



Views and preferences for compensation under REDD+ in Tanzania

Kilosa pilot project case study



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Poverty and sustainable development impacts of REDD architecture: options for equity growth and the environment

About this project...

Poverty and sustainable development impacts of REDD architecture is a multi-country project led by the International Institute for Environment and Development (IIED, UK) and the Norwegian University of Life Sciences (Aas, Norway). It started in July 2009 and will continue to December 2013. The project is funded by the Norwegian Agency for Development Cooperation (Norad) as part of the Norwegian Government's Climate and Forest Initiative. The partners in the project are Fundação Amazonas Sustentável (Brazil); Hamilton Resources and Consulting (Ghana); Netherlands Development Organisation (SNV) (Vietnam); Sokoine University of Agriculture, Faculty of Forestry and Nature Conservation (Tanzania); and Makerere University, Faculty of Forestry and Nature Conservation (Uganda).

The project aims to increase understanding of how different options for REDD design and policy at international, national and sub-national level will affect achievement of greenhouse gas emission reduction and co-benefits of sustainable development and poverty reduction. As well as examining the internal distribution and allocation of REDD payments under different design option scenarios at both international and national level, the project will work with selected REDD pilot projects in each of the five countries to generate evidence and improve understanding on the poverty impacts of REDD pilot activities, the relative merits of different types of payment mechanisms and the transaction costs.

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Introduction

1.1 REDD+ and the Tanzania Forest Conservation Group

At its most basic, REDD+ is about reducing emissions from deforestation and forest degradation through carbon trade (Angelsen and Hofstad 2008), and therefore the payment mechanisms and benefit-sharing systems for REDD+ are of great importance. A growing body of work is dedicated to identifying the elements and design of appropriate distribution systems of REDD+ benefits. One main focus is on how to ensure a fair distribution system that benefits rather than penalises the most vulnerable and poorest forest communities (Peskett *et al.* 2008; IUCN 2009; Peskett 2011; Skutsch *et al.* 2011).

Since 2008, Tanzania has been working to create a national REDD+ strategy. Nine REDD pilot projects have been put in place in different areas of the country, with the main aim being to gain experience and learn more about what constitutes good practice for REDD+, in order to influence Tanzania's national REDD strategy (URT 2013). In 2012, a report describing the experiences and lessons of (equitable) benefit-sharing from these pilot projects was published (Campese 2012).

This is one of the pilot projects for the Poverty and sustainable development impacts of REDD architecture: options for equity growth and the environment project, and is being carried out by the Tanzania Forest Conservation Group (TFCG) in collaboration with the Tanzania Community Forest Network (*Mtandao wa Jamii wa Usimamizi wa Misitu Tanzania*, or MJUMITA) in Kilosa (and Lindi) districts (TFCG and MJUMITA 2009). One of the project's objectives is to test different payment modalities. By the end of its five-year project, they will have devised 'a pro-poor approach to reducing deforestation and forest degradation by generating equitable financial incentives from the global carbon market' (*ibid*, p.9).

One step towards achieving this goal is to carry out several 'test payments' in the REDD pilot villages. In 2012, villages which had completed the main steps of community-based forest management (CBFM) process (such as creating a village land-use plan (LUP) and establishing village bylaws¹) have been paid a certain amount of money at the village level. The amount was based on calculations of historical deforestation combined with carbon prices from the voluntary market. The village forest area to be placed under protection (minus the area left out, representing leakage) was then calculated. During village assembly meetings, it was decided how much of the amount should be paid to individuals and how much was to be put in a community fund meant for community development projects.

1.2 Study on compensation preferences under REDD+

One of the project aims is to look at pro-poor REDD architecture. As such, the Kilosa pilot site is now the focus for exploring local people's perceptions of different payment formats, their views on benefit sharing, and their understanding of terms such as sustainability. This will contribute to the discussion around costs and benefits of REDD+ activities and especially on how to design a pro-poor payment system in Tanzania. The information presented in this report was gathered by carrying out a series of focus group discussions (FGDs) in four selected REDD pilot villages in Kilosa District in December 2012. The information gathered in the FGDs also fed into a choice experiment on the same topics. The choice experiment was conducted at a later stage and the results are presented in a separate report.

1. Among other things, these bylaws determine the benefit-sharing agreements and specific distribution rules for REDD in the village.

Methodology

2.1 Focus group discussions

Focus group discussions were used to acquire the information we needed. There were several reasons for this. When discussing issues around payment formats, not only were we interested in the types of formats the participants would prefer, but why they preferred them. A focus group discussion enabled these types of answers more so than if people were asked to respond individually to a standardised questionnaire, especially since it allowed the group to discuss amongst themselves and form opinions in response to what others had said. Group dynamics were especially interesting when testing the different opinions that emerged. By adjusting the questions or presenting different scenarios, we were able to see when, and how, answers changed and how it affected individual and/or group answers. As such, it was not only factual information which was gained through these discussions. They also provided important insights into group behaviour and thought processes.

Individual interviews and household surveys are good ways of recording answers based on personal characteristics, but so are FGDs. For the discussions, we split the participants into different groups, based on pre-set criteria, and recorded who said what, to later analyse their responses according to their recorded personal characteristics. Another advantage of using a focus group discussion was the favourable time element, as more people's views could be recorded in a shorter amount of time. Caution is needed, however, when deciding the size of a focus group, to ensure that everyone participates. Likewise, it is important to prevent a few individuals from dominating the discussions and discouraging others from speaking openly and freely.

2.2 Focus group criteria

Drawing on the tools and experiences of a similar set of focus group discussions in Vietnam (Enright 2013) we went to Kilosa District to test out the tools and see what issues emerged. As we expected differences due to the country context, this one-day exercise was invaluable and led us to adapt more to 'the Tanzanian case', an important outcome. We learnt several important lessons about village selection, focus group size and characteristics, complementary research techniques and how best to modify the research instruments used in Vietnam.

■ Include one village which has, and three which have not, conducted a REDD test payment.

TFCG has come quite a long way in their project implementation: village natural resource committees (VNRCs) have been established in all pilot villages. Alternative livelihoods and income-generating activities have also started in most, and LUPs have been finalised in many of the villages. Those who have completed the LUP process have also set up a special REDD payment committee and taken part in a one-day test payment. The village, based on a set of forest criteria (size and quality of conserved forest) is given a lump sum of money to be distributed according to their REDD village bylaws. Nyali village had already been through this process. We choose this village to participate, as it would provide us with insights into the villagers' experience and perceptions of the process. However, we knew that it would also highly influence their views on REDD payment systems and benefit sharing in general. Therefore, we deliberately chose the other three villages – Ilonga, Idete and Mfluni – as they were in various earlier stages of their LUP process and had not had yet experienced the REDD test payment process.

