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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the project
The Forest Justice in Tanzania is a three years project implemented in a partnership between the Community Forest Conservation Network of Tanzania, known as MJUMITA and the Tanzania Forest Conservation Group. The overall goal of the initiative is that ‘forest ecosystem services are conserved for the benefit of the nation and local communities’. The project is funded by the Accountability in Tanzania (AcT) programme. One of the activities implemented by FJT is monitoring forest governance and forest condition with a view to demonstrating the issues that contribute to the loss of Tanzania’s forest values and to provide a benchmark for improvement in forest governance.

1.2 Introduction of the survey
Forest Justice in Tanzania Project team has developed a dashboard monitoring tool aimed at measuring the strengths and weaknesses of community forest governance in Tanzania. The project aimed to improve forest governance at village, district and national levels by helping community members to understand their rights and demand for improvement of governance in their forest programs. The dashboard tool is designed to be implemented by MJUMITA members to assess important aspects of forest governance such as management quality, enforcement quality, transparency and accountability as well as level of participation in decision making and on how district forest offices and police are supporting communities in the participatory forest management.

1.3 Purpose of the survey
The overall aim of this survey is to assess performance of forest governance in the communities implementing participatory forest management programs in Tanzania by examining major issues on management quality, enforcement quality, transparency, accountability and level of participation in decision making. The results from this survey will help community members and other natural resources management stakeholders to identify forest governance gaps and come up with various mechanisms to resolve the situation.

1.4 Methodology
This study was designed specifically to interview Village Natural Resource Committees (VNRC) leaders, Village Government Councils Leaders and Community Members. The tool for data collection was a structured interview questionnaire which was divided into four sections. Section one of this questionnaire comprised background information of the village interviewed and section two contained various questions aimed at understanding various efforts undertaken by forest district offices and enforcement organs like police in supporting PFM programs. These data were collected from village government leaders and village natural resources committee leaders. While section three was designed for document verification and these documents were found in the village government offices or houses of the leaders. Section four questions were designed for the purpose of understanding on how community members were involved in PFM programs through focus group discussion. The focus groups comprised 10 community members who are non village council members or village natural resources committee members in each village interviewed. The FGD participants were purposefully selected with the village executive officer based on their knowledge and experience on conservation issues, representation from each sub village and gender balance. The interviews were carried out in villages implementing participatory forest management programs and data were collected from 186 villages with CBFM, 72 JFM and 75 villages implementing both JFM and CBFM. Data for this exercise was collected by MJUMITA members who are outside of village government and had been trained by zonal coordinators on how to undertake the study. The completed questionnaires were returned to MJUMITA zonal offices where MJUMITA zonal coordinators entered data from the questionnaires into a web based system. A total of 343 villages participated in the dashboard
exercise and 333 questionnaires were returned. Data from the web based system was processed and summarized automatically in simple reports for each village. The reports were returned to the communities during feedback meetings (initially to VNRC and VC members meeting and later to a general assembly meeting). This exercise aimed at creating community awareness on the current governance issues and helps them to understand the existing problems and create demand for change. Also data from web based system were exported to SPSS program and analyzed to generate an overall report showing forest governance trends across all MJUMITA villages. The questionnaires were administered from September to October 2011. The project intends to repeat the exercise after one to two years. The table below indicates the number of villages that participated in the survey in each geographical zone.

**Table 1: Sample of villages covered in each zone**

<table>
<thead>
<tr>
<th></th>
<th>Northern zone</th>
<th>Eastern zone</th>
<th>Southern zone</th>
<th>Western zone</th>
<th>Southern highlands</th>
<th>Central zone</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of villages participated in dashboard exercise</td>
<td>85</td>
<td>73</td>
<td>75</td>
<td>12</td>
<td>48</td>
<td>50</td>
<td>343</td>
</tr>
<tr>
<td>Number of dashboard returned and entered in the database</td>
<td>82</td>
<td>70</td>
<td>72</td>
<td>12</td>
<td>46</td>
<td>50</td>
<td>333</td>
</tr>
<tr>
<td>Number of dashboard not returned/ do not met the required standards</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>10</td>
</tr>
</tbody>
</table>
2.0 RESULTS AND DISCUSSION

2.1 Illegal cutting
The survey aimed to understand communities’ perception on whether illegal tree cutting in the forest reserve under participatory forest management, is decreasing or increasing. The study found that 58% of participants reported that illegal cutting has decreased and 30% of villages reported that illegal cutting has increased. Participants reported that the situation of illegal tree cutting in most forest reserves has been decreasing since the Tanzania government started to involve community members in managing forest resources. Village authorities particularly those with community based forest management (CBFM) have a clear mandate to protect their forest and its produce as well as using village forest bylaws to prevent illegal harvesting. This implies that participatory forest management is working to some degree in Tanzania to enhance forest management.

