting forces), but also that there were things that would hinder them on the way (opposing forces). We made a list of these forces. Each opposing force was written on a yellow card and each supporting force on a blue card. The person who made the suggestion came to the front and held the card up, so that everyone could see all the forces.

We then took each of the opposing forces in turn and looked at what the people in the village could do to weaken it, if anything.

8) Plan for the village

We collected the opposing forces cards and we used them to form the basis of the action plan for the village for the next ten years, together with the suggestions of the participants. We also took into consideration the two presentations at the beginning and the vision drawn up by the participants. We took an issue, the participants suggested activities which would help to deal with the issue, and then we decided who would be able to provide help and which inputs were needed.

9) Presenting the action plan to the village assembly

After finishing the action plan, the plan is presented back to the village assembly for further discussion and acceptance.

3) Results

Vision-based participatory natural resource management plans were developed for each of the seven villages. The results of each of the planning meetings including the visions defined by each village and the actions necessary to achieve these visions are outlined in Appendix I.

3.1 Participation

Between 29 and 58 people participated in each of the meetings. The proportion of women participating varied from 17% in Mohoro to 62% in Muyuyu. Participants included forest users, members of the village government and village environmental committee members.

Table 1. Summary of participants in community planning meetings.

Village	Women	Men	Total
Somanga Simu	10	23	33
Marendego	12	46	58
Kiwanga	25	26	51
Mohoro	7	32	39
Chumbi	25	29	54
Muyuyu	18	11	29
Nyamwimbe	10	37	47

3.2 Research results

In every village, the participants agreed with the findings of the research and agreed that they presented an accurate picture of the village and its environment.

3.3 Current trends

In all of the villages, participants identified trees and animals that had disappeared within living memory or that were now rare. In all seven villages, participants stated that mvule, mninga and mkongo trees had disappeared or were now rare. Mtondoo and mpingo were mentioned in five of the villages as having disappeared. Similarly elephant and buffalo were frequently mentioned as now being scarce.

Other common trends that were noted included water sources drying up, changes to the climate including less rain and higher temperatures and less food.

Based on the research findings and their own observations, participants predicted that another 14 species would soon become locally extinct including mnepa, mpangapanga and mkuruti.

A common prediction was that the participant's village land would end up being a desert with nothing to support their lives.

3.4 Visions

Having predicted the outcome of the current trajectory in the status of natural resources, each village developed a vision. Similar themes recurred in most of the villages visions. For example improved agriculture and improved forest management were mentioned in the visions for all seven villages. Increased awareness of environmental issues was mentioned in four of the villages.

3.5 Supporting and opposing forces

Nine different supporting forces were mentioned by the communities. These are listed in Table 2. In all communities, participants mentioned the availability of land, labour and forests as being strong supporting forces in achieving their vision. Other supporting forces that were mentioned

include the availability of water, roads and technical expertise; the village leadership and the presence of projects.

Table 2. List of forces supporting the achievement of the village's vision.

Supporting force	Number of villages in which this was mentioned as an supporting force
We have land	7
We have forests	7
We have people who can work	7
There are projects or social services in our area	3
We have water sources	3
There are experts in the area	2
Our leaders	2
We have a road	2
There is an area where we can make salt	1

In general more opposing forces were listed than supporting forces. These are summarized in Table 3. The most frequently cited opposing forces relate to agricultural problems including: the lack of agricultural inputs and expertise and the issue crop-raiding by wild animals.

Table 3. List of forces opposing the achievement of the village's vision.

Opposing force	Number of villages in which this was mentioned as an opposing force
Lack of agricultural inputs	7
Lack of expertise	6
Destructive animals	6
Lack of capital	5
Lack of social services	4
Poor education	3
Worsening climate	3
Poor cooperation within the community	3
Poverty	2
Low awareness on environment and agriculture	2
Destruction of the environment	2
No secure market	2
Poor infrastructure	2
People don't follow laws	1
Poor law enforcement	1
Hunger	1
Lack of forest guards and equipment	1
Lack of water	1
Uncontrolled grazing	1
Old fashioned houses	1
Laziness	1
Poor supervision of community work	1
Poor governance	1
Bad system of issuing timber licenses	1

3.6 Village plans

Each village identified a series of issues that need to be tackled in order to achieve their vision. For each issue, activities were identified that would help in tackling the issue. Participants also listed the key stakeholders who would need to be involved and the inputs necessary to address them. These form the basis for the village plans.

Several themes common to each of the villages emerged in developing these plans:

1) Improving village land use management

Efforts to improve natural resource management and agriculture were being hampered by the absence of village land use plans in all of the villages (although Chumbi has drafted one it has not yet been finalised). As such, most villages consider the development of a village land use plan and the registration of their village as a priority activity.

2) Participatory forest management

Poor management of forests on village land and in adjacent government forest reserves was attributed to weak management and governance issues. Activities such as training, awareness raising and supporting the establishment of village forest reserves or joint forest management would help in addressing these issues.

Although some villages have had some involvement in participatory forest management, all villages identified the need to manage their forest resources more sustainably. The destruction of forest resources is the most visible natural resource problem at the moment with timber being harvested illegally, at unsustainably high rates in all of the villages.

Somanga Simu and Marendego are both involved in the management of Kitope Hill Forest Reserve through joint forest management and Muyuyu is involved in the management of Ngumburuni Forest Reserve. All other villages have potential sites for community based forest management some of which have already been identified as village forest reserves.

3) Improving village governance

Widespread illegal harvesting of forest products and poor law enforcement were some of the key governance issues identified. These were linked to lack of awareness on natural resource laws and policies amongst both the village leaders and the community as a whole. Weak cooperation between villagers was also identified as a contributing factor. Improved awareness of natural resources laws and policies would help in addressing this as would improved networking within and between communities.

4) Environmental education

Improving communities awareness of the value of their natural resources and their options in terms of how to manage them sustainably was widely recognized as being an important initiative.

5) Improving agriculture

Improving access to technical advice on agriculture as well as accessing equipment and agricultural inputs were issues in all of the villages. Some of the activities that were recommended to address this included training villagers to be agricultural extensionists, providing training directly to farmers, strengthening farmers groups, improving marketing skills, providing oxen, starting block farming and providing improved seed varieties.

In relation to agriculture, another key issue that was mentioned in six of the seven villages, is destructive animals. Many people spend a lot of their time defending their crops from baboons, bush pig and other wild animals. Most villages requested equipment and assistance to defend their crops.

6) Accessing other economic opportunities

Getting access to capital and to expertise on alternative economic activities was mentioned by most villages. Many villages requested training in establishing savings and credit societies as well as support for alternative activities to traditional agriculture and forest harvesting.

3.7 Support from Songas

Having collated the results of the individual village plans, together with the findings of the socioeconomic and biodiversity research, TFCG have developed a proposed project plan for the period 2007 – 2017. The project plan focuses on the six areas described in the previous section i.e. village land use planning, participatory forest management, improved governance, environmental education, improved agriculture and improving access to capital and alternative economic activities.

Initially the plan will follow closely the activities prioritized by the communities during the planning outlined in this report. These plans will be subject to annual review with the communities. During the review process, the progress of the project can be monitored by the communities and the plans can be adjusted to respond to new priorities, emerging issues and to lessons learnt.

Proposed results	Year					
	1	2	3	4	5	6 - 10
Land use planning						
Land use plans developed for all villages						
All villages registered						
Villagers are aware of the village land use plans and are implementing them						
Participatory forest management						
Community based forest management established in new areas.						
Support for ongoing management and monitoring of village forest reserves.						
Support for joint forest management of reserves close to Songas pipeline						
Establish PFM for Mohoro and Tamburu Forest Reserves.						
Improving governance						
Training and awareness raising for women and men on issues, policies and laws relevant to natural resource management.						
Supporting the village environmental committees.						
Improving cooperation within and between villages through networking.						
Support construction of village offices.						
Environmental Education						
Support schools to provide improved environmental education						
Support activities that raise awareness amongst women and men on the values, threats and conservation of natural resources.						
Improving agriculture						
Train villagers to become agricultural extensionists.						
Link with other agricultural initiatives in the area.						
Improving access to other economic alternatives						
Support savings and credit societies through training.						
Provide training in alternative economic activities including bee keeping and brick making.						

4) Recommendations

It is recommended that, over the next ten years, the project aims to achieve the following elements of the communities visions:

1) Improved village land use

Each of the seven villages are registered and are managing their land according to a village land use plan that has been accepted widely by women and men within the community, including the poor.

2) Participatory forest management

Each of the seven villages are managing the forest resources on their land through community based forest management and are jointly managing the adjacent government forest reserves of Kitope Hill, Mohoro, Tamburu and Ngumburuni with the result that the forests are being managed sustainably and in such a way as to benefit the community.

3) Strengthening village governance

Women and men are aware of their rights and responsibilities with regard to natural resources management as well as the roles of other stakeholders including the different levels of government and are demanding improved implementation of the law.

4) Environmental education

Women, men and children are aware of the values of the natural resources on their land, the threats that they face and the actions that can be taken to address those threats.