- **Have a maximum of eight to nine participants in each focus group.** We opted against large focus groups, as we saw that it might be more intimidating for people to speak up in a larger group, where a few individuals might dominate. Being easier to manage a smaller group, it also allowed us to better facilitate the discussions so as to involve all members.
- **Include a resource people's focus group in each village.** This group should consist only of village leaders and those directly involved in forest protection, for two reasons: so they did not participate in the general focus groups and influence other people's responses, but also to get their unique viewpoints, assuming they have a different opinion to the rest of the villagers.
- **Divide focus groups into male and female groups.** As forest use and dependence often varies a lot between different genders, we wanted to capture this. Women also often have a harder time speaking up in a room filled with men, which became very apparent during the three mixed FGDs we held. Here, the few female participants hardly participated, and when asked for their opinion directly, most simply agreed with what had been said previously. Therefore, to ensure that female voices were heard, we had a women-only focus group in each village. Although we were also interested in exploring further participant characteristics, we chose not to stratify our focus groups further, both due to the logistical challenges involved in finding the different participants and because we felt there was still enough participant variety within the three different strata we already had. It is worth noting, however, that in a group with large disparities (for example, in terms of income or education) the better-off and better-educated community members might overshadow and intimidate others who are less well-off or educated.
- **As far as is feasibly possible, seek variety in your participants' characteristics such as age, income, wealth and forest use.** This helps you to see how these characteristics affect their perceptions and to enable as many varied responses as possible. We aimed for variety within each of our twelve focus groups. Although each group consisted of only around eight to nine participants, the complete data set of twelve focus groups in many cases provided us with a large enough sample size to identify certain characteristic trends.
- **Carry out a key resource person interview in each village before the focus groups** to learn about the general characteristics of the village, and so that you do not have to spend time during the focus group discussions getting this information.
- **Wrap up each village visit by also visiting the forest area with a representative from the village natural resource committee.** This is so that you can ask any follow-up questions and test answers once you have seen the state of the forest, extent of forest use etc.

Before the focus group discussions took place, we also interviewed TFCG to get an overview of their activities to date and in the future, and consulted the District Natural Resources Office. Both were involved in deciding which villages would participate in the FGDs, based on our pre-set criteria. A staff member from TFCG helped with logistics, as he was very familiar with these villages and could communicate easily with them regarding our focus group selection criteria and planning schedules etc.

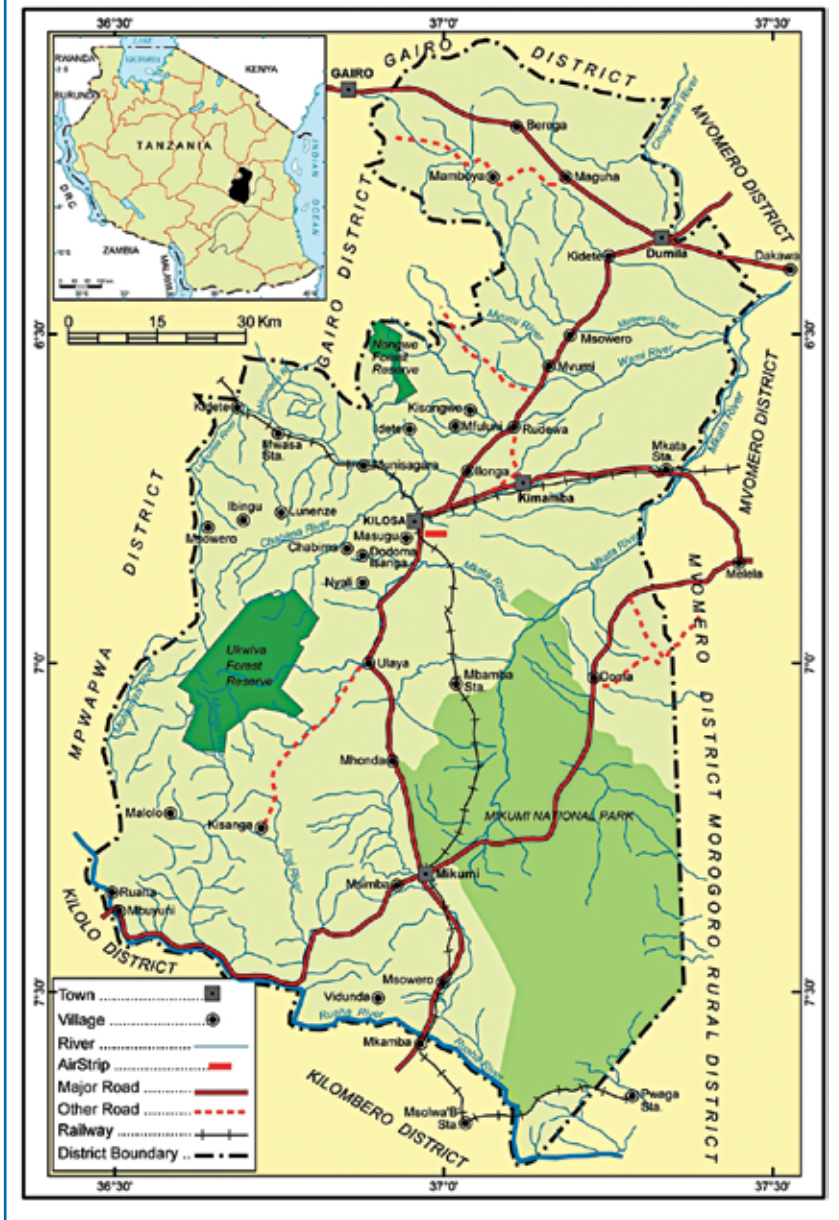
2.3 Objectives of the focus group activity

The objective of this study was, through the use of focus group discussions, to obtain information on which activities people felt they should be compensated for, what kind of compensation they preferred, the quantity and frequency of the compensation, and their thoughts on the total period of compensation required and the sustainability of REDD. Equally important, the study explored why people preferred what they do, all of which helped to inform and shape the choice experiment later carried out in the second round of activities.

The study area

Kilosa District is located approximately 300km inland from Dar es Salaam, close to the major Dar es Salaam–Dodoma highway. It makes up an area of 14,245km². It is one of six districts and makes up 20 per cent of Morogoro region (Dyngeland and Eriksson 2011). Our study village Nyali is situated in the western-central part of Kilosa District at around 500m altitude, while Idete and Mfluni villages are located more centrally and higher up in the mountains at 800–900m altitude and around 25km from Kilosa town. Ilonga village is the most accessible village, neighbouring Kilosa municipality. It is only 12km from Kilosa town, at an altitude of approximately 500m (Enos 2013a).

Figure 1. Map of Kilosa district (Ministry of Land and Housing 2013)



3.1 Geographical characteristics

The geographical characteristics in Kilosa District are quite varied. It can be divided into three zones:

- **Floodplains**, where rice and sisal is grown and where Maasai pastoralists graze their cattle. This part extends to the foothills in the west at an altitude of 550m.
- **Plateau**, which reaches an altitude of around 1100m and is characterised by plains and hills in the north. A lot of maize is produced here, and livestock can also be found grazing.
- **Highlands**, which are a part of the Eastern Arc mountain range which runs from Kenya through Tanzania. They are home to several unique ecosystems, many with endemic species. Running from the north to the south, it reaches an altitude up to 2200m (Kilosa District Council 2010).