A chi-square test was used to determine the association of decrease or increase of illegal cutting with the level of awareness of community members on forest rules. The results obtained ($x^2$ of 0.005) indicates that there is a significant relationship between decrease or increase of illegal cutting in the forest reserve and awareness of community members on forest rules. It indicates that increased awareness amongst community members on rules regarding forest use is associated with a decrease in illegal cutting in the forest reserve, that means if the level of awareness is high then illegal cutting is likely to decrease and if the level of awareness is low then illegal cutting is likely to increase. Also village government sharing information on natural resources at the village assembly meetings mentioned as another factor that can influence on increase or decrease of illegal cutting in the forest reserve. This means that information sharing improve understanding of the community members on forest governance and changes the perceptions of those engaging in illegal harvesting. However, 12% of the data were treated as missing because some of the villages did not answer that question in the dashboard and stated that they did not know whether illegal cutting has decreased or increased. The study found that some interviewees were not aware or were unfamiliar with the forest management activities carried out in their villages.

![Figure 1. A pie chart showing perception of illegal cutting in the communities participating in forest management](chart.png)

2.2 VNRC meetings held in a year
The purpose of any committees that are formed shall be to receive instructions from people, to implement these instructions, and to report back regularly on progress (Child, 2007). For the environment committee
to effectively implement what they are expected to do, they are supposed to have regular meetings which will enable them to discuss and plan their work as well as resolving challenges they are facing on managing the forest. Participants were asked about the number of VNRC meeting held during the last one year. The study found that 52% of the participating villages were not holding VNRC’s meetings at all while 0.6% of the village natural resources committee reported that they are meeting but they failed to provide meeting minutes for verification and 29.4% were able to meet 1 to 4 meetings per year. Unavailability of VNRC records might be contributed to the fact that some of the VNRC members were not meeting at all, others were meeting but were not keeping records regarding their meetings and some of them reported to have misplaced the records. A non parametric Mann-Whitney U test was used to determine whether the number of meetings held by the VNRC was related to a decrease or increase of illegal cutting in the forest reserve. The results obtained as observed at Mann-Whitney U (0.514) indicated that there is no statistically significant relationship at \( P > 0.05 \) between an increase or decrease of illegal cutting with the number of meetings held by village natural resources committee. This implies that the number of VNRC meetings had no influence on whether illegal cutting in the forest reserve increased or decreased because holding VNRC meetings only is not sufficient in managing the forest. This should be accompanied by other activities such as patrolling the forest reserve, keeping records, sharing information with community members and enforcing forest bylaws by arresting and charging culprits according to the forest bylaws.

![Number of meeting held by Village natural resources committee members for the past 12 months](image)

**Figure 2. Number of meetings held by VNRC members**

### 2.3 Number of patrol conducted by natural resources committee

The survey sought to understand how community members are engaging in managing and protecting village forests. The respondents were asked to list the number of patrols conducted by VNRC members in the village forest reserve during the last 12 months. Analysis shows that 53% of the interviewed villages did not conduct any patrol in the village forest reserve for the past 12 months while 1% of VNRC’s records were not found to provide verification on patrol carried out for the last 12 months period and 24% of the participated villages carried out 12 or more patrols as indicated in figure 3. Participants reported that most villages were not able to do patrols in their forest reserve because they lack money to buy patrol gears such as boots, uniform, machetes and could not pay food allowances to committee members. The issue of food allowances was seriously raised almost by all villages that it is very difficult to keep on conducting...
voluntary forest patrols. Committee members were complaining that most of the time members were spending the whole day roaming in the village forest reserve without anything to eat and sometimes they get injured by illegal loggers while in the patrols and there is no medical support provided by either village government or the respective forest owner.

Inadequate patrols have resulted in an increase in illegal activities such as charcoal making, unauthorized grazing and increasing number of pit sawing machinery for lumbering which leads to forest destruction. This study concludes that the villages should establish a system of zoning areas in forest reserves for sustainable use where community members can harvest forest products legally and pay all the legal taxes to the government. The available money will be used to buy patrol equipment and pay food allowances to committee members. Also committee members need to increase the number of patrols in the forest reserve so that those who are involved in illegal harvesting can be arrested and village forest bylaws should be used to punish offenders. Furthermore the committee leaders should make sure that all crimes committed in the forest or unsustainable practices and fines administered should be recorded; and records be kept in the village office and shared with community members during general assembly meetings.