5) Improved agriculture

Women and men have access to improved technical advice on agricultural issues and are able to apply their improved technical knowledge.

6) Improved access to other economic opportunities

Women and men have improved access to micro-finance and are earning cash incomes from non-destructive economic activities.

Other:

7) The impact of the project is monitored and evaluated regularly and its achievements and any lessons learnt are communicated effectively.

Given the limited budget available from Songas for the achievement of these changes, it is recommended that a key role for TFCG is to facilitate linkages between the seven villages and other initiatives in the area.

5) References

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Appendix I Results of the village planning for seven villages

Somanga Simu, Kilwa District - 11 June 2007

The Songas pipeline passes through or close to a number of biologically important coastal forests. Communities living in the vicinity of these forests are generally poor and dependent on agriculture, timber harvesting and charcoal production for their livelihoods. Rates of forest loss in this area are increasing. A project has been initiated - 'Natural resource management planning and implementation for selected villages in the vicinity of the Songas Pipeline, led by TFCG (Tanzania Forest Conservation Group) with funding from Songas through the Songas Community Development Programme – to assist these communities to manage their natural resources more sustainably. This vision based planning process was carried out to contribute to the project's second objective:

To assist selected villages to develop collaborative natural resource management plans.

A meeting was held in Somanga Simu to come up with a vision for village environmental development, and to make an action plan around the vision. The meeting was attended by 10 women and 23 men, including village government officials, and was facilitated by TFCG. The meeting was opened by the village chairman.

The facilitators were:

Simon Masha	Project manager, TFCG Coastal Forests
Hussein Harry	Coordinator of PAMS project, Rufiji district
Kate Forrester Kibuga	Facilitator

After we were introduced to the participants of the meeting, the project manager began by explaining the background to the meeting and the purpose of today's meeting. TFCG has already carried out two research studies in Somanga Simu – a socio-economic study and a biodiversity study in the village forests (Kitope Hill FR, Mkongoro and Sanduku VFRs). The objective of this meeting was to present the findings of the research and then for the participants to come up with a plan for the village natural resources.

1. Research results

The results of the research were summarised briefly. From the socio-economic study, issues that stood out as important for development were presented:

Poor state of agriculture	- large area of land	
	- shifting cultivation	
	- small shambas	→ results in hunger
	- lack of expertise	→

No land use plan

Forests - Kitope Hill FR – JFM plan is still at the Ministry

- Mkongoro/Sanduku VFRs

The forests are being destroyed

- timber/logs – no trees of any value left → result of hunger

- charcoal production →

- shifting cultivation → poor agriculture

- fires

- VEC isn't carrying out its responsibilities

Lack of knowledge of good governance

COCOBA is weak

After the socio-economic study, a brief summary of the biodiversity study was presented:

Kitope Hill FR - Poles

Transect	Total counted	Live	Dead	Cut in the past	Cut recently
1	1210	1157	52	1	0
2	303	277	26	0	0
3	798	709	72	11	6
Total	2311	2143	50	12	6
Average/ha	770	714	6	4	2

Kitope Hill FR - Trees

Transect	Total counted	Live	Dead	Cut in the past	Cut recently
1	308	285	19	4	0
2	257	175	64	18	0
3	292	222	66	4	0
Total	857	682	149	26	0
Average/ha	286	227	50	9	0

Sanduku VFR

Poles	Live	Dead	Cut in the past	Cut recently	Total
	509	16	0	8	533/ha
Percentage	95%	9%	0%	2%	

Trees	Live	Dead	Cut in the past	Cut recently	Total
	214	6	2	0	222/ha
Percentage	16%	3%	1%	0	

Destruction observed

- Fires
- Shambas
- Trees felled for poles, timber and logs
- Hunting
- Logging roads cut through the forest

The participants at the meeting agreed with the findings and said that they represented an accurate picture of the village and its environment.

2. The past and the future of the forests

The facilitator then began a discussion about the changes which had taken place in the forests in the last ten years in order to develop a common understanding amongst the participants about the current condition of the forests. Participants were invited to list trees and animals which had disappeared or which were not seen with such frequency as they were in the past, and also to list any other changes which had taken place in the last decade. The results of the discussion were as follows:

Trees no longer seen	Birds	Animals	Other changes
mvule mninga mkongo mkungutanga mpingo mndundu mpangapanga	nditi vitiyenga	ndogoro ndohe mbalapi mbawala buffalo swala/paa lion	Less rain Level of ponds dropped Rivers are drying up Less food

Participants explained that most of the above were rarely seen nowadays, e.g. large trees of the species mentioned were hardly encountered, they no longer heard the birds. After looking back at the past, we turned to the future, and thought about the changes that would continue to occur if we carried on in the same mode. We made another list, considering what would disappear in the next ten years, as follows: :

Trees		Animals	Other changes
<u>Timber</u> mtondoo mkuliungu	<u>Charcoal</u> mpingo mndolindo mbubunu msekese mngulunguya mnepa	buffalo mbawala	The village will become a desert

People said that since all timber trees would have disappeared, they would concentrate exclusively on charcoal to meet their income needs, which would mean that many trees favoured for charcoal production would start to disappear. Their final verdict was that they would end up living in a desert, with nothing to support their lives, no rain or water, no trees, if they continue to live as they are now.

3. Visions

After talking about the future and picturing the desert that the village could become, we then began to talk about how the village could be if they changed their course. Participants reflected on how they wanted their village to be in ten years' time, taking into account the research results and the list of changes that had taken place in the last ten years. They sat in two groups, a group of women and a group of men, in order to discuss their vision for the future of Somanga Simu. Each group came up with a vision, and a representative from each group came to explain their vision to the other participants.

Group 1 - Women

We will stop practising shifting cultivation, and will farm with modern methods, with experts to advise us. The whole community will have an understanding about our forests. Village laws will be enforced. There will be good services in the village and everyone will have modern houses.

Group 2 – Men

Our forests will have all its natural biodiversity. We will have modern houses, built with burnt bricks and iron sheeting roofs, and more social services. We will farm with modern methods and there will be a good land use plan. We would like to have a technical college in the village to train those who have left school.

After each group had read out their vision to the others, we put the two visions together to make one overall vision for Somanga Simu:

<p><i>Vision for Somanga Simu</i></p> <p><i>We will farm with modern methods, using a land use plan. Our community will have knowledge and understanding about how to use the forests wisely. Laws will be enforced. Services will be better and people will live in modern houses. There will be a better life for everyone in the community.</i></p>
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4. Supporting and opposing forces

After completing the village vision, we began to think about how to attain the vision, and to identify important forces supporting and opposing their desired future scenario. It was clear that there were things which could help people to reach the vision (supporting forces), but also that there were things which would hinder them on the way (opposing forces). We made a list of these forces. Each opposing force was written on a yellow card and each supporting force on a blue card. The one who made the suggestion came to the front and held the card up, so that everyone could see all the forces. The supporting and opposing forces generated were as follows:

Supporting forces	Opposing forces
We have land There are programmes supporting education We have forests There are experts in the area We have people who can work	Low standard of education amongst the people Lack of expertise People don't follow the laws Poor law enforcement Destructive animals Lack of agricultural equipment Lack of social services

We then took each of the opposing forces in turn and looked at what the people in the village could do to weaken it, if anything. The suggestions made were as follows:

Opposing forces

Low standard of education amongst the people

This is an important obstacle – we need expertise and training to overcome it

Lack of expertise

There is nothing we can do about this.

People don't follow the laws – Poor law enforcement

Everyone needs to know the laws and follow them, and then the laws need to be enforced properly- we can do this.

Destructive animals

There's nothing we can do about this.

Lack of agricultural equipment

There's nothing we can do about this.

Lack of social services.

There's nothing we can do about this. We tried to repair the road and we failed.

5. Plan for the village

We collected the opposing forces cards and we used them to form the basis of the action plan for the village for the next ten years, together with the suggestions of the participants. We also took into consideration the two presentations at the beginning and the vision drawn up by the participants. We took an issue, the participants suggested activities which would help to deal with the issue, then we decided who would be able to provide help and which inputs were needed.

The action plan was as follows:

Somanga Simu Action Plan

Issue	Activity	Who	Inputs
People have little knowledge about environmental issues	Training for people about environmental issues <ul style="list-style-type: none"> • school children • VEC • Village government • Village people 	TFCG District council Teachers Village people	Training materials School EE materials Facilitators
Lack of experts	Train village people to be	TFCG	Training materials

(land, agriculture, forestry)	experts Access experts from outside	District council Village people	Facilitators
Poor law enforcement and adherence	Training on environmental laws for village people Ensure laws are enforced	TFCG Village government District council Village people	Training materials Facilitators
Destructive animals	Draw up land use plan to keep animals under control Training about the habits of animals	TFCG Village government District council Village people	Hunting materials
Lack of equipment and agricultural inputs	Training about modern agricultural methods and inputs Start up farming with oxen	TFCG Village government District council Village people	Training materials Facilitators Agricultural inputs Oxen
Lack of knowledge about good governance	Training on good governance for leaders and people	District council TFCG Village government Village people	Training materials Facilitators
Lack of capital for starting up business	Training for people about savings and credit and business skills Training on alternative income generating activities	District council TFCG Village people	Training materials Facilitators Capital Examples of new projects, e.g bee hives
Destruction of the forest (cutting, fire, shambas)	Establish two village forest reserves (Mkongoro and Sanduku) Strengthen VEC Follow up of management plan for Kitope Hill	District council TFCG Village government Village people	Training materials Facilitators
Lack of land use plan	Training for people on land use planning Prepare a land use plan	District council TFCG Village government	Training materials Facilitators

After finishing the action plan, the project manager promised that he would bring it back soon and present it to the whole village at a public meeting. The village chairman then thanked everyone who had attended and closed the meeting.