3.2 Social characteristics

According to the 2012 census, 438,175 people live in Kilosa District (National Bureau of Statistics 2013). Historically, the district has three main ethnic groups: Kaguru in the north, Sagala in the central region, and Vidunda in the south. However, recent high in-migration means that a greater ethnic mix of people now reside in the district (National Bureau of Statistics 2007). Within our sample, we recorded as many as 14 different tribes. The main religions are Christianity and Islam. Since the 2002 census, the population in Kilosa District has reduced, with approximately 50,000 inhabitants, and the average household size has also decreased, from 4.6 household members to 4.2.

3.3 Land use and natural resources

Of its total land area, the district is divided into 37.5 per cent agricultural land, 33.5 per cent natural pasture, 22.5 per cent Mikumi National Park, 5.5 per cent forest reserves and 1 per cent urban areas, water and swamps (Kilosa District Council 2010). Most of the forests are found in the western part of the district, particularly around the Eastern Arc Mountains. The main forest type is miombo woodland. Forests are found on common land (in Tanzania classified as 'general land') as well as in national and district forest reserves, community forests and privately owned forest plantations (Shishira *et al.* 1998). In particular, forests on common land are being exploited – the main driver is forest clearance for agricultural land. In the Rubeho Mountains (part of the Eastern Arc) in Kilosa, the total loss of forest cover was estimated to be 82 per cent, with a 10.3 per cent loss between 1975 and 2000 (Hall *et al.* 2009). The district's location – close to the main highway reaching Das es Salaam, Morogoro and Dodoma – has resulted in much charcoal being produced and transported out of the district.

3.4 Economic development

More than 80 per cent of people in Kilosa depend on agriculture. The main food crops grown are maize, rice, beans, cassava, banana and cowpeas. Cash crops are sisal, sim sim, cashew-nuts and sugarcane. The majority are small-scale subsistence farmers, where only the surplus is sold. The average farm is less than 1 hectare, and the majority use hand hoes for cultivation and little or no inputs. The productivity in the district is recorded as decreasing (Kilosa District Council 2010; Dyngeland and Eriksson 2011). Large-scale farms are also present and hold about 5 per cent of the total land in the district. Many were previously sisal estates, but are now abandoned. Although many of the deeds still belong to these private estates, the land is now occupied by small-scale farmers, making the future of this land highly insecure. Kilosa also has a high number of livestock, approximately 842,514 in 2006. Approximately 509,790ha of land is seen as fit for grazing, but only 290,688ha of land is actually used (National Bureau of Statistics 2007). Many pastoralists still move their livestock around the area in search of water and pasture, and the district is experiencing much conflict between farmers and pastoralists (Benjaminsen *et al.* 2009).

3.5 Study villages

Our study village Nyali, having completed its LUP process, was chosen since it would give us a greater insight into payment formats and villagers' experiences of these. The other villages – Ilonga, Idete and Mfluni – had not taken part in a similar payment test by the time of the focus group discussions,² as their LUP processes were still at different stages of completion.

Nyali village is the biggest of our study villages 9286ha in size and with 5626ha of forest under REDD protection. The population is only 2323 inhabitants, and land is still plentiful. There has been a steady influx of people to the village, and the population is quite mixed, in terms of both tribe and religion. Many live at quite a distance from the forest and instead collect firewood or timber for charcoal-making from the bush land areas around them. However, the forest is still under pressure from charcoal-making and timber production, which was made evident during our transect walk. The majority of inhabitants are small-scale farmers who depend on middlemen to sell their produce. This has left many farmers frustrated and without much bargaining power where agreeing a price is concerned. Having experienced corruption and a misuse of village funds by previous village leaders³ there is some general mistrust felt towards the village government, however we were told that the village's REDD test payment was managed without any problems. In accordance with Nyali's bylaws, the village leaders distributed 50 per cent of the village payment between each individual household,⁴ while 50 per cent was used to build a village dispensary. As with all the REDD villages, they are also building a new village office, with funds provided by TFCG.

For Ilonga village, its close proximity to Kilosa's urban area has contributed to a greater mix of people living in the village, with a total population of 5923. The majority of villagers are involved in small-scale subsistence farming. However, several inhabitants are employed by one of the seven governmental institutions within the village. These institutions own a fair bit of land in the village. Ilonga is also experiencing some border issues, as one of its sub-villages is claiming to belong to Kilosa township instead. Because of this, no land-use planning has been done for Ilonga yet.⁵

Forest use in Ilonga is quite extensive, especially with young men extracting timber for making charcoal, while women collect firewood for cooking. Some also hunt or mine in the forest, and the forest cover has reduced noticeably in recent times.

One neighbouring village to Ilonga is Idete, reachable only by a narrow pathway on foot or motorcycle (in the dry season) and therefore quite remote. It has a population of 1451 inhabitants and a village size of 4108ha. The population is also quite mixed here, although all are Christians. There are some issues between the village government and the population at large, mainly based on political differences between the leaders and the rest of the villagers. There are also some border issues with a neighbouring village. Regardless of this, they have successfully made a LUP and drafted bylaws, and (after completing the FGDs for this report) have also received a test payment. Besides agriculture, there are not many alternative income sources. Forest use is less in Idete, where they claim to make hardly any charcoal and that the only people extracting timber are from Ilonga village, and encroaching on their forest. Their forest size is 1408ha.

2. Both Idete and Mfluni have since received their test payment, in early 2013.

3. The village leader and village executive officer were replaced in 2012 as a direct result.

4. Tsh7500, equal to UD\$4.50 per person.

5. No exact calculation of total village land size has been established yet either.

Neighbouring Idete village is Mfluni, about an hour's walk away. With a size of 2831ha, Mfluni village is almost completely covered by forest (2243ha) and only has a population of 812 people. The majority of these are from the Kaguru or Sagala tribes. The biggest driver of deforestation here is clearing forest for agriculture and many people have also been found cultivating inside the forest. After the introduction of REDD, these villagers have been asked to relocate to somewhere outside of the forest. The new Agricultural Education and Lands Committee has been put in charge of the relocation, established as a result of REDD. This matter has caused a lot of tension in the village however, as the offered replacement land is seen by the majority to be of inferior quality. The main complaint is that whereas the soil in the forest is quite fertile and easy to cultivate, the new land is less fertile and its soil more difficult to work with, making it less suitable for agriculture. This conflict has resulted in a reduced legitimacy of the LUP as a whole. Due to the difficulty of accessing a market for forest products, the forest is mostly used for collecting firewood. However, Mfluni is also experiencing problems with encroachment from villagers in Ilonga.