![Figure 3. Number of patrol conducted by village natural resources committee](image)

### 2.4 Forest management plan

The survey also want to understand if villages have already developed forest management plan as one of the strategies for managing their resources. To ensure that there is sustainable utilization of natural resources, the Forest Act of 2002 section 34 stipulates that village forest reserve (VFR) should be managed in accordance with forest management plans. The management plan should describe how the forest is managed, protected and clearly describe how much forest products can be harvested and from which areas. Therefore effective implementation of the approved forest management plan is a criteria for sustainable forest management (CAG 2012). The results from the interviewed villages shows that the majority (59%) of villages reported that there is no forest management plan for their forest reserve and (41%) reported that the village has approved forest management plan. The results from this study shows that the majority of villages participating in this study do not have forest management plans. The reason mentioned was that the district authorities which have a responsibility to assist villages in preparing FMP do not give priority in allocating adequate budget to support the activity and hence district official fail to provide technical support when needed. This result is supported by Controller Auditing General (CAG) report on the performance audit on the Ministry of Natural resources and tourism (MNRT) programs and activities from June 2011 to March 2012. The report found out that many of the Tanzanians forests reserve are managed without forest management plan but the harvesting of natural resources is done even in
forest reserves with no forest management plans. Based on the interview with the participants, it was realized that even those villages with approved forest management plan were not practicing sustainable forest management plan because they lack technical support from district forest officials.

Figure 4. Percentages of villages with and without Forest Management Plan

2.5 Schedule of reviewing forest management plan

A schedule of reviewing forest management plans is one way of improving good governance in forest management activities. This study also aimed at understanding whether the villages have a schedule for reviewing their forest management plans. The results from the survey show that 22% of the villages interviewed have a schedule for reviewing their forest management plan, 33% do not have a schedule for reviewing their forest management plan. Analysis of this question was done only to those villages which have forest management plans and data from those villages which do not have management plan which is 44% was treated as missing. The results from this study indicate that the majority of villages which have forest management plans were not reviewing their management plans or were not sure of the plan. It was reported that the majority of community members do not understand the importance of reviewing the forest management plans. Furthermore this study found that even in those villages where respondents mentioned that they intend to review the management plan, the review had not occurred. To ensure that sustainable forest management is practically implemented, a plan of reviewing management plans is essential since it provides communities with the opportunities of making changes in all issues that in one way or another seems to hinder the development of the forest reserve.

Figure 5: Percentage of villages which have schedule of reviewing Forest Management Plan
2.6 Area zones for sustainable harvesting of natural resources

Forests play a critical role in supporting the livelihoods of people in meeting their daily needs. Sustainable forest management can contribute to economic development by providing income, food security as well as the shelter as proved by many villages in the surveyed area. However, it is not just the level of harvesting that contributes to sustainability, but also the method.

As the part of this survey the community were asked if they created management zones in their forests for the purpose of harvesting. 22% of the villages interviewed have zones for sustainable harvesting and 26% of the villages reported that they did not have management zones in their forest for sustainable harvesting of forest products. The majority (52%) of the participating villages did not respond to this question. The majority of villages failed to respond on this question because the procedure of establishing Participatory Forest Management programs in their villages is still in progress; procedures like demarcation of the forest, formulation and approving forest management plan and bylaws is not completed because of inadequate funds allocated to forest sector by the district and central governments. It was reported that forest sector is not a priority in the national and district development programs and activities, though its contribution is great. Also it was realized that there are some forest reserves which are focusing only on conservation for the purpose of preserving sources of water and areas with high biodiversity therefore harvesting in such forests is not allowed. Also most of the villages were not zoning their forest for sustainable use of natural resources because of political influence who think that conservation of forest can work better by prohibiting all livelihood activities carried out in the forest. However a sustainable harvesting plan is very important to the communities depending on the availability of natural resources for survival and this enables them to fulfill their needs while preserving the forests for the future. The impact of not zoning the area for sustainable use is that, community members will continue clearing all forests outside the protected area, after several years all forests outside protected area will be finished and people will start illegally harvesting products from forest reserve. Therefore it is important to set aside a specific area in the forest reserve which will be legally used by communities for various uses to sustain their livelihood rather than completely preventing the harvesting which might accelerate illegal harvesting. Forest management plan should clearly stipulate the maximum amount of resources that are allowed to be harvested in a year and also should briefly explain on the whole process of obtaining the legal permit and amount requires for harvesting forest resources. On the other hand the revenues obtained from this area can be used to pay committee expenses such as buying patrol gears such as boots, uniforms and machetes and paying food allowances to committee members.