**Village Visioning and Planning Meeting
Marendego, Kilwa District - 12 June 2007**

The Songas pipeline passes through or close to a number of biologically important coastal forests. Communities living in the vicinity of these forests are generally poor and dependent on agriculture, timber harvesting and charcoal production for their livelihoods. Rates of forest loss in this area are increasing. A project has been initiated - 'Natural resource management planning and implementation for selected villages in the vicinity of the Songas Pipeline, led by TFCG (Tanzania Forest Conservation Group) with funding from Songas through the Songas Community Development Programme – to assist these communities to manage their natural resources more sustainably. This vision based planning process was carried out to contribute to the project's second objective:

To assist selected villages to develop collaborative natural resource management plans.

A meeting was held in Marendego to come up with a vision for village environmental development, and to make an action plan around the vision. The meeting was attended by 12 women and 46 men, including village government officials, and was facilitated by TFCG. The meeting was opened by the village chairman.

The facilitators were:

Simon Mosha	Project manager, TFCG Coastal Forests
Hussein Harry	Coordinator of PAMS project, Rufiji district
Kate Forrester Kibuga	Facilitator

After we were introduced to the participants of the meeting, the project manager began by explaining the background to the meeting and the purpose of today's meeting. TFCG has already carried out two research studies in Marendego – a socio-economic study and a biodiversity study in the village forests (Kitope Hill FR, Mpakilwa and Marendego VFRs). The objective of this meeting was to present the findings of the research and then for the participants to come up with a plan for the village natural resources.

1. Research results

The results of the research were summarised briefly. From the socio-economic study, issues that stood out as important for development were presented:

- Poor state of agriculture
 - large area of land
 - shifting cultivation
 - small shambas → results in hunger
 - lack of expertise →
 - destructive animals →
- Forests - Kitope Hill FR – JFM plan is still at the Ministry
 - Marendego/Mpakilwa VFRs - VEC isn't carrying out its responsibilities
 - people don't know Forest Laws

- The forests are being destroyed
 - timber/logs – wholesale destruction → result of hunger
 - charcoal production →
 - shifting cultivation → poor agriculture
 - fires

Lack of knowledge of good governance
COCOBA is weak

After the socio-economic study, a brief summary of the biodiversity study was presented:

Mpwakilwa VFR

Poles	Live	Dead	Cut in the past	Cut recently
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	436	24	6	218
Percentage	64%	4%	1%	32%

Timber trees	Live	Dead	Cut in the past	Cut recently
	31	10	0	0
Percentage	75%	24%	0%	0%

Marendego VFR

Poles	Live	Dead	Cut in the past	Cut recently
	399	8	7	31
Percentage	90%	2%	2%	7%

Timber trees	Live	Dead	Cut in the past	Cut recently
	241	30	7	33
Percentage	77%	10%	2%	11%

Destruction observed

- Trees felled for logs
- Roads cut through the forests
- Timber sawing
- Charcoal burning
- Fire

The participants at the meeting agreed with the findings and said that they represented an accurate picture of the village and its environment.

2. The past and the future of the forests

The facilitator then began a discussion about the changes which had taken place in the forests in the last ten years in order to develop a common understanding amongst the participants about the current condition of the forests. Participants were invited to list trees and animals which had disappeared or which were not seen with such frequency as they were in the past, and also to list any other changes which had taken place in the last decade. The results of the discussion were as follows:

Trees no longer seen	Birds	Animals	Other changes
mvule mninga mkongo mpangapanga msekeseke mkuruti mtasi mkulo mkungutanga mpingo	kanga kololo kwale	mbunju tohe mbalapi mbawala buffalo kuro hippo	Herbal medicines no longer available Less rain

Participants explained that most of the above were rarely seen nowadays, e.g. large trees of the species mentioned were hardly encountered, they no longer heard the birds. After looking back at the past, we turned to the future, and thought about the changes that would continue to occur if we carried on in the same mode. We made another list, considering what would disappear in the next ten years, as follows: :

Trees	Plants	Birds	Other changes
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mitondoo mnangu mnepa msenjele msufi pori mkiliyungu mnyeje mtunda	ukindu – reeds	kololo	The village will become a desert There will be hunger There will be even less rain
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People said that they would end up living in a desert, with nothing to support their lives, no rain and no possibility of producing food, if they continue to live as they are now.

3. Visions

After talking about the future and picturing the desert that the village could become, we then began to talk about how the village could be if they changed their course. Participants reflected on how they wanted their village to be in ten years' time, taking into account the research results and the list of changes that had taken place in the last ten years. They sat in four groups, one group of women, one group of older men and two groups of young men, in order to discuss their vision for the future of Marendego. Each group came up with a vision, and a representative from each group came to explain their vision to the other participants.

Group 1 - Women

We will have experts in agriculture in the village, and there will be employment for everyone and loans for women. We will organise guards for the forests.

Group 2 – Older men

We don't want to see our village become a desert. There will be development, and food and peace and tranquillity. We will have a forest in good condition, and knowledge about how to look after it.

Group 3 – Younger men

Our forests will be like they were in the past, and the internal and international markets for timber and logs will be controlled. We will plant the trees that have disappeared from our forest. We will work together to prevent fires in the forest.

Group 4 – Younger men

We will put a stop to uncontrolled tree cutting, and the price of licences will be much higher. We will have knowledge about modern agriculture and care of the environment. Young people will have jobs, and we will have agricultural inputs.

After each group had read out their vision to the others, we put the two visions together to make one overall vision for Marendego:

Vision for Marendego

We don't want to see our village become a desert, so uncontrolled cutting and burning of the forest will be stopped so that our forest can return to the condition it was in the past. We will have knowledge about agriculture and the environment. We will have alternative ways of income generation in order to reduce our dependence on the forests.

4. Supporting and opposing forces

After completing the village vision, we began to think about how to attain the vision, and to identify important forces supporting and opposing their desired future scenario. It was clear that there were things which could help people to reach the vision (supporting forces), but also that there were things which would hinder them on the way (opposing forces). We made a list of these forces. Each opposing force was written on a yellow card and each supporting force on a blue card. The one who made the suggestion came to the front and held the card up, so that everyone could see all the forces. The supporting and opposing forces generated were as follows:

Supporting forces	Opposing forces
We have good fertile land We have a nice forest We have people who can work	Lack of capital Lack of expertise Lack of agricultural inputs Worsening climate Poverty Destructive animals Low level of cooperation within the community Low level of knowledge about agriculture and the environment amongst the people Hunger Lack of social services

We then took each of the opposing forces in turn and looked at what the people in the village could do to weaken it, if anything. The suggestions made were as follows:

Opposing forces

Lack of capital

Form groups and seek loans

Lack of expertise

Choose young people and send them to be trained

Lack of agricultural inputs

Seek loans in order to buy inputs

Worsening climate

Plant trees and look after the forests to bring the rain back

Poverty

Seek loans

Destructive animals

Strengthen cooperation between people, and seek loans to buy equipment to cull the animals

Low level of cooperation within the community

Make laws to ensure cooperation between people in the community

Low level of knowledge about agriculture and the environment amongst the people

Choose young people and send them to be trained

Hunger

Our land is good, we have people who can work, we need experts to advise us on modern agricultural techniques to increase our production

Lack of social services

We have people who can help to build

While we were considering these issues, two points were discussed at some length

- Destructive animals – these include especially baboons, monkeys, wild pigs and elephants. The people explained that Selous Game Reserve authorities had said that it was not possible for them to kill any animals in their village. They argued that there was no other way of dealing with them, that they were being overrun with them and that their numbers seemed to be on the increase. There was discussion about the best way of dealing with them, whether

to catch them in nets or to shoot them, and where to get the equipment from. There was also discussion about how it would be better if all the farmers in the village farmed in one area, rather than spread around in isolated patches hacked out of the forest, and thus more susceptible to attacks by animals.

- Saccos – there was a lack of confidence expressed in COCOBA, the Saccos in the village. People said that hardly anyone has yet received a loan, because there is no money in the institution. They were thinking that they would get money from the government, but this hasn't materialised, so they are ready to give up. It was pointed out that if they had more members and if everyone contributed regularly, then there would be more money to give out in loans, until a source of capital can be identified.