Findings

4.1 Focus group participants

Eighty-one people participated in our focus group discussions (47 men and 34 women). Participants were selected to ensure as wide a variety of characteristics as possible, such as age, tribe, main economic activities and levels of income and forest use. Their ages ranged from 20 to 90 years and as many as 14 different tribes were represented. For income-generating activities, though, most of our participants practice agriculture, like the majority of people in Kilosa so only 16 per cent of participants had another source of income. Perhaps because of this, we did not find many participants with higher levels of income nor extensive forest users. For more details on the participants, please refer to Annex 2.

When carrying out the discussions we tracked, as far as possible, each response to the individual participants, so we could later analyse responses according to that participant's characteristics. We did not succeed in tracking every response in this way, however, as responses were often given quickly and simultaneously from various people.

Although each focus group was distinct, one common trend was that about half of participants spoke freely and regularly in each group, whereas the other half would only speak when asked a direct question.⁶ None of the groups were uniform in their opinion at all times, and sometimes the debates grew heated between those with opposing views. In some instances, a consensus was reached, in others participants agreed to disagree, but interestingly on several occasions, individual answers or group views changed in the course of the discussion, as a result of previous responses given.

The focus group discussions were split into six main sections, which are discussed in more detail below:

- Reduced forest use and mitigation activities
- Reasons for and distribution of compensation
- Type, level and frequency of compensation
- Governance of compensation distribution
- Compensation based on effort or carbon stored
- Sustainability of forest conservation and the REDD project

4.2 Reduced forest use and mitigation activities

At the start of each discussion, we began by establishing which forest products the participants use. It became obvious that these communities depend heavily on forests for their livelihoods, to cover their energy needs, for building materials, as an added source of income, as a source of available land, and to collect non-timber forest products (NTFPs).

When asked which changes in these activities would be possible to reduce forest use, suggestions were plentiful. The introduction of fuel-efficient stoves and improved agricultural practices, carrying out land-use planning, developing bylaws, and having regular forest patrols are activities that are already underway or put in place in each village, and these were therefore often mentioned. Forest fires and reducing these also came up often. People had different opinions on the matter, though, and emphasised different activities and reasoning behind their choices.

6. Not including the smaller focus groups of three to four participants, within which all participated more.

4.2.1 Sustainable use and education on conservation

The sustainable use of forest products and education on conservation and the effects of deforestation were seen as important for all, but different activities were emphasised. One suggestion that was raised by the all-male focus groups (besides the one in Ilonga) and by male respondents in the resource people's (RP) groups in Nyali and Idete, was that timber extraction should be limited to personal use only. This suggestion was supported by the rest of the participants. The female participants, in three out of the four women-only focus groups (except Mfluni) instead suggested sustainable firewood use, such as only going to collect fuel on pre-selected days. Interestingly, these women were all middle-age women with low incomes and low-level forest use. Participants from 10 of the 12 focus groups, both male and female, suggested education and the introduction of fuel-efficient stoves to reduce the use of firewood further. These stoves have already been introduced in each village and overall participants spoke positively of them, except in Mfluni village where the women complained that the stoves broke easily. In all three focus groups in Ilonga and in the RP focus group in Nyali, learning about modern charcoal-making also came up. All who mentioned this were young men (in the women's focus group, the woman also referred to the importance of this to young men), and interestingly, all the men mentioning it were members of a VNRC.

When discussing how to reduce charcoal use, it always began with or was followed by a discussion on the importance of education about, or loans to facilitate, other income-generating activities, especially to compensate for foregone income from timber or charcoal production. This suggestion was brought up exclusively in Ilonga and Nyali in all but one focus group. However, this was not surprising as in these two villages such forest activities were widespread. Those who saw it as an important activity included men and women, the majority ranging between 34–53 years of age. Interestingly, all of them were low-level forest users and therefore would not have had a high opportunity cost for foregone income from charcoal or timber production. In Ilonga, an interesting view from the youngest male participant (28 years) and a high-level forest user, was that general education on forest conservation would be enough for charcoal makers to see the error of their ways and to stop their activities. This was, however, not supported by the rest of the group, with the others rather insisting on the need to partly, or fully, cover opportunity costs.

4.2.2 Agricultural support and education

There was a greater consensus during these discussions. Agricultural support and education were seen as the main interventions required to reduce forest use and dependence. It came up in eight different discussions and in each village. As agriculture is the main income-generating activity in all of the participating villages, it affects the community at large, and the respondents discussing this issue were quite varied in terms of levels of income and forest use, age and gender. A common argument presented was that difficult agricultural conditions have turned many to the forest for an added income or as a place to find new agricultural land. They felt that if they could improve their current practices and be taught about conservation agriculture or agro-forestry, or were assisted with irrigation, they would be able to stop their shifting cultivation and not have to clear any more forest land, but make do instead with the land they already have. Five male participants from five different groups also highlighted the need for new land (of equal quality) if they were to be relocated from their original land in or around the forest.

4.2.3 Improved forest management

Improved forest management, in different forms, came up in every discussion. Land-use planning and zones for use and for conservation was brought up by six focus groups. In the discussions in Ilonga, Nyali and Idete the majority view was positive, however, in Mfluni both the male and RP focus groups raised the issue of their unhappiness with the LUP, explaining how too little fertile land had been set aside for agriculture, creating a shortage of land and tension between villagers

and the village leaders. Regular forest patrols and forest bylaws were suggested in every village as positive mitigation activities, particularly by the male participants and in three out of four RP focus groups. Bylaws concerned with reducing forest fires also came up often. Interestingly, more of the older participants (50+ years) saw such measures as important. For instance, the four participants raising the issue of introducing payments or fees for charcoal-making/timber extraction were between 45 and 60 years old (both male and female). Two of these only practised medium-level forest use and, given the physically hard work of making charcoal and extracting timber, it is less likely that they were much involved in such activities.

4.3 Reasons for and distribution of compensation

When asking if mitigation activities or reduction in forest use needed compensation, most participants had strong opinions and this was the section where the most heated discussions occurred. But hearing the different views expressed caused, in several instances, a change in opinion.

4.3.1 Arguments in favour of compensation

‘We need compensation or alternatives to forest products’ was a view expressed in all but one focus group in Ilonga and Nyali, with the argument that compensation by providing alternatives for the reduced use were essential, since no other alternatives existed, especially when it came to alternative energy sources and building materials. It was emphasised by four women in the female Nyali focus group, and by four male participants from four different groups. Three respondents were from the middle-income range, while two were also mid-level forest users. When discussed in the groups, this view was not challenged by the other participants.

‘We need compensation to cover the opportunity cost’ was a view also emphasised, but highly debated. It was brought up in seven focus groups and primarily by men (and by two female respondents referring to charcoal and timber activities carried out by men). Two were medium and two were high-level forest users, and they were all adamant that in order for someone to stop their activities in the forest, money or other sources of income would be needed to cover their losses.