![Figure 6. Percentage of villages with or without sustainable harvesting plans.](image)

2.7 Record keeping by VNRC

Keeping records regarding management of forest resources is vital in attaining sustainable forest management. The majority of interviewed villages (55%) were not keeping records regarding forest management while a few villages (41%) were keeping records on natural resources management and 4% of...
the data are missing as shown in figure 6. Most of the participants reported that, the village natural resources committees were not keeping records regarding natural resources management because their villages do not have the budget or any mechanism of getting money to buy record keeping materials such as ledger book, pens, papers, rural and so on. Village leaders reported that, most of the time they were using their own money to buy notebooks and pens to keep some of the information which seems to be necessary to them. However, the problem of keeping records was still revealed in villages that had received record keeping materials (Ledger book, receipt book and files) from the East Usambara Forest Landscape Restoration (EUFLR) Project a partnership project between WWF and TFCG on building capacity for VNRCs on record keeping. Under documents verification part, this study found out that most of the record keeping documents were empty. That means that nothing was recorded on fines obtained from those who broke the laws; how the bylaws were enforced; the amount of forest products sold and the revenue obtained and how was used. Some of the villages filled only a few pages of the ledger books. Generally the findings indicate that there is poor transparency on the information regarding natural resources management as well as use of revenues obtained from natural resources. Since records are not kept it is difficult for community members or other stakeholders to access important information which might have effect on their life. Therefore village government should establish a systematic way of keeping records on revenue collected from fines and other fees of forest products, expenditures and enforcement records and kept at the village office, so that they can be accessed easily when needed by any community member or other forest stakeholder.

![Percentage of village natural resources committee keeping records](image)

**Figure 7. Percentage of village natural resources committee keeping records**

### 2.8 Information sharing

Most of participating village government authorities (73%) were not sharing information regarding natural resources management with community members and 25% were sharing information while 2% did not respond on the question as indicated at (figure 8). It was reported that the majority of VNRC and VC members were not sharing information on forest management because the records on natural resources management were not kept as discussed on the previous section. Some of communities in focus group discussion revealed that even the little information kept by some villages were not shared with communities because forest conservation is not taken as a priority in their village assemblies. It only becomes a priority if it is a source of revenue generation such as selling forest products or fine for those who broke the laws. In some cases VNRC members reported that records regarding management of forest resources were kept but there is no tendency of presenting their reports at the village assembly meeting. Sometimes forest management reports were presented to the village government authorities but were not shared with community members due to laxity of village leaders. A chi-square test was used to determine the association of sharing information and participation of community members in decision making. The results obtained ($\chi^2$ of 0.000) indicates that there is significant relationship between sharing information and participation of community members in decision making. This implies that the village government authority which shares information with community members is likely to involve people in making decision
in important matters such as financial issues. Accessibility of information enables community members to participate in making decisions on issues benefiting the community in general and understanding the progress of activities agreed to be done. In ensuring that community members are effectively engaging in management of forests resources; there should be a mechanism which allow members to access all information regarding forest management and these information should be written in a simple language and freely available in the village government offices.

Figure 8: Information sharing in the villages participated in the study

2.9 Mechanism of sharing information

Figure 8 shows how information from natural resources management was shared in the participating villages. This study found that 43% of the participating villages were not sharing information regarding natural resources management while 41% shared information with lots of people by reading all the reports on natural resources management at the village assembly meeting and posting them at the village notice boards. This result indicates that even though the majority of villages are not sharing information regarding natural resources management still a number of villages sharing information shown practicing a democratic way of sharing information whereby members were given opportunity to questions and get explanations of the issues presented. Also it is very advantageous for community members who failed to attend the general assembly meeting so that they can read the reports from the village notice board.