5. Plan for the village

We collected the opposing forces cards and we used them to form the basis of the action plan for the village for the next ten years, together with the suggestions of the participants. We also took into consideration the two presentations at the beginning and the vision drawn up by the participants. We took an issue, the participants suggested activities which would help to deal with the issue, then we decided who would be able to provide help and what inputs were needed. The action plan was as follows:

Marendego Action Plan

Issue	Activity	Who	Inputs
Lack of capital	Form groups Training on group formation and loans Seek a source of loans Strengthen COCOBA	District council Village people TFCG	Training materials Facilitators Capital Materials for groups
Lack of expertise	Train local people in e.g. beekeeping, agriculture, fishing	TFCG District council Village people	Training materials Facilitators
Destruction of the environment (Worsening of the climate)	Plant trees Prevent fires Strengthen the VEC Training about the environment for the community Control the issuing of licences Set up village forest reserves in Marendego and Mpakilwa	TFCG Village government District council Village people	Training materials Facilitators Nursery materials
Poor state of agriculture (Hunger, poverty, lack of agricultural inputs)	Training about improved agricultural techniques Increase availability of inputs Start block farming Strengthen farmers groups and marketing Strengthen community solidarity	TFCG Village government District council Village people	Training materials Facilitators Agricultural inputs Materials for groups
Destructive animals	Cull smaller animals Purchase of culling equipment	TFCG Village government District council Village people	Hunting equipment
Good governance	Training in good governance for leaders and community members	District council TFCG Village government Village people	Training materials Facilitators

After finishing the action plan, the project manager promised that he would bring it back soon and present it to the whole village at a public meeting. The village chairman then thanked everyone who had attended and closed the meeting.

**Village Visioning and Planning Meeting
Kiwanga, Rufiji District - 13 June 2007**

The Songas pipeline passes through or close to a number of biologically important coastal forests. Communities living in the vicinity of these forests are generally poor and dependent on agriculture, timber harvesting and charcoal production for their livelihoods. Rates of forest loss in this area are increasing. A project has been initiated - 'Natural resource management planning and implementation for selected villages in the vicinity of the Songas Pipeline', led by TFCG (Tanzania Forest Conservation Group) with funding from Songas through the Songas Community Development Programme – to assist these communities to manage their natural resources more sustainably. This vision based planning process was carried out to contribute to the project's second objective:

To assist selected villages to develop collaborative natural resource management plans.

A meeting was held in Kiwanga to come up with a vision for village environmental development, and to make an action plan around the vision. The meeting was attended by 25 women and 26 men, including village government officials, and was facilitated by TFCG. The meeting was opened by the village chairman.

The facilitators were:

Simon Mosha	Project manager, TFCG Coastal Forests
Hussein Harry	Coordinator of PAMS project, Rufiji district
Kate Forrester Kibuga	Facilitator

After we were introduced to the participants of the meeting, the project manager began by explaining the background to the meeting and the purpose of today's meeting. TFCG has already carried out two research studies in Kiwanga – a socio-economic study and a biodiversity study in the forest adjacent to the village (Tamburu FR). The objective of this meeting was to present the findings of the research and then for the participants to draw up a plan for the village natural resources.

1. Research results

The results of the research were summarised briefly. From the socio-economic study, issues that stood out as important for development were presented:

Poor state of agriculture	- large area of land	
	- shifting cultivation	
	- small shambas	→ results in hunger
	- lack of expertise	→
	- destructive animals	→

No village land use plan

Forests – Tamburu FR

- There are no village forest reserves

The forests are being destroyed

- timber/logs – wholesale destruction → result of hunger

- charcoal production →

- shifting cultivation → poor agriculture

- fires

- VEC isn't carrying out its responsibilities

Lack of knowledge of good governance

COCOBA is weak

Lack of modern technology for salt making

After the socio-economic study, a brief summary of the biodiversity study was presented:

Tamburu FR - Poles

Transect	Live	Dead	Cut in the past	Cut recently
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1	680	32	0	0
2	388	18	3	8
3	458	42	16	13

Tamburu FR – Trees – timber and logs

Transect	Live	Dead	Cut in the past	Cut recently
1	225	17	0	1
2	235	17	15	15
3	226	56	31	24

Destruction observed

- Trees felled for logs (56/ha)
- Roads cut through the forests (25/ha)
- Timber sawing

Percentage of forest cover remaining

Transect 1 – over 50%

Transect 2 – 10-50%

Transect 3 – 10-20%

The participants at the meeting agreed with the findings and said that they represented an accurate picture of the village and its environment.

2. The past and the future of the forests

The facilitator then began a discussion about the changes which had taken place in the forests in the last ten years in order to develop a common understanding amongst the participants about the current condition of the forests. Participants were invited to list trees and animals which had disappeared or which were not seen with such frequency as they were in the past, and also to list any other changes which had taken place in the last decade. The results of the discussion were as follows:

Trees no longer seen	Birds	Animals	Plants	Other changes
mvule mninga mkongo mpangapanga msekeseke mkuruti mpingo mkangazi mtondoo mkoko mnyamwela mangangawalo mkarati	kanga kololo kwale nditi koani namkuta kopangola	buffalo mbalapi mbawala elephant ndohe lion hippo	ukindu (reeds)	Less rain Lakes and ponds have less water Less water in the rivers throughout the year Fewer fish in the sea

Participants explained that most of the above had not actually disappeared, but were hard to find nowadays. After looking back at the past, we turned to the future, and thought about the changes that would continue to occur if we carried on in the same mode. We made another list, considering what would disappear in the next ten years, as follows: :

Trees	Birds and animals	Other changes
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The trees listed above will have disappeared completely	The birds and animals will also have disappeared	The village will become a desert
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People said that they would end up living in a desert, with nothing to support their lives, no rain and no possibility of producing food, if they continue to live as they are now.

3. Visions

After talking about the future and picturing the desert that the village could become, we then began to talk about how the village could be if they changed their course. Participants reflected on how they wanted their village to be in ten years' time, taking into account the research results and the list of changes that had taken place in the last ten years. They sat in five groups, two groups of women, one group of older men, one group of young men and one other group of men, in order to discuss their vision for the future of Kiwanga. Each group came up with a vision, and a representative from each group came to explain their vision to the other participants.

Group 1 - Women

We shouldn't cut down the forest, animals have left the forest, we don't have rain, there will be erosion. There will be desert and there won't be rain. We should stop shifting cultivation.

Group 2 – Women

We will plant lots of different trees, like mninga and mkuruti. We will have laws about uncontrolled cutting down of trees in the forest. We will cultivate large shambas and learn about agriculture so we can grow cash crops. We will have a better life and good modern houses.

Group 3 – Younger men

We will have a forest reserve in the village so that we can look after our environment and make the forests better.

Group 4 – Men

The forests will be as they were in the past. We will have large and permanent shambas. Every household will have enough food, and will live in a modern house. We will use our forests according to a management plan.

Group 5 – Older men

We will have large shambas. We will have large forests and good sources of water. We will have the right equipment for farming and we will plant sesame and cashews. We will have a harbour.

After each group had read out their vision to the others, we put the two visions together to make one overall vision for Kiwanga:

Vision for Kiwanga

We will have village forest reserves so that our forests will be as they were in the past, and they will be managed and used according to a plan. We will have large permanent shambas where food and cash crops are grown so that we don't suffer from hunger, and so that we have a good life.

4. Supporting and opposing forces

After completing the village vision, we began to think about how to attain the vision, and to identify important forces supporting and opposing their desired future scenario. It was clear that there were things which could help people to reach the vision (supporting forces), but also that

there were things which would hinder them on the way (opposing forces). We made a list of these forces. Each opposing force was written on a yellow card and each supporting force on a blue card. The one who made the suggestion came to the front and held the card up, so that everyone could see all the forces. The supporting and opposing forces generated were as follows:

Supporting forces	Opposing forces
We have a large area of good fertile land We have a nice forest We have people who can work There are rivers and the sea There is an area where we can make salt	Destruction of the environment Lack of experts Lack of agricultural inputs Lack of forest guards and equipment Lack of water Destructive animals Lack of cooperation in managing the forests Low level of education about agriculture and the environment Lack of social services

We then took each of the opposing forces in turn and looked at what the people in the village could do to weaken it, if anything. The suggestions made were as follows:

Opposing forces

Destruction of the environment

We can stop cutting down trees and burning the forests, we can form a VEC to manage the forest

Lack of experts

We can't do anything about this

Lack of agricultural inputs

We can't do anything about this

Lack of forest guards and equipment

We can't do anything about this

Lack of water

We can dig trenches for pipes and look after water pumps

Destructive animals

We can work together against these animals, and look for loans to get equipment to cull them

We don't work together to manage the forests

If we received training and help, we could do something about this

Low level of education about agriculture and the environment

We don't have any experts

Lack of social services

We have the work force to help with building

5. Plan for the village

We collected the opposing forces cards and we used them to form the basis of the action plan for the village for the next ten years, together with the suggestions of the participants. We also took into consideration the two presentations at the beginning and the vision drawn up by the participants. We took an issue, the participants suggested activities which would help to deal with the issue, then we decided who would be able to provide help, and what inputs would be needed. The action plan was as follows:

Issue	Activity	Who	Inputs
Destruction of the environment	Establish village forest reserves Training about the environment and tree planting for the	District council Village people TFCG	Training materials Facilitators Equipment for tree

	community Promote permanent shambas instead of shifting cultivation Prepare bye-laws about the environment		nurseries
Poor state of agriculture	Training about improved agricultural techniques Access agricultural inputs	District council Village people TFCG	Training materials Facilitators Agricultural inputs
Lack of capital	Training in entrepreneurship Establish a Saccos in the village	TFCG District council	Training materials Facilitators Capital
No land use plan	Draw up a village land use plan Training on sustainable land use	Village people TFCG District council Village government	Training materials Facilitators
Destructive animals	Purchase of culling equipment, e.g. nets, bullets Start up block farming	Village people District council Village government	Hunting equipment
Good governance	Training in good governance for leaders and community members	District council TFCG Village government Village people	Training materials Facilitators

After finishing the action plan, the project manager promised that he would bring it back soon and present it to the whole village at a public meeting. The village chairman then thanked everyone who had attended and closed the meeting.