The responses to these views varied. In the RP discussion in Ilonga, a counter argument was that the people who make small amounts of charcoal (and only once in a while) actually use more trees than those making charcoal regularly and in larger quantities, since they know how to do it more efficiently. Therefore although those making maybe 20–40 bags a month would be forgoing a much higher profit (which they would then be compensated for) they actually degrade the forest far less than those individuals making perhaps only 2–3 bags per week. Since no consensus was reached on the matter, participants wrapped up the discussion by suggesting the project should decide on the criteria for compensation.

In the male focus groups in Idete and Mfluni the counter argument was that if some are paid more because they are high-level forest users, it might incentivise others to do the same in order to receive the compensation. Also, in three focus groups where the suggestion of opportunity costs came up, it was quickly countered by a majority view that all should be paid equally regardless, a view which eventually became accepted by all. In two cases, however, a more extreme stand was taken, with the counter argument being that those using the forest (for example for making charcoal) should not be paid according to their losses. Instead, they argued that ‘we need to punish those who use the forest a lot/degrade’ with the main argument being that you should punish someone who degrades the common good for individual gain. Altogether, four focus groups held this view. The female participants in Idete and Mfluni were all clear that it would only be fair to pay less or punish those who chose to degrade the forest, since they could do the same as the majority and earn money from agriculture instead.

4.3.2 Arguments against the need for compensation

In all the female focus groups some participants were of the view that they ‘don’t need any compensation’ and would take care of their forest regardless, because they understand its importance and because a good-quality forest will bring its own benefits. Out of the five participants raising this viewpoint, three were mid-level forest users and four were between the ages of 40–50 years. However, following these statements, participants emphasised that compensation would be a good motivation to continue conserving the forest.

None of the male focus groups held the same belief, and only one VNRC member felt they could conserve without compensation. The one exception was when it came to the issue of man-made fires in or around the forest. In this case, the four male participants raising the issue did not feel it was necessary to receive any compensation for stopping the activity, as it was based mainly on tradition and it could be stopped relatively easily. In Ilonga, this issue came up in each focus group, and it was not contested. On the other hand, one specific activity that did need compensation, raised especially by men in Idete and Mfluni, was for fire-fighting activities in the forest, especially for any injuries that had occurred.

4.3.3 Equal versus differentiated distribution

Closely linked to if and why individuals or communities should be compensated for reduced access to forest products was the discussion on how the compensation should be distributed. As seen above, in most focus groups different opinions existed depending on different forest uses or users, and sometimes participants changed their views in the course of the discussion. This was especially the case in terms of whether or not to distribute the compensation equally.

Equal distribution of payments was mentioned in all but at one focus group, although at different points in the discussions. Many of the youngest participants brought up the issue first, with four of the six participants tracked being between 24 and 37 years. The main argument was that everyone is responsible for conserving the forest, and to make sure that no one feels overlooked and left out of the project, everyone should get the same amount and be motivated equally. In three of the focus groups where the issue of opportunity costs was raised early on, a majority view of equal distribution was only agreed at a later stage. In two focus groups it was agreed to disagree on the matter.

Distributing payments differently was seen by some as a viable alternative. For instance, in the RP focus group in Mfluni two participants felt it was essential that those removed from the forest should be given compensation to cover their losses first and only then should the remaining amount be distributed equally. The other participants did not, however, agree with this. In three focus groups (men in Ilonga, RPs in Nyali and women in Idete), after first stating they wanted equal distribution for all, it was later felt that it would only be fair to pay those individuals doing forest patrols a little extra for their effort. In Nyali this differentiation is in place already, with the VNRC getting a certain percentage of the money to cover expenses for tools and food during patrols.

4.4 Type, level and frequency of compensation

After establishing which activities needed compensation, on which basis and to whom the compensation should be given, an important aspect discussed was which type of compensation participants preferred. This automatically raised questions of how much or how often compensation was needed. This was less debated than the previous questions and after some discussion, most focus groups came to a consensus on one or two preferred types. Overall, three main types of compensation were discussed.

4.4.1 Direct cash payments

Monetary compensation was discussed in each focus group, but on different grounds. For those participants mentioning monetary compensation in terms of covering opportunity costs, the level of compensation would then differ depending on the amount of lost income per individual and should be received on a regular basis. In the RP focus group in Ilonga, it was felt this monetary payment was only necessary in the beginning, with its importance reducing once other benefits such as improved agriculture were introduced. In fact, after a discussion amongst the three male participants in this group, they decided and agreed that no monetary payment should be given at all, but rather all earnings should be used to improve agriculture (and irrigation especially) and better social services, such as building a dispensary.

Several participants had a specific amount for a cash payment in mind which they saw as appropriate. These ranged from Tsh15,000 (approximately UD\$10) per person twice a year to Tsh3–500,000 (approximately US\$185–315) per household per month. But what everyone had in common was that this amount did not necessarily reflect their opportunity cost. Some based the amount on the idea that it would work as an appropriate motivation to continue conserving the forest. Four participants then raised the need for monthly payments to keep people motivated and away from the forest. Others, it seemed, answered according to overall livelihood needs and as such, the amount would greatly surpass any real opportunity cost from the forest. Nyali, having gone through a test payment, based most of their answers on that experience. What became apparent was that they felt the amount of compensation received (Tsh7500/US\$5 per person plus a newly built dispensary) was neither enough to motivate them nor to compensate their losses from REDD, and participants in all focus groups raised the need to receive greater payments in the future. Then again, they did not know how often they should receive such a payment, and we were also not told how often these test payments should be made. The groups in Nyali did not, however, suggest a noticeably higher or lower amount of payment than the groups in the other villages. Whereas a member of the VNRC mentioned that since the amount was so low many still had to use the forest, it was argued by another that the reduction in forest use they had experienced was due to the education they had received and not the compensation.

Overall, the various amounts of compensation suggested seemed quite random and only four individuals (both male and female) made a direct reference to the actual carbon storage capacity when deciding on the amount, giving an indication that the link between feasible carbon storage and monetary benefits is not yet very strong (see more discussion in Section 4.6). Direct cash payments was the first type of payment that came up in seven of the focus groups and it engaged many of the younger participants, men and women. It was also a preference for seven medium-level and one high-level forest user, and the majority (ten participants) came from a low-income background. However, discussions of direct cash payments always included other types of compensation in the form of development projects or social services.

4.4.2 Development projects and/or social services

This type of compensation also came up in each focus group and after discussions all groups preferred a mixed payment of cash and development projects (except for the male focus group in Ilonga, which preferred development projects and agricultural improvements only). We did not find any participant characteristic trends linked with preference for this type of compensation, and both male and female of high- and low-income and forest-use levels thought improving infrastructure or adding a dispensary in their village would be an appropriate compensation, indicating the lack of basic infrastructure and need for social services in these areas. It was also considered to be a motivation and a reminder whenever people used the new service, and as fair compensation as it could be used by everyone. Three people also mentioned it was preferred in terms of sustainability as it would be a long-term benefit, whereas any cash compensation would just be spent.