Figure 9: How information from natural resources management was shared

2.10 Village general assembly meeting

The primary mechanism for making decisions and for checking that decisions are implemented in the community is the general assembly meeting where all matters such as financial issues, progress of all activities are presented and agreed face to face (Child, 2009). Community members have the right to receive and discuss issues at general meetings no less than four times each year as stipulated by Local
Government Act of 1982 as amended 2002 section 4. Participants were asked the number of general meetings held in the village in last 12 months. The majority (43%) of the participants reported that there was no meeting held in their village for the past 12 months, 2% of villages reported that the evaluators could not found documents on meeting minutes, 21% of villages reported that 2 to 3 meetings have been conducted in their villages while 28% held 4 meetings as indicated in figure 10. The study found that most of villages visited were not holding general meeting regularly. Based on the interview from the participants, the poor attendance of community members at the general meeting leads to inadequate quorum. A meeting is not deemed to have been officially held nor can decision or report be formalized without a quorum. Furthermore the negligence of some village leaders was mentioned as another reason for most of villages to have no or few meetings in a year. In order to get a clear picture on whether the general assembly meetings were held, village leaders were asked to provide meeting minutes, unfortunately majority of village authorities failed to provide meeting minutes. The reasons for not submitting minutes varies from one village to another, some villages did not held meetings at all while others held meetings but they didn’t keep records of the meetings. This study concludes that village leaders should ensure that 4 or more meetings are held in a year and make sure that majority of community members attends meetings. Also village authority should use local government authority laws which provide the basis for village authority to punish members who fail to participate at the village general meetings. General assembly meetings provide the opportunity to community members to share the benefits, make decisions, to support community activities and get information about all the activities of the community including on natural resources management.

![Bar chart showing number of village general meetings held](image)

**Figure 10: Number of village general meetings held**

**2.11 Percentage of women participating at the village assembly meeting**

A gender balanced participation in annual general meetings is of great importance in ensuring that every community members has the opportunity to participate in making decisions on natural resources management issues. Figure 11 shows that 28% of villages reported that more than 50% of women attended the last village assembly meeting while 28.2% of villages participated reported that less than 50% but more than 25% of women attended the last village assembly meeting in their villages. Generally this study found that the majority of women were attending village assembly meetings and this offers the opportunity for women to participate in activities or making decisions on various issues regarding natural resources management since they are mostly presented at the general assembly meetings. It was revealed that the reason behind of this attendance is that women are the ones who are taking care of the family therefore they are mostly available in the village contrary to men who are always travelling from one place to another doing business or looking fertile land for agriculture. On the other hand women were reported
to be more silent when discussing any issues at the general assembly meeting. Therefore village leaders should introduce a proper way of engaging women in the discussion during the general assembly meeting to ensure that their voices are heard and their ideas are considered when making any decision.

![Percentage of women attended the last general meeting](image)

**Figure 11: Percentage of women attended the last general meeting**

### 2.12 Decision making on spending revenue obtained from natural resources

This study also aimed at understanding the process on how community members are involved in making decisions over the revenues obtained from natural resources. The results from the survey as shown in figure 12 found that 74.2% of villages participating in the study reported that decisions over expenditure of the revenues obtained from natural resources are made by village natural resources committee members and village government authorities and each institution is deciding on how to spend its percentage. This is followed by 21.9% of village assembly meeting reviews and approves the budget of village government and village natural resources committee and 3% of the data were treated as missing because this question in some of villages was left blank. This study found that most of decision making process on expenditure of the revenues obtained from natural resources is made by village government authorities. In some villages, government authorities make decisions on spending the revenue then present feedback to village assembly meeting but most of them do not present feedback to the communities at all. This result is supported by the study conducted by Kessy (1999) as cited by LEAT (2012) who found the decision making process in local authorities is mainly done by local bureaucrats and not community members or the elected members (councilors) as one would expect. In an ideal situation, it is assumed that community members make decisions while government authorities implement those decisions.

A chi-square test was used to determine the association of decrease or increase of illegal cutting and the process of village assembly meeting to review and approves budgets for Village Council and Village Natural Resources Committee. The results obtained ($\chi^2$ of 0.005) indicates that there is a significant relationship between a decrease or increase of illegal cutting in the forest reserve and the process of village assembly meeting to review and approves budgets for VC and VNRC. This implies that if decisions on spending revenue are made by the communities at the general assembly meeting then illegal cutting is likely to decrease. If decisions on spending revenue are made by only local authorities then illegal cutting is likely to increase. This indicates that the process of involving community members on decision making on how to spend revenues obtained from natural resources makes members understand that they are the owner of the forest reserve and they have the responsibility of protecting it.
2.13 Distribution of revenue obtained from forest resources