Village Visioning and Planning Meeting Mohoro, Rufiji District - 14 June 2007

The Songas pipeline passes through or close to a number of biologically important coastal forests. Communities living in the vicinity of these forests are generally poor and dependent on agriculture, timber harvesting and charcoal production for their livelihoods. Rates of forest loss in this area are increasing. A project has been initiated - 'Natural resource management planning and implementation for selected villages in the vicinity of the Songas Pipeline, led by TFCG (Tanzania Forest Conservation Group) with funding from Songas through the Songas Community Development Programme – to assist these communities to manage their natural resources more sustainably. This vision based planning process was carried out to contribute to the project's second objective:

To assist selected villages to develop collaborative natural resource management plans.

A meeting was held in Mohoro to come up with a vision for village environmental development, and to make an action plan around the vision. The meeting was attended by 7 women and 32 men, including village government officials, and was facilitated by TFCG. The meeting was opened by the village chairman.

The facilitators were:

Simon Mosha	Project manager, TFCG Coastal Forests
Hussein Harry	Coordinator of PAMS project, Rufiji district
Kate Forrester Kibuga	Facilitator

After we were introduced to the participants of the meeting, the project manager began by explaining the background to the meeting and the purpose of today's meeting. TFCG has already carried out two research studies in Mohoro – a socio-economic study and a biodiversity study in the village forests (Mohoro FR, Nyambawala VFR). The objective of this meeting was to present the findings of the research and then for the participants to come up with a plan for the village natural resources.

1. Research results

The results of the research were summarised briefly. From the socio-economic study, issues that stood out as important for development were presented:

Poor state of agriculture	- large area of land	
	- shifting cultivation	
	- small shambas	→ results in hunger
	- lack of expertise	→
	- destructive animals	→
	- a few large shambas	

No village land use plan → conflict between farmers and livestock keepers

Forests - Mohoro FR

- Nyambawala VFRs

The forests are being destroyed

- timber/logs – wholesale destruction	→ result of hunger
- charcoal production	→
- shifting cultivation	→ poor agriculture
- fires	
- VEC isn't carrying out its responsibilities	

Lack of knowledge of good governance

Erosion on the banks of the Mohoro river

Less rain

No Saccos

After the socio-economic study, a brief summary of the biodiversity study was presented:

Mohoro FR - Poles

Transect	Live	Dead	Cut in the past	Cut recently
1	201	10	5	0
2	143	12	4	2

Mohoro FR – Trees – timber/logs

Transect	Live	Dead	Cut in the past	Cut recently
1	223	20	11	16
2	166	24	34	1

Nyambawala VFR

	Live	Dead	Cut in the past	Cut recently
Poles	212	20	0	0
Trees	221	32	6	0

Destruction observed

- Trees felled for logs
- Roads cut through the forests
- Timber sawing
- Charcoal burning
- Fire

Forest cover: 10-50%

Growth under the forest: 50-100%

There are no birds or animals endemic to the coastal forests

The participants at the meeting agreed with the findings and said that they represented an accurate picture of the village and its environment.

2. The past and the future of the forests

The facilitator then began a discussion about the changes which had taken place in the forests in the last ten years in order to develop a common understanding amongst the participants about the current condition of the forests. Participants were invited to list trees and animals which had disappeared or which were not seen with such frequency as they were in the past, and also to list any other changes which had taken place in the last decade. The results of the discussion were as follows:

Trees no longer seen	Birds	Animals	Other changes
mvule mninga mkongo mpangapanga msekeseke mtondoo mkangazi mpingo mpandanyani	kanga nyangenyange nchinguri mkuta	elephant rhino giraffe rabbit mbalapi mbawala buffalo colobus mon	Less rain Water sources are drying up The river bank is eroding

Participants explained that most of the above were rarely seen nowadays, e.g. large trees of the species mentioned were hardly encountered. After looking back at the past, we turned to the future, and thought about the changes that would continue to occur if we carried on in the same mode. We made another list, considering what would disappear in the next ten years, as follows:

Trees	Other changes
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All hardwood trees will have been used for charcoal and we will have started to cut softwood trees for charcoal	The village will become a desert The river valleys will have eroded away The rivers will have dried up
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People said that they would end up living in a desert, with nothing to support their lives, if they continue to live as they are now.

3. Visions

After talking about the future and picturing the desert that the village could become, we then began to talk about how the village could be if they changed their course. Participants reflected on how they wanted their village to be in ten years' time, taking into account the research results and the list of changes that had taken place in the last ten years. They sat in three groups, one group of women, one group of older men and one group of young men, in order to discuss their vision for the future of Mohoro. Each group came up with a vision, and a representative from each group came to explain their vision to the other participants.

Group 1 - Women

We will have permanent shambas and we will not suffer hunger. Lots of trees will be planted and there will be laws to prevent uncontrolled harvesting in the forest, because the VEC will have training in how to look after the environment. The village will be strong economically, and there will be development for everyone.

Group 2 – Older men

We want to see our forest looked after, we will plant the trees which have disappeared from our forests, and water sources will be protected. We will stop shifting cultivation and we will plant woodlots. We want to see everyone getting education about the environment and modern agriculture. There will be savings and credit societies in the village.

Group 3 – Younger men

We will cultivate using modern methods. We will have loans. Our infrastructure will be better. There will be separate areas for farmers and livestock keepers. We will protect water sources and reduce the number of licences issued for tree harvesting.

After each group had read out their vision to the others, we put the two visions together to make one overall vision for Mohoro:

Vision for Mohoro

We want to see our forests and water sources protected. There will be more tree planting and people in the village will have knowledge about the environment. We will farm with modern methods on permanent shambas so that we can defeat the scourge of hunger. We will have a land use plan. We will have savings and credit societies.

4. Supporting and opposing forces

After completing the village vision, we began to think about how to attain the vision, and to identify important forces supporting and opposing their desired future scenario. It was clear that there were things which could help people to reach the vision (supporting forces), but also that there were things which would hinder them on the way (opposing forces). We made a list of these forces. Each opposing force was written on a yellow card and each supporting force on a blue card. The one who made the suggestion came to the front and held the card up, so that everyone could see all the forces. The supporting and opposing forces generated were as follows:

Supporting forces	Opposing forces
We have good fertile land We have forests, lakes and rivers We have people who can work	Lack of knowledge about agriculture Lack of experts There is no secure market Worsening climate Lack of agricultural inputs and equipment Destructive animals Lack of capital Infrastructure in poor condition Uncontrolled grazing

We then took each of the opposing forces in turn and looked at what the people in the village could do to weaken it, if anything. The suggestions made were as follows:

Opposing forces

Lack of knowledge about agriculture

We don't have any experts to help us

Lack of experts

We only have one extension officer in the ward. We have young people who could be trained to be experts.

There is no certain market

We can't do anything about this. No-one comes to buy our produce, our crops rot at home. We need factories where we can process our crops.

Worsening climate

We can look after our forests and water sources

Lack of agricultural inputs and equipment

They are not available here, we can't do anything about this

Destructive animals

We can cull them, but we don't have the equipment

Lack of capital

We have a strong work force. We can start up groups

Infrastructure in poor condition

We have a strong work force who can help to build

Uncontrolled grazing

We can talk to the livestock keepers, we can make a land use plan, we can make sure that livestock keepers have social services in the places we assign for them.