In terms of frequency, five focus groups with predominately male participants (Ilonga, Nyali and Mfluni and RP focus groups in Idete and Mfluni) were in agreement that such projects or improvements were needed once each year, whether it was a new dispensary, an extra classroom or improvements to the road. In six focus groups (RPs in Ilonga, male and female groups in Idete plus all groups in Mfluni), the majority view was they would prefer to receive compensation in the form of a development project first, such as an improved road in the case of Idete and Mfluni (which was not surprising given their remoteness). Then whatever remains could be divided amongst individuals as an additional motivation.

In the male focus group in Ilonga the two youngest males (28 and 34 years) were actively engaged in the discussion and had an interesting change where they both were in favour of cash payments first, but then themselves changed their minds to prefer social services instead. One argument was that, unless the payments were big enough that the impact of a household payment would really be noticed, it was best to pool payments together and provide a dispensary or other tangible village improvements that would motivate all. The group reached a final consensus to prioritise social services over cash payments. In the RP group discussions in Idete, there was a gender divide where the female participants (after being directly questioned) preferred a dispensary and running water while the men, although also wanting these things, preferred to receive a cash payment first. All held fast to their convictions.

Four of the groups agreed on what they thought was an appropriate compensation level in terms of an overall village sum. Ranging from Tsh70–150 million (UD\$45,000–95,000) these amounts were much higher than what is feasible, compared to the test payments made by TFCG and MJUMITA (and based on expected carbon revenues). In fact, the suggested amount in Nyali was three times what they had actually received. In Idete, it was six times as high, and in Mfluni it was between ten and twenty times higher than what they were given for the test payment (see Annex 7). When looking at how much this amounts to at an individual level within each village, it is not however unreasonable, and rather speaks towards the low levels of compensation REDD will most likely be able to offer on an individual level. In Mfluni, the suggested Tsh70–150 million amounts to only Tsh86,000–184,000 (US\$52–111) per individual, and if paid out per year, this is not very high. This is especially true when considering that many will lose out from having to relocate their agricultural practices to less economically viable areas. The amount is, however, far away from what they actually received (Tsh8,148 or US\$4.93).⁷

In the RP and male focus groups in Nyali, they preferred 50 per cent of allocation given to households and 50 per cent kept for development projects. This was also the majority view for the female focus group in Idete. But some participants were also wary of development projects. Two young female participants⁸ from Idete and Mfluni, both with low incomes and mid-level forest users, as well as a female participant from Ilonga⁹ raised the issue of distrust in their village leaders. They therefore thought it would be best if the money was given to them directly and did not remain with the village government to then only end up 'lost' or in the pockets of their leaders.

7. Calculated based on village compensation received divided by village population and not taking into consideration village payment distribution arrangements.

8. Aged 23 and 24.

9. A mid-level forest user aged 51 years with a middle income level.

4.4.3 Alternative sources of income or improved agriculture

Four focus groups, both RP and female groups in Ilonga and Nyali, mentioned this type of compensation for reduced forest use. In Ilonga it was brought up as a better alternative and a more sustainable source of income than just being given money to spend. For two participants (one man aged 46 years and one woman aged 53 years) it was emphasised that once they received this compensation, there would be no need for additional monetary compensation in the future, as they will have earned extra income from their new jobs. The oldest participant, a woman of 90 years in Nyali, spoke up for the only time and explained that, due to the agricultural training they had received, they now cultivate and make higher yields on smaller pieces of land.

Two participants were against this alternative as a compensation type, however, and it brought about a lively discussion in the RP focus group in Nyali. When brought up as an alternative by the facilitator one man (a 24-year-old VNRC member) thought it might be a good idea and something for them to experiment with for the next payment. The two slightly older male participants, aged 37 and 46, did not agree at all, with the argument that by creating income-generating groups, only those few who participate will benefit, while the remaining people will not. In addition, they were worried about the management of the money allocated to these groups, raising the issue of their distrust in their village leaders, and again worried that only a few would benefit because of this.

4.5 Governance of compensation distribution

Who were the most suitable to govern and manage the distribution of compensation? Opinions were highly influenced by the current situation and relationships with village leaders. Each village had its own issues, which became apparent during the focus group discussions and complementary in-depth interviews, which were also conducted.

4.5.1 Village governance and elected committee

Nine focus groups mentioned the involvement of the village government in governing the distribution of REDD compensation. However, they were referring to all people and groups being managed by the village government or to the government having only an overseeing role, with the REDD committee having the power to actually distribute compensation payments, with the village at large being part of deciding how this would be done. Only six focus groups preferred the distribution to be dealt with in this way, though. The participants in the RP and male focus groups in Ilonga were the least critical of any village government involvement and made no reference to any concerns they had. In the all-male focus group, the discussion was carried out exclusively by mid- and high-level forest users. In contrast, a young male VNRC member in the RP focus group in Nyali was very clear that no-one from the village government should be a member of the REDD committee or have any involvement or say whatsoever in how compensation is distributed.

The REDD committee in Nyali had already distributed money once and the participants here spoke favourably about how the distribution was done, with TFCG overseeing the activity during the day. Although each group agreed that the committee had done a good job, there was still a certain cautiousness felt towards the committee and a focus on the involvement of TFCG. Interestingly, two of four RP focus groups lacked trust in the village leaders and thought they should not be in charge of REDD payments.

4.5.2 External project governance

In the female-only focus group in Nyali, some participants felt that TFCG should be in charge of the payments in future, and this was supported by the other participants. In fact, the view that TFCG should govern the distribution of compensation was the consensus in six focus groups, specifically all of the all-female groups and all of the groups in Mfluni. The reasoning behind this view was that they did not trust their village leaders and their ability to manage and distribute the compensation fairly and without corruption, and therefore they would prefer someone from outside the village to do it.

In Mfluni especially it seemed that REDD had caused the most tension. Villagers were unhappy about the land-use planning and redistribution of land, they distrusted their village government, and were discontented with the VNRC, which many felt did not do a satisfactory job in patrolling. To make matters worse, we were told of villagers from Ilonga increasingly venturing into the Mfluni forest to extract timber and make charcoal, now that their own forest was under REDD with strict restrictions and as they had incentives to protect their own forest. Although this has caused further negative reactions towards REDD, as of yet, no steps towards resolving these issues have been taken by the villagers. Our suspicion was that the overall community relationship here is not very strong, which came from comments made by the village leader and a female participant that it was hard to get villagers to work together in community projects without being paid for their labour, an issue which did not come up in any other village.

4.6 Compensation based on effort or carbon stored

During the discussions, we explored the idea that REDD involved making changes in carbon stored in the forest and that village compensation was based on this amount. Overall, the link between the level of compensation and the actual carbon stored was not easy for participants to see, and it became apparent that many participants had expectations of REDD which (most likely) will not reflect realistic carbon storage possibilities. The preference for compensation in terms of development projects and improved social services in the villages (with little to no thought of the link between costs of this and carbon credits earned) also shows that REDD is viewed more as a development project aimed at their community needs rather than as a market venture for trading carbon.