Figure 13 shows the distribution of money obtained from natural resources' fees and fines. 52% of the interviewed villages reported that 100% of revenues obtained from fees and fines of natural resources are retained by the village government and distributed among government authority and village natural resources committee. Participants explained that the percentage of income distributed to village natural resources committee are used to enable VNRC to improve their performance in managing forest resources and other percentage distributed to village government is directed to village development programs. 28% of the villages interviewed reported that they have no idea on how money collected from natural resources is distributed. Participants said that there is no clear mechanism which explains how such revenue is distributed. Generally there is poor involvement of community members in all issues concerning distribution of revenues at village level as well as to the district level. 17% of participants said that a specific percentage of revenue collected from fees and fine goes to district council and others remain to the village council. However, the study found that the majority of villages in the study area are not getting enough revenue from the forest reserve since they are only targeting on conservation and burn all other activities. The only revenue they depend from the forest as a source of income in supporting forest management activities is fine which is very small to meet all the expenses of managing forests. When the fine is decreasing then the committee is likely to fail to perform their duties such as patrolling. Therefore this study is calling for villages to find alternative way of getting revenues to support forest management activities.
2.15 Village forest bylaws
Forest bylaws are an essential component in the process of managing forest resources. Figure 14 shows villages with forest bylaws. 63% of villages participating in this study have forest bylaws while 37% of the interviewed villages do not have forest bylaws. Although this study shows that the majority of villages have forest bylaws still the percentages of villages which do not have while engaging in participatory forest management is big. For communities to attain sustainable resources management, the district needs to allocate enough funds to PFM programs so that the proposed forest reserve can complete the process of establishing PFM and have forest bylaws. Availability of forest bylaws provides legal mandate to village government authorities to manage and protect natural resources in ways that are both sustainable and profitable (LEAT, 2012).

Figure 14: Villages with forest bylaws and those who don’t have forest bylaws

2.16 Villages with approved forest bylaws
This study also aimed at understanding the extent to which district forest offices were committed in supporting village forest management through approving village forest bylaws. Only data from those villages which have forest bylaws were analyzed as indicated in figure 15. The majority, 82% of the villages have approved forest bylaws while 18% of the participating villages do not have approved forest bylaws.
This indicates that the procedures of approving forest bylaws at the district level have been improved compared to the previous years. On the other hand, lack of approved bylaws in some of the villages discourages the efforts of VNRC to manage their forests because they lack power to punish the culprits and hence that accelerated forest illegal activities in the village forest reserve. Village authorities in collaboration with non-government organization should continue pushing district council to approve pending village forest bylaws.

![Figure 15: A pie chart showing percentage of villages has approved forest bylaws](image)

2.17 Explanation of forest bylaws at the general meetings

This study also aimed to understand whether village government authorities took initiatives to make sure that community members understand rules regarding natural resources management. Participants were asked if forest bylaws have been explained in a village assembly meeting in the last 12 months. Figure 16 shows that 58% of the participated villages reported that, the forest bylaws had not been explained at the village assembly meeting in the last 12 months. Only 39% of the interviewed villages reported that, forest bylaws were explained at the village assembly meetings. It was reported that the bylaws were explained at the village level when it was first drafted by representatives from the village (VC and VNRC members) and tabled to general meeting for approval. The majority of village government authorities do not have the tendency of explaining village forest bylaws to its members; this led into low awareness of community members about the rules regarding their forest management. This was revealed when participants asked the number of adults in the community aware with rules regarding forest management. The results shows that the majority of the participants (35%) reported that less than 45 people understand the rules regarding natural resources as indicated in figure 17. That means only village council members and village natural resources members who participated in bylaws formulation are aware of the rules. A non-parametric Mann-Whitney U test was used to determine whether awareness of every community members on rules regarding natural resources use have relationship with the decrease or increase of illegal cutting in the forest reserve. The results obtained as observed at Mann-Whitney U (0.005) indicated that there is a statistically significant relationship at $P < 0.05$ between increase or decrease of illegal cutting with awareness of every community members on the rules regarding natural resources use. This implies that awareness of forest rules decreases the frequency of people engaging in illegal harvesting and *vice versa*. To increase awareness among community members village government authorities should put more effort in explaining forest bylaws to village assembly meeting.
Figure 16: Percentage of villages explaining forest bylaws at general meetings

2.18 Penalty increment for repetition of crimes
This study also aims at understanding whether the process used to penalize offenders was discouraging illegal forest crime in MJUMITA villages. 38% of the interviewed villages reported that their forest bylaws provides legal basis for the penalty to increase when a perpetrators is committing multiple crime. While 17% of villages reported that their bylaws do not explain anything about penalty increment when a person is committing multiple crimes and 45% of data were treated as missing because some of the villages do not have forest bylaws and other their bylaws is in the process of formulation therefore were not able to tell on how a person with multiple crime is punished. Though some of the bylaws provides legal basis for charging perpetrators according to the number of crime committed but in reality, the majority of these villages are not using the specified laws to charge offenders. Often community members report catching people harvesting illegally in the forest reserve and send them to the village authority but most of the time village leaders were accused of taking bribes and freeing the offenders.
2.19 Number of incidence of illegal cutting punished in consistence to forest bylaws