5. Plan for the village

We collected the opposing forces cards and we used them to form the basis of the action plan for the village for the next ten years, together with the suggestions of the participants. We also took into consideration the two presentations at the beginning and the vision drawn up by the participants. We took an issue, the participants suggested activities which would help to deal with the issue, then we decided who would be able to provide help and what inputs would be needed. The action plan was as follows:

Mohoro Action Plan

Issue	Activity	Who	Inputs
Poor state of agriculture and lack of certain market for produce	Education about agriculture for farmers Bring in extension officers Establish farmers groups and seek loans Start irrigated agriculture Start block farming Use modern agricultural equipment Start oxenisation Look for improved seeds and new crops Seek new markets	Village people District council Village government TFCG	Training materials Facilitators Group materials Agricultural equipment Improved seeds
Destructive animals	Establish groups for culling Purchase of hunting equipment Start block farming Education on ways of dealing with destructive animals	Village government District council Village people TFCG	Hunting equipment Training materials Facilitators
Destruction of the environment and water sources	Start up tree nurseries Plant trees Training about the environment for the community and VEC Draw up a management plan for forests	TFCG Village government District council Village people	Training materials Facilitators Nursery materials
No village land use plan	Draw up a village land use plan Training on good use of land	TFCG Village government District council Village people	Training materials Facilitators
Lack of capital	Form groups for savings and credit Training on group formation and loans and entrepreneurship Build links with loans organisations	District council Village government TFCG	Training materials Facilitators Capital Materials for groups
Good governance	Training in good governance for leaders and community members	District council TFCG Village government	Training materials Facilitators

After finishing the action plan, the project manager promised that he would bring it back soon and present it to the whole village at a public meeting. The village chairman then thanked everyone who had attended and closed the meeting.

**Village Visioning and Planning Meeting
Chumbi, Rufiji District - 15 June 2007**

The Songas pipeline passes through or close to a number of biologically important coastal forests. Communities living in the vicinity of these forests are generally poor and dependent on agriculture, timber harvesting and charcoal production for their livelihoods. Rates of forest loss in this area are increasing. A project has been initiated - 'Natural resource management planning and implementation for selected villages in the vicinity of the Songas Pipeline, led by TFCG (Tanzania Forest Conservation Group) with funding from Songas through the Songas Community Development Programme – to assist these communities to manage their natural resources more sustainably. This vision based planning process was carried out to contribute to the project's second objective:

To assist selected villages to develop collaborative natural resource management plans.

A meeting was held in Chumbi to come up with a vision for village environmental development, and to make an action plan around the vision. The meeting was attended by 25 women and 29 men, including village government officials, and was facilitated by TFCG. The meeting was opened by the village chairman.

The facilitators were:

Simon Mosha	Project manager, TFCG Coastal Forests
Hussein Harry	Coordinator of PAMS project, Rufiji district
Kate Forrester Kibuga	Facilitator

After we were introduced to the participants of the meeting, the project manager began by explaining the background to the meeting and the purpose of today's meeting. TFCG has already carried out two research studies in Chumbi – a socio-economic study and a biodiversity study in the village forests (Rangitatu, Kinjoranjora and Nyakironji VFRs). The objective of this meeting was to present the findings of the research and then for the participants to come up with a plan for the village natural resources.

1. Research results

The results of the research were summarised briefly. From the socio-economic study, issues that stood out as important for development were presented:

Poor state of agriculture	- large area of land		
	- shifting cultivation		
	- small shambas	→	results in hunger
	- lack of expertise	→	

Forests - Rangitatu, Kinjoranjora and Nyakironji VFRs

The forests are being destroyed

- timber/logs – destruction → result of hunger
- charcoal production →
- shifting cultivation → poor agriculture
- fires
- VEC isn't carrying out its responsibilities

Lack of knowledge of good governance

No Saccos

After the socio-economic study, a brief summary of the biodiversity study was presented:

Kinjoranjora VFR

	Live	Dead	Cut in the past	Cut recently

Poles	440	13	1	2
Trees	268	39	10	15

Nyakironji VFR

	Live	Dead	Cut in the past	Cut recently
Poles	383	2	0	0
Trees	203	27	12	11

Destruction observed

- Trees felled for logs
- Roads cut through the forests
- Timber sawing
- Charcoal burning
- Animal traps

Forest cover: 10-50%

Growth under the forest: 50-100%

There are no birds or animals endemic to the coastal forests

There are no commercially valuable trees

The participants at the meeting agreed with the findings and said that they represented an accurate picture of the village and its environment.

2. The past and the future of the forests

The facilitator then began a discussion about the changes which had taken place in the forests in the last ten years in order to develop a common understanding amongst the participants about the current condition of the forests. Participants were invited to list trees and animals which had disappeared or which were not seen with such frequency as they were in the past, and also to list any other changes which had taken place in the last decade. The results of the discussion were as follows:

Trees no longer seen	Birds	Animals	Other changes
mvule	chiriku	elephant	Climate – drought Butterflies are also disappearing
mninga	tetere	colobus	
mkongo	kichelekichele	monkey	
mpingo	njungwi	warthogs	
msekeseke	shore	mbalapi	
mtondoo	kinyagohalima	mbawala	
mlopolopo	kitundule	buffalo	
mnango	kinjochi	swala	
mkuruti	kityengu	mbonju	
mtonga	kiwebu	ndondole	
mpodo		lion	
mkarati		leopard	
mtasi			
mtabwe			

After looking back at the past, we turned to the future, and thought about the changes that would continue to occur if we carried on in the same mode. We made another list, considering what would disappear in the next ten years, as follows:

Trees that will have disappeared	Animals	Other changes

mitondoo mitanga mikenge mpodo	wild pigs warthogs hippos	The village will become a desert No-one will remember the names of the trees mentioned above because they will never have seen them
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People said that they would end up living in a desert, with nothing to support their lives, if they continue to live as they are now.

3. Visions

After talking about the future and picturing the desert that the village could become, we then began to talk about how the village could be if they changed their course. Participants reflected on how they wanted their village to be in ten years' time, taking into account the research results and the list of changes that had taken place in the last ten years. They sat in four groups, two groups of women and two groups of men, in order to discuss their vision for the future of Chumbi. Each group came up with a vision, and a representative from each group came to explain their vision to the other participants.

Group 1 - Women

We will plant trees and farm using modern methods and irrigation. We will protect the forest.

Group 2 – Women

We will protect the forest. We will farm using modern methods and follow the advice of experts. We will stop uncontrolled cutting of trees and plant fruit trees.

Group 3 – Men

We will farm using modern methods with advice from experts and up to date implements. We will build modern houses. We will not practise shifting cultivation or grazing. We need good governance and savings and credit societies. We will plant trees and stop cutting down our own forests.

Group 4 - Men

We will plant trees and stop practising shifting cultivation. We will stop uncontrolled harvesting and burning of the forest. We will farm in a better way with modern implements, using modern technology.

After each group had read out their vision to the others, we put the two visions together to make one overall vision for Chumbi:

<i>Vision for Chumbi</i>
<i>We will have modern agriculture and permanent shambas, following the advice of experts. Forests will be protected and we will plant trees. We will have a good life and enough capital. Our community will have good governance.</i>

4. Supporting and opposing forces

After completing the village vision, we began to think about how to attain the vision, and to identify important forces supporting and opposing their desired future scenario. It was clear that there were things which could help people to reach the vision (supporting forces), but also that there were things which would hinder them on the way (opposing forces). We made a list of these forces. Each opposing force was written on a yellow card and each supporting force on a blue card. The one who made the suggestion came to the front and held the card up, so that everyone could see all the forces. The supporting and opposing forces generated were as follows:

Supporting forces	Opposing forces
We have a large area of good land We have forests and water sources	Lack of agricultural equipment Not enough experts

We have people who can work There are experts around We have leaders We have social services	Lack of capital Destructive animals Old fashioned houses
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We then took each of the opposing forces in turn and looked at what the people in the village could do to weaken it, if anything. The suggestions made were as follows:

Opposing forces

Lack of agricultural equipment

We don't have tractors or water pumps for irrigation

Not enough experts

There is nothing we can do about this

Lack of capital

We have the strength to work hard

Destructive animals

We can cull them

Old fashioned houses

We have the work force to build, to burn bricks, we have trees to burn the bricks, but we don't have the expertise

5. Plan for the village

We collected the opposing forces cards and we used them to form the basis of the action plan for the village for the next ten years, together with the suggestions of the participants. We also took into consideration the two presentations at the beginning and the vision drawn up by the participants. We took an issue, the participants suggested activities which would help to deal with the issue, then we decided who would be able to provide help and what inputs would be needed. The action plan was as follows:

Chumbi Action Plan

Issue	Activity	Who	Inputs
Poor state of agriculture and destructive animals	Education about agriculture Use modern agricultural equipment Make our shambas bigger Seek loans Purchase of hunting equipment for destructive animals	Village people District council TFCG Local agricultural extension officer	Training materials Facilitators Agricultural equipment Hunting materials
Destruction of the environment	Start up tree nurseries Plant trees Training about the environment for the community Set aside village forest reserves Draw up a management plan for forests	TFCG District council Village people	Training materials Facilitators Nursery materials
Lack of capital	Form groups for savings and credit Training on group formation and loans and entrepreneurship Form production groups Start up income generating projects, e.g. beekeeping Start building modern houses	District council Village people TFCG	Training materials Facilitators Capital Examples of possible projects, e.g. bee hives Materials for groups Building materials
Good governance	Training in good governance for leaders and community members	District council TFCG Village government	Training materials Facilitators

After finishing the action plan, the project manager promised that he would bring it back soon and present it to the whole village at a public meeting. The village chairman then thanked everyone who had attended and closed the meeting.