Perhaps due to this lack of understanding, or just the fact that many respondents were getting tired at this point, there was little discussion on this subject, or opposition to whatever view was raised in the groups. Also, when we challenged their views and asked what would happen if the forest caught fire, two focus groups changed their views from 'carbon only' to 'carbon and effort' as the basis for receiving compensation, leaving only two groups with a conviction that REDD should be based on actual carbon stored only.

It was still obvious that TFCG has worked hard to explain the idea of carbon storage and carbon payments to the communities, as these were familiar concepts to everyone. It is also understandable that it can be difficult to grasp the concept without having any hands-on experience with measuring or selling carbon. In addition, since they had not yet received any payments based on carbon stored, but had only been introduced to various other benefits from the REDD project, it might be difficult for them to differentiate. At the same time, it did not seem as if the focus groups in Nyali had any better understanding of the system than the other focus groups.

Before we raised the concept of carbon payments as compensation in the discussions, the idea of carbon had already been mentioned in eight focus groups. However, this was the case in only two RP focus groups, and especially in Nyali the idea of carbon payments was quite vague. The participants in Mfluni also had a very limited understanding of what carbon payments entailed. On the other hand, all of the four female focus groups seemed to have some view that their compensation would be linked somehow to how much carbon they stored. Two of the older females (both aged 52 years) in Ilonga were, for instance, very clear that after carbon payments start, no other type of compensation was needed, since they would receive more benefits and carbon payments from the forest. Comparing REDD to a baby growing up – which needs care and support in the beginning but later can take care of itself – they meant that after approximately four years they will have stored lots of carbon which they will then be able to sell and from which they can support themselves. Therefore, they would not need to receive any more support from the project. This was the same focus group that expressed the view that REDD needed to cover opportunity costs, and should provide them with Tsh200,000 per household per month. Perhaps having too high hopes for carbon payments in the future, they also preferred compensation to be given based on carbon stored only.

Two young male participants in Ilonga as well as male participants in Idete had a more realistic picture of projected carbon levels, saying that the level of compensation (and their subsequent choice of type of compensation) would depend directly on the amount of carbon stored, also mentioning it might not necessarily be as high as they would like it to be. The RP focus group in Idete calculated their payment level based on other village trial payments and their own forest area, showing some understanding of how future carbon payments would work.

When asked directly to choose between compensation based on carbon or effort the majority preferred being compensated partly for their effort and partly based on carbon levels. This was the case for all three focus groups in Nyali as well as the male focus group in Ilonga, the RP group in Idete and all of the focus groups in Mfluni, eight in total. The reason for a mix between the two was that although they understood that this project is about conserving the forest for a better environment, and even though their compensation lies in the amount of carbon they are able to store, they felt there should also be some recognition of their conservation efforts. This was both in terms of reducing forest fires and ensuring that the community remains motivated. The female focus group in Idete was the only one that thought they should be compensated for effort only.

The issue of incentivising and motivating them to continue conserving the forest was also the reason why six groups (RP and male focus groups in Nyali, Idete and Mfluni) felt that compensation should continue for as long as the forest and their efforts in conserving it remained. As a community, they suggested that they could themselves take over responsibility of the project in three to five years, or in the case of the RP group in Idete, when TFCG considered them as capable of doing so. The female and male focus groups in Ilonga, Idete and Mfluni also specified that when TFCG eventually phases out its activities (after five years) the villages should themselves take over responsibility and generate compensation through the sale of carbon. A few women in Idete and Mfluni went further, saying they would continue conserving the forest even without payment, realising the benefits that a good-quality forest provides on its own.

4.7 Sustainability of forest conservation and the REDD project

As a final issue, the sustainability of forest conservation and REDD was discussed. This section was the most difficult and hard for the participants to grasp. The RP group in Ilonga was perhaps the only one that seemed able to grasp different aspects of sustainability and listed selective and harmless uses of forest products, education, regular patrols and transparent governance as issues important for the sustainability of REDD and forest conservation. The other responses we received formed a strong causal relationship between the presence of REDD and payment/compensation for their efforts and a continued well-conserved forest. This came up in seven focus groups, especially from male participants. Other contributing factors to ensuring that REDD and forest conservation continued to be successful and sustainable was further education about good forest management practices and having strict bylaws.

When asked if they thought REDD overall would succeed, or what its main strengths and weaknesses were, the majority view was positive, based on the experiences they had already had. A few participants in each village mentioned they would get a better climate and reduced forest destruction as a result of REDD. Again, male participants in six focus groups (RP and male focus groups in Nyali, Idete and Mfluni) highlighted the training they had received in conservation, land-use planning and improved agricultural practices. Five focus groups were motivated also by the test payment (cash payments and the new dispensary in Nyali) or by the new village office premises that each village had received. Women from Nyali, Idete and Mfluni raised this point especially. However, not everyone was as positive. Participants from the RP focus groups in Idete and Mfluni were not sure if REDD would work, whereas five focus groups also mentioned worrying about losing income or land, or not being compensated sufficiently. This view came from both the RP focus groups in Ilonga and Nyali, as well as from the male focus group in Ilonga and the female and male groups in Idete.

Caveats and limitations

5.1 Group selection criteria

The one-day pilot fieldtrip was very useful and helped us to clarify the criteria we wanted for the focus groups. We still agree on the criteria we used, but our advice to others would be to have each participant talk briefly about their main income and general forest use during the introduction within each group, so that the interviewers are aware of this from the beginning and can probe for different answers. That might make it easier to detect possible differences in opinion based on income and forest use.

We were happy with the focus group size as it was small enough for around half to feel comfortable to speak freely while at the same time enabling us to make sure that other voices were heard also. However, one caution is not to make the focus groups too small either. In one of the female focus groups only five participants showed up, and one left shortly after. None of the participants were very talkative about their thoughts on and experiences of REDD, and we found we had to ask many questions. This became for many very repetitive and meant that having discussions about the reasons 'why' and not just 'what' was very difficult. In general, participants found it somewhat tedious to have to explain (in what many saw as a repetition of previous answers) the variations in their views, for example 'would you still consider x a good thing if y changed'? Doing this did, however, let us really see the benefits of a focus group discussion as we saw group and individual views change because of the probing and previous discussions.

5.2 Payment, time and methods

Due to good facilitation (by TFCG staff) almost all participants showed up at the times we had arranged. Payment for their participation was the biggest issue and sometimes difficult to get a handle on. Through our facilitator, they were told (when asked) that some token of appreciation would be given. Local resource people were paid a monetary token for their time spent preparing these meetings and we brought with us crates of soda and biscuits as payment which was given out to the participants at the end of the discussions. In two of the villages in particular, this payment was seen as far from sufficient and they became very upset that no monetary compensation was given. It took a lot of explanation about our intentions and background, but we always came to some sort of understanding eventually. But it appears that the research environment is becoming more challenging, and especially in these villages. We expect since the very nature of REDD has a monetary element to it and those doing research are often associated with that money, and since the interest in REDD has resulted in many researchers visiting these villages (some of whom are paying the villagers relatively high sums), this is setting the standard. The mode and quantity of payment should be considered as well as the ethical questions it raises.