Governance in the forest sector should consider all the stipulated rules and regulation in managing the forest resources. Community members should abide by the forest bylaws and in case of any violation of the stipulated rules or regulations, the bylaws should be used in punishing the guilty person. Figure 19 shows that 56% of participants did not respond on this question because some villages do not have forest bylaws or approved bylaws and others did not keep records on the crime committed. Also 27% reported that there was no crime detected which resulted in someone being punished for the last 12 months and 11% of the villages administered punishment to the majority of crimes found in accordance to forest rules and 6% of villages administered punishment to just a minority of crimes committed in according to the rules regarding forest use. This study shows that there is poor performance in enforcing village forest bylaws in the villages visited, most of crimes occurred in the area are not punished accordance to village forest bylaws and sometimes no punishment was administered to the culprits. It was reported that this situation is often accelerated by some unfaithful leaders who were accused of taking bribes instead of bringing offenders to the village council for punishment. Additionally the delayment of district forest office to approve some of forest bylaws was mentioned as another problem hinder enforcement of forest bylaws. The absence of approved forest bylaws causes difficult to VEC members to protect and manage forest because most of perpetrators refuse to abide with those rules.

2.20 Mechanism to comment on performance of VNRC members

Figure 20 shows mechanism of community members in commenting on performance of village natural resources committee members. The result from the study shows that 44% of the participated villages reported that the mechanism used to comment on the performance of VNRC members is to attend and
comment at the village assembly meeting and posting comments at the village suggestion box. Though community members recognize the available opportunities of commenting on the performance of VNRC members, participants reported that these opportunities are not effectively utilized. It is very common to see a committee member not performing his/her duties correctly remain to his/her post until the next election. Also 41% of the participants reported that there is no mechanism for commenting on performance of VNRC members and this denies the right of communities to make committee members accountable for not fulfilling their responsibilities. Other mechanisms such as attending and commenting at the VNRC, VC and visiting village government offices were rarely used (5%) and 10% did not respond on the question. Generally this study shows that majority of community members do not have the traditional of commenting on the performance of VNRC.

Figure 20: A bar chart showing mechanism of commenting on the performance of VNRC members

2.21 Right of the community members to replace a VNRC member
It is important that community members have the right to call a general assembly meeting to discuss important matters such as performance of various committee in the village. This is an important safeguard since it enables the community to demand accountability from the committee whenever they wish and also to hold special election if they consider to replace all or some of committee members who fail to carry out their duties (Child, 2009). Figure 21 shows the mechanism used by community members to replace a VNRC member as stipulated in the forest bylaws. 52% of the participated villages did not respond on this question and these data were treated as missing while 7% reported that nothing is written on forest bylaws about community members replacing a VNRC member. However 22% of villages reported that they are replacing a VNRC member during the next VNRC election meeting and this is followed by 13% of the participants who reported to hold a special vote in the next village assembly meeting and elect a person who can replace him/her. This results indicate that the process of replacing committee members in the study area is not common and most of forest bylaws in a number of villages do not show how communities can replace a committee members when failed to carry out their responsibilities. It is suggested that the bylaws should stipulate clearly the mandate of communities to call the committee at the village assembly meeting and demand explanation on specific issues and hold them accountable for their wrong doing. This mechanism will help community members to deal with disgruntled or radical members who are disrupting the community.
Figure 21: Mechanism of replacing VNRC member
CHAPTER THREE

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 Natural resources management

The quality of natural resources management in the villages visited is generally poor and this has been revealed through poor commitment of natural resources committee in implementing their responsibilities. The committees do not hold meetings or patrol village forest reserve as required and in other areas the committees are not active at all. This was demonstrated through the lack of meeting minutes and patrol records. It was reported that the majority of villages lack budgets for buying patrol gears such as boots, clothes, machetes and allowances for committee members. Also, most villages were not zoning their forest for sustainable use of natural resources because of political influence who think that conservation of forest can work better by prohibiting all livelihood activities carried out in the forest. This study concludes that villages should set aside specific areas in their forest reserves for legal, ecologically sustainable uses. Users should pay a small amount of money which will be used to pay committee expenses such as buying clothes, machetes, boots, food allowances and materials for keeping records. This will increase morale of committee members to engage in managing forests in an efficient and effective way.