**Village Visioning and Planning Meeting
Muyuyu, Rufiji District - 16 June 2007**

The Songas pipeline passes through or close to a number of biologically important coastal forests. Communities living in the vicinity of these forests are generally poor and dependent on agriculture, timber harvesting and charcoal production for their livelihoods. Rates of forest loss in this area are increasing. A project has been initiated - 'Natural resource management planning and implementation for selected villages in the vicinity of the Songas Pipeline, led by TFCG (Tanzania Forest Conservation Group) with funding from Songas through the Songas Community Development Programme – to assist these communities to manage their natural resources more sustainably. This vision based planning process was carried out to contribute to the project's second objective:

To assist selected villages to develop collaborative natural resource management plans.

A meeting was held in Muyuyu to come up with a vision for village environmental development, and to make an action plan around the vision. The meeting was attended by 18 women and 11 men, including village government officials, and was facilitated by TFCG. The meeting was opened by the village chairman.

The facilitators were:

Simon Moshia	Project manager, TFCG Coastal Forests
Hussein Harry	Coordinator of PAMS project, Rufiji district
Kate Forrester Kibuga	Facilitator

After we were introduced to the participants of the meeting, the project manager began by explaining the background to the meeting and the purpose of today's meeting. TFCG has already carried out two research studies in Muyuyu – a socio-economic study and a biodiversity study in the village forests (Ngumburuni FR). The objective of this meeting was to present the findings of the research and then for the participants to come up with a plan for the village natural resources.

1. Research results

The results of the research were summarised briefly. From the socio-economic study, issues that stood out as important for development were presented:

Poor state of agriculture

- large area of land
- shifting cultivation
- small shambas → results in hunger
- lack of expertise →

Conflict between farmers and livestock keepers

Forests - Ngumburuni FR

- cooperation between 7 villages is not working
- VEC isn't carrying out its responsibilities

The forests are being destroyed

- timber/logs – destruction → result of hunger
- charcoal production →
- shifting cultivation → poor agriculture
- fires

Lack of knowledge of good governance

No Saccos

Weak groups

After the socio-economic study, a brief summary of the biodiversity study was presented:

Ngumburuni FR - Poles

Transect	Live	Dead	Cut in the past	Cut recently
1	281	22	8	2

2	218	34	7	0
3	394	43	2	0

Ngumburuni FR – Trees

Transect	Live	Dead	Cut in the past	Cut recently
1	149	32	34	9
2	148	47	13	1
3	244	52	10	0

Destruction observed

- Shambas in the forest
- Roads cut through the forests
- Tree felling – for logs, short logs, timber
- Timber sawing
- Fires
- Animal traps

Forest cover: 50-100%

Growth under the forest: 10-50%%

There are few birds and animals endemic to the coastal forests, and many were not seen

The participants at the meeting agreed with the findings and said that they represented an accurate picture of the village and its environment.

2. The past and the future of the forests

The facilitator then began a discussion about the changes which had taken place in the forests in the last ten years in order to develop a common understanding amongst the participants about the current condition of the forests. Participants were invited to list trees and animals which had disappeared or which were not seen with such frequency as they were in the past, and also to list any other changes which had taken place in the last decade. The results of the discussion were as follows:

Trees no longer seen	Birds	Animals	Other changes
mvule	kinyagohalima	colobus	Lakes and ponds are drying up
mninga	kitorondo	monkey	There is less rain
mkongo	chiriku	mbawala	
mtondoo	nyawili	buffalo	
mnango		ngulungala	
mtanga	butterflies	elephant	
mtasi		mbalapi	
mtabwe		leopard	
mdundundu		ndohe	
muuya		mbutuka	
mtumba		nokela	
msufipori		nondoli	
mnyamwela			

One person explained that in the past, everyone lived in the river valleys/delta area, far away from the forest. At the time of Operation Vijijini, they were moved from the lower lying ground and resettled near Ngumburuni forest. People were not used to living near a forest and didn't know how to look after it, or to live sustainably with it. Forest destruction begins from that time.

After looking back at the past, we turned to the future, and thought about the changes that would continue to occur if we carried on in the same mode. We made another list, considering what would disappear in the next ten years, as follows:

Trees	Other changes
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The forests and all the trees will have disappeared	The village will become a desert The lakes and valleys will have dried up There will be no rain at all Poverty and hunger will be rampant
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People said that they would end up living in a desert, with nothing to support their lives, if they continue to live as they are now.

3. Visions

After talking about the future and picturing the desert that the village could become, we then began to talk about how the village could be if they changed their course. Participants reflected on how they wanted their village to be in ten years' time, taking into account the research results and the list of changes that had taken place in the last ten years. They sat in three groups, one group of women, one group of older men and one group of younger men, in order to discuss their vision for the future of Muyuyu. Each group came up with a vision, and a representative from each group came to explain their vision to the other participants.

Group 1 - Women

Those who cultivate in the forest and around water sources will have moved and will have planted trees in those places. There will be more forest guards to prevent uncontrolled cutting and burning of trees. Shifting cultivation will be outlawed. The forest will be as it was in the past, and everyone will be well informed about the environment.

Group 2 – Older men

The forest, and the animals, birds and insects of the forest will be as they were in the past. The land will be as it was in the past.

Group 3 – Younger men

We will have a fertile forest with animals of every type, we will farm using modern methods and we will have alternative forms of income generation, so that every household will have enough food. We will have modern houses and up to date education. We will have a forest which is owned by us, not shared with others, and we will have a strong protection force. We will have a land use plan and all the livestock keepers will have their own area.

After each group had read out their vision to the others, we put the two visions together to make one overall vision for Muyuyu:

Vision for Muyuyu
<i>We will have a biodiverse forest with a management plan for sustainable use. We will have modern agriculture on permanent shambas and alternative means of income generation, so that we have enough food. The village will have a land use plan. Our community will be well educated and have a good life.</i>

4. Supporting and opposing forces

After completing the village vision, we began to think about how to attain the vision, and to identify important forces supporting and opposing their desired future scenario. It was clear that there were things which could help people to reach the vision (supporting forces), but also that there were things which would hinder them on the way (opposing forces). We made a list of these forces. Each opposing force was written on a yellow card and each supporting force on a blue card. The one who made the suggestion came to the front and held the card up, so that everyone could see all the forces. The supporting and opposing forces generated were as follows:

Supporting forces	Opposing forces
We have a large area of good land	Not enough experts

We have forests We have people who can work We have a village government who we take part in electing We have a road We have projects ready to help us We	Poverty Laziness No savings and credit societies Poor supervision of community work Lack of agricultural equipment Lack of good governance Bad system of issuing licences for the forest Low level of education in the community Poor spirit of cooperation amongst community members Lack of market
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We then took each of the opposing forces in turn and looked at what the people in the village could do to weaken it, if anything. The suggestions made were as follows:

Opposing forces

Not enough experts

We can't do anything about this. But we have young people who are ready to be trained.

Poverty and laziness

Everyone should have their own shamba and should work hard on it

No savings and credit societies

We can set up groups

Poor supervision of community work

We can encourage each other to stop wasting time

Lack of agricultural equipment

We can contribute money to buy important things

Lack of good governance

Leaders should agree to change. We can elect good leaders.

Bad system of issuing licences for the forest

We should complain to the district authorities, and we can keep an eye on who is doing what in our forests.

Low level of education in the community

Children should go to school

Poor spirit of cooperation amongst community members

We can educate and criticise each other, between ourselves.

Lack of market

We can cultivate the crops for which there is a demand.

While we were discussing these issues, the subject of Ngumburuni Forest Reserve came up. The people of Muyuyu are unhappy about sharing the management of the forest with six other villages, saying that they have the largest share of the forest, and that other villages have already used up the resources in their parts of the forest so are now coming to harvest in the part of the forest belonging to Muyuyu. In Muyuyu there are other areas of forest which they could use, and they could easily leave Ngumburuni completely as a reserve, but the other villages would come in and steal from it. They then began to complain about the role of the district. Originally, Ngumburuni forest had an area of only 2226ha. Under REMP/PAMS? in 2003? the six villages agreed to enlarge the forest, forming a sort of buffer zone around the core forest. Ngumburuni therefore now has an area of 12,700ha. But now the people are not sure whether that area of forest land which they added to the reserve is their forest, or whether it formally belongs to the district. The centre of the problem, for the people of Muyuyu, is that when Songas came through, they put their pipeline through the buffer forest of Muyuyu. The district received all the trees cut down for their own use, and the people assume that they also received all compensation, while Muyuyu village received nothing. They also complain that the district can arrest people in the buffer forest for illegal cutting and they fine them, but the village is expected to guard the forest with their own guards.

This is an issue which clearly needs to be sorted out, firstly the problem of sharing the forest between seven villages and secondly the problem of who the forest actually belongs to. Songas say that they didn't pay compensation for any of the forest, since compensation only went for buildings and permanent crops, not for unused areas of forest. Again, this needs to be clarified.

5. Plan for the village

We collected the opposing forces cards and we used them to form the basis of the action plan for the village for the next ten years, together with the suggestions of the participants. We also took into consideration the two presentations at the beginning and the vision drawn up by the participants. We took an issue, the participants suggested activities which would help to deal with the issue, then we decided who would be able to provide help and what inputs would be needed. The action plan was as follows:

Muyuyu Action Plan

Issue	Activity	Who	Inputs
Destruction of the forests and water sources	Strengthen forest guards and VEC Start up tree nurseries Plant trees in deforested areas Education about environmental protection for leaders and the community Draw up a management plan for sustainable use of the forest Solve the problems of the seven villages managing the FR Training on building modern houses	TFCG District council Village people Village government	Training materials Facilitators Nursery materials Tree seeds Equipment for guards
Poor state of agriculture and lack of a market	Increase cooperation between community members Start up production and marketing groups Start up vegetable growing areas Start demonstration shambas Education about agriculture Use modern agricultural equipment, e.g. ox ploughs Access improved seeds at the right time	Village people District council TFCG Village government	Training materials Facilitators Agricultural equipment Improved seeds Group materials
Good governance	Vote in good leaders Training in good governance for leaders and community members	District council TFCG Village government	Training materials Facilitators
Lack of savings and credit societies	Form groups for savings and credit Training on group formation and loans and entrepreneurship Education on alternative income generating projects Build links with financial institutions	District council Village people TFCG Village government	Training materials Facilitators Capital Examples of possible projects Materials for groups
The village land use plan has not been completed	Education about land use Survey the land use areas Ask for the map to be brought to the village	District council Village people TFCG Village government	Training materials Facilitators

After finishing the action plan, the project manager promised that he would bring it back soon and present it to the whole village at a public meeting. The village chairman then thanked everyone who had attended and closed the meeting.

Village Visioning and Planning Meeting Nyamwimbe, Rufiji District - 17 June 2007

The Songas pipeline passes through or close to a number of biologically important coastal forests. Communities living in the vicinity of these forests are generally poor and dependent on agriculture, timber harvesting and charcoal production for their livelihoods. Rates of forest loss in this area are increasing. A project has been initiated - 'Natural resource management planning and implementation for selected villages in the vicinity of the Songas Pipeline, led by TFCG (Tanzania Forest Conservation Group) with funding from Songas through the Songas Community Development Programme – to assist these communities to manage their natural resources more sustainably. This vision based planning process was carried out to contribute to the project's second objective:

To assist selected villages to develop collaborative natural resource management plans.

A meeting was held in Nyamwimbe to come up with a vision for village environmental development, and to make an action plan around the vision. The meeting was attended by 10 women and 37 men, including village government officials, and was facilitated by TFCG. The meeting was opened by the village chairman.

The facilitators were:

Simon Moshia	Project manager, TFCG Coastal Forests
Hussein Harry	Coordinator of PAMS project, Rufiji district
Kate Forrester Kibuga	Facilitator

After we were introduced to the participants of the meeting, the project manager began by explaining the background to the meeting and the purpose of today's meeting. TFCG has already carried out two research studies in Nyamwimbe – a socio-economic study and a biodiversity study in the village forests (Minganji VFR). The objective of this meeting was to present the findings of the research and then for the participants to come up with a plan for the village natural resources.

1. Research results

The results of the research were summarised briefly. From the socio-economic study, issues that stood out as important for development were presented:

Poor state of agriculture	- large area of land
	- shifting cultivation
	- lack of expertise
No village land use plan	
Forests - Minganji VFR - VEC isn't carrying out its responsibilities	
The forests are being destroyed	
- charcoal production	
- shifting cultivation	→ poor agriculture
Lack of knowledge of good governance	
No Saccos	

After the socio-economic study, a brief summary of the biodiversity study was presented:

Minganje VFR

	Live	Dead	Cut in the past	Cut recently
Poles	370	13	1	0
Trees	149	23	26	0

Destruction observed

- Cultivation in the forest
- Charcoal burning

Condition of the forest

- The forest is secondary growth
- There are few large commercially valuable trees
- In the past, there were fires in the forest
- There are many small bushes
- The population of birds and animals is reduced
- Colobus monkeys were seen
- Forest cover: 50-100%
- Growth under the forest: 10-50%
- There are no roads in the forest

The participants at the meeting agreed with the findings and said that they represented an accurate picture of the village and its environment.

2. The past and the future of the forests

The facilitator then began a discussion about the changes which had taken place in the forests in the last ten years in order to develop a common understanding amongst the participants about the current condition of the forests. Participants were invited to list trees and animals which had disappeared or which were not seen with such frequency as they were in the past, and also to list any other changes which had taken place in the last decade. The results of the discussion were as follows:

Trees no longer seen	Birds	Animals	Other changes
mninga mvule mkongo mtondoo mhenge mkuruti mushrooms	gongo ninga tetera kololo kanga ngurikwi ngulukulu	mbawala lion hyena buffalo leopard	Water sources are drying up The climate is changing It's very hot

After looking back at the past, we turned to the future, and thought about the changes that would continue to occur if we carried on in the same mode. We made another list, considering what would disappear in the next ten years, as follows:

Trees	Other changes
All trees mentioned above will have disappeared	Water sources will have dried up completely The land will be less fertile Life will be difficult

People said that they would end up living in a desert, with nothing to support their lives, if they continue to live as they are now.

3. Visions

After talking about the future and picturing the desert that the village could become, we then began to talk about how the village could be if they changed their course. Participants reflected on how they wanted their village to be in ten years' time, taking into account the research results and the list of changes that had taken place in the last ten years. They sat in three groups, one group of women, one group of older men and one group of younger men, in order to discuss their vision for the future of Nyamwimbe. Each group came up with a vision, and a representative from each group came to explain their vision to the other participants.

Group 1 - Women

We request of the visitors that they should not be visitors just to sit or to disappear without doing anything. We want a dispensary and a village office. We want education and we want to farm together.

Group 2 – Older men

We will have forests and water. We will have enough food and fruit. The animals which disappeared will come back. We will have lakes and clear air like we used to in the past.

Group 3 – Younger men

We will farm using modern methods and we will have full employment. We will have a good road and clean water.

After each group had read out their vision to the others, we put the two visions together to make one overall vision for Nyamwimbe:

Vision for Nyamwimbe
We will farm using modern methods so that we will have enough food. We will have a good forest and the environment will be as it was in the past. The community will have been training and we will have alternative income generating opportunities so that we will have a good life.

4. Supporting and opposing forces

After completing the village vision, we began to think about how to attain the vision, and to identify important forces supporting and opposing their desired future scenario. It was clear that there were things which could help people to reach the vision (supporting forces), but also that there were things which would hinder them on the way (opposing forces). We made a list of these forces. Each opposing force was written on a yellow card and each supporting force on a blue card. The one who made the suggestion came to the front and held the card up, so that everyone could see all the forces. The supporting and opposing forces generated were as follows:

Supporting forces	Opposing forces
We have a large area of fertile land	Destruction of the forests
We have forests	Lack of rain
We have people who can work	Bad road
There is a road	Lack of social services
We can all work together	Lack of capital
	Destructive animals
	Low level of education amongst the community
	Lack of agricultural equipment

We then took each of the opposing forces in turn and looked at what the people in the village could do to weaken it, if anything. The suggestions made were as follows:

Opposing forces

Destruction of the forests

We can make laws preventing destructive practices, we can patrol, we can put signs up

Lack of rain

We can stop destroying our forests, we can look after the environment

Bad road

We can make a plan to fill in the holes

Lack of social services

We have a workforce which can carry water, sand, etc. for building

Lack of capital

There's nothing we can do about this

Destructive animals

We have groups, we can cull them, except that we don't have any equipment

Low level of education amongst the community

Education can help to solve a lot of problems. We are ready to be trained

Lack of agricultural equipment

There's nothing we can do about this.

5. Plan for the village

We collected the opposing forces cards and we used them to form the basis of the action plan for the village for the next ten years, together with the suggestions of the participants. We also took into consideration the two presentations at the beginning and the vision drawn up by the participants. We took an issue, the participants suggested activities which would help to deal with the issue, then we decided who would be able to provide help and what inputs would be needed. The action plan was as follows:

Nyamwimbe Action Plan

Issue	Activity	Who	Inputs
Destruction of the environment	Patrol the forest Survey the forest Demarcate boundaries and put up signs Draw up a management plan for the forest Start up tree nurseries Plant trees Training about the environment for the community Make a land use plan Strengthen the VEC	TFCG District council Village people Village government	Training materials Facilitators Nursery materials Tree seeds Patrol equipment Signs
Poor state of agriculture and destructive animals	Education about agriculture Use modern agricultural equipment Form farmers groups Draw up contracts with owners of equipment such as tractors Set aside an area for shambas Cull destructive animals Purchase of hunting equipment	TFCG District council Village people Village government	Training materials Facilitators Agricultural equipment Hunting materials Group materials Improved seeds
Good governance	Training in good governance for leaders and community members Access resources for administration	District council TFCG Village government	Training materials Facilitators
Lack of capital	Form savings and credit society Form production groups Seek loans Education about loans and entrepreneurship	District council Village people TFCG Village government	Training materials Facilitators Capital Group materials

After finishing the action plan, the project manager promised that he would bring it back soon and present it to the whole village at a public meeting. The village chairman then thanked everyone who had attended and closed the meeting.