Furthermore, committee members reported that they are unaware of their responsibilities in managing the forest since after being elected they did not receive any training or manual explaining their responsibilities. However following the dashboard monitoring exercise, people started to become aware of their responsibilities and their rights and promised to make changes on various issues which seem to hinder practices of good governance. Also participants asked MJUMITA to prepare and distribute manuals regarding roles and responsibility of natural resources committee.

Despite poor natural resources management, the study shows that community members perceive that illegal cutting in the forest reserves has been decreasing if compared to previous years, because of Participatory forest management initiatives. Village authorities particularly those with Community based forest management (CBFM) have a clear mandate to protect their forest and its produce as well as using village forest bylaws to prevent illegal harvesting. Increased awareness on rules regarding natural resources had an influence on decreasing or increasing illegal cutting in the forest reserve (x² of 0.006) as observed at Chi-square test analysis. On the other hand a non parametric test Mann-Whitney U shows that the number of VNRC meetings that were held had no influence on decrease or increase of illegal cutting in the forest reserve. VNRC meetings only are not sufficient in managing the forest but should be accompanied by other activities such as patrolling the forest reserve, keeping records, sharing information with community members and enforcing forest by laws by arresting and charging culprit using village forest bylaws.

3.2 Transparency

In terms of transparency, the study found rather poor performance in most villages. The majority of village governments and village natural resources committee are not keeping records regarding natural resources management. Evaluators in most of villages could not find important records on natural resources management such as forest management plans, forest bylaws, meetings minutes and other VNRC documents (i.e patrol book, expenditure, revenue obtained from fees and fines). Only a minority of the villages that participated were keeping some of the information on natural resources management. It was reported that this situation were contributed with the lack of budget for buying record keeping materials such as ledger book and pens. The study found that even the little information recorded was not shared. Therefore villages should identify an activity which will provide money to committee members to buy record keeping materials such as books and pens. Village leaders should make follow up on committee
activities and make sure that all activities and financial issues are recorded and presented at the general assembly meeting and posted on the village notice boards where everyone can see.

3.3 Community participation in decision making
The study shows that there was poor involvement of community members in decision making. People knew very little about the revenue collected from forest fees or fine and how it was spent because decisions were made by village government leaders and committee leaders. Also people were not aware on how money was distributed because there is no clear guideline explaining on how the revenue is distributed. This is the result of inadequate or lack of general assembly meeting where community members can be involved in making decisions in all matters such as financial issues, agreed on implementing certain project and get information about all the activities of the community including on natural resources management. All decisions about forest fees or fines should be made at the general assembly meeting with required quorum to make a formal decision. On the other hand this study found more women attend general assembly meetings than men which suggests that if compared to the previous years at the moment women’s interest are included during the decision making.

3.4 Law enforcement
The study found poor enforcement of law. Often offenders were charged low penalties which were inconsistent with forest by-laws. People said that most of village leaders feel uncomfortable charging their relatives or their neighbors. In some cases penetrators were paying bribes and were being let free. Such mechanisms do not act as deterrent against future violation of laws rather it allows offenders to benefit from the act. Lack of approved bylaws to some of the villages reported to encourage illegal activities since the committee lack power to enforce rules. Also low awareness of community members on rules regarding management of forests leads to the majority engaging in forest degradation. This is the result of a lack of a mechanism of explaining rules to community members. Poor enforcement of laws was evidenced by presence of bribes, increase of illegal activities such as pit sawing, charcoal making and unauthorized grazing. Community members should abide by the forest by-laws and in case of any violation of the stipulated rules or procedures, the by-laws should be used in prosecuting the guilty party. District officials should approve all village forest bylaws in time and the village authorities should make sure that approved laws are enforced. Village authorities should make follow ups with district regarding approval of bylaws and if the problem persist, they should seek support from other non government organization like MJUMITA to make follow up.

1.5 Accountability
This study found that there is a lack of accountability in the villages participating in forest management programs whereby community members or committee/village leaders were not implementing their responsibilities. It was noted that most community members in the visited villages were not attending general assembly meetings and hence miss the opportunity of participating in decisions making of matters which sometimes affects their life. People said that only few people and leaders were engaging in forest management activities such as patrolling and attending meetings. On the other hand the committees were not accountable to the communities because they were not sharing any information regarding management of forest at the general assembly meetings. Also the majority of participants thought that they do not have the right to fire or replace corrupt or incompetent committee members because laws and rules were not clear about it. The committee needs to be accountable to the communities by sharing reports at general meetings and communities should make follow up to ensure that committee are implementing what they have been instructed. Community members should attend general meetings and participate in making decisions on key matters.
4.0 Reference