Concerning the time spent on discussions, it sometimes became a challenge due to two factors in particular. The first was the group dynamic. Some groups were more active than others, being very involved and interactive and willing to discuss some questions in depth resulting in a rich variety of responses. Participants in these groups, even though discussions usually took longer (approximately two hours) did not complain too much about the time, although the participation level usually dropped as time passed. Those groups with less active participation and which were having a more difficult time understanding the reasons behind our 'repetitive'

questions often became impatient halfway through and wanted to stop. In these cases, around one hour seemed to be their limit and from then on many answers were one-sided and without multiple responses. How we as interviewers acted then made all the difference, and we had to constantly make an effort to motivate them to answer. Although previous suggestions were to keep discussions going for about three hours to facilitate a deeper understanding of these issues, having such a long discussion seems to us too difficult. The format of the discussion would have to be changed and we would have to find ways in which to keep the participants interested.

5.3 Content of the discussion

As mentioned previously, the questions concerning adequate forest cover and sustainability (also mentioned in the previous Vietnam report) still seemed difficult for the respondents to relate to. Having tried out various ways of asking these questions, we still felt we did not succeed in finding the best way to obtain the types of answers we wanted. Likewise, some people seemed to feel that we were only repeating questions and not paying attention to the participants' previous answers when we were looking for variations in their answers and continuously probing for differences. We therefore became very aware that it became very important to strike a balance between probing and moving on from discussions on some subjects before our questions were exhausted. Going too far in attempting to elicit answers could turn certain respondents against the discussion and affect the mood of the whole group. Since we were very careful not to let this happen it never went that far, and we succeeded in getting the participants to think through these issues. We captured variations in opinions depending on where the participants came from, their gender, age, income level and forest dependence.

Conclusions and recommendations

Forests provide essential services and products for the villages we visited in Kilosa: for making an income from producing charcoal and timber, as their main source of energy, and not least as a place to find available agricultural land. With TFCG introducing REDD to them, the relationship between the villagers and forest resources will change. As people depend differently on the forest and use it in different ways, they will also be affected by REDD in different ways. From the focus group discussions, as described above, some key findings have arisen which can be of use to TFCG and the REDD pilot project in Kilosa and might also serve as interesting for other REDD projects elsewhere when designing their benefit system.

- Timber and charcoal production is carried out primarily in Ilonga and Nyali, and mostly by younger males. The importance of this income is recognised by the communities in these two villages with also women and low-level forest users suggesting it be dealt with either by covering their opportunity costs, providing alternative sources of income, or teaching them modern charcoal making. Covering opportunity costs might be difficult and, at the end of the day, the majority preference was to have compensation distributed equally to ensure that everyone feels they are being treated fairly and feels responsible for conserving the forest. Improving agricultural practices can be a viable option to reduce pressure on the forest and provide a substitute income. Overall, this was accepted as a new activity and since the majority are involved in agricultural production it would also have an impact on a large part of the population. Care would be needed, however, to ensure inclusiveness and in spreading new knowledge and practices. It is clear that the issue of charcoal and timber production does need to be dealt with properly as it also affects surrounding REDD and non-REDD pilot villages, as seen by the leakage from Ilonga villagers, who have now moved their activities to the forest in Mfluni instead.
- The high dependence on firewood by women, and on forest products for building materials, should not be forgotten, even though the monetary value in itself is lower than from charcoal and timber extraction. Without any alternative income sources or compensation, these activities cannot be stopped, and if access is restricted it will especially negatively affect women and most poor forest-dependent individuals. Sustainable use and fuel-efficient stoves appear to reduce the use of firewood somewhat, and these were acceptable options to both male and female participants.
- Due to the differences in forest use and dependence, which are affected by both personal characteristics and location, a blueprint REDD benefit-sharing system should be avoided. Realising this, TFCG has enabled each village to some extent to create their own system, based on what they see as fit for them. Because a village represents many different realities and is not homogenous, not everyone will benefit in the same way and extra caution is essential to minimise these losses while at the same time trying to maximise improved forest conservation and subsequent compensation.
- Raising awareness about the effects of deforestation and forest degradation and creating ownership of REDD within the villages might be equally as important in motivating villagers as solely economic benefits. Raised on several occasions by different individuals, groups and villages, this new knowledge was seen as a sufficient incentive to reduce forest use

alone and was mentioned as one of the positive benefits experienced with REDD so far. Interestingly, this appeared to have had more of an influence on the women, who seemed more willing to conserve regardless of monetary compensation.

- The understanding of what type of project REDD is, and what can be expected from it, also depends on good communication between the project implementers TFCG and the communities. It was obvious that TFCG staff had made an effort to explain the links between the forest and carbon storage, although it seems that more is necessary to draw a clear link between the carbon stored and the level of compensation received. We saw that a higher knowledge and acceptance of REDD and its importance can help create a more realistic picture of REDD and what it can offer, whereas an uninformed or negative view can create unrealistic expectations. It might also help with the understanding of sustainability and what that means in terms of forest conservation and REDD. Even so, villagers have a prevailing concern about whether payments are to be based on carbon storage alone, in terms of the damage that forest fires can have, especially since they appear to be a common problem in the area.
- The type of compensation preferred gave an interesting insight into what type of project REDD is viewed as. With cash payments being viewed as necessary in terms of personal motivation, mostly, and preferred primarily by younger and low-income participants, monetary payment coupled with assistance to improve community social services or village infrastructure was the main preference by both men and women. Money earned from carbon trading and used for community development can be equally effective and serves as a reminder and motivation for people to conserve the forest. It creates a sense of belonging to the project by giving them an actual benefit they can all use and feel. Taking into consideration the unstable and fluctuating prices within the voluntary carbon markets and the small amount people would receive if REDD payments were distributed to each individual, a community development project such as a village dispensary might be the best option to keep everyone motivated, and might in fact end up being more cost effective. However, the experience from the test payment in Nyali indicates that it might not be enough to discourage continued use of the forest, and payment should be combined with other activities such as awareness-raising on climate change and the effects of deforestation and forest degradation, and introducing other income sources.
- There was an overall emphasis on ensuring a fair and equal distribution system for REDD benefits. This was not surprising given the strained relationships between village leaders and these communities. Apart from their role in the LUP process, village leaders have a secondary role in the REDD process and although leaders are placed within the village government hierarchy, it is the VNRCs and REDD payment committees that are in charge of most REDD activities. Due to the history of misuse of funds by village leaders, this can be understandable, but care should still be taken not to ignore the village government completely. A bad relationship with the newly established committees would be very unfortunate for the legitimacy and sustainability of REDD. If the process were to begin without full village government support, such problems might only be exacerbated when the (relatively) large REDD funds come into the village, surpassing the village government's limited funds, and going into the hands of these new institutions. Allocating some of the money to development projects might help the situation. Whereas previously this would have been solely a village government responsibility, it could instead be funded jointly, or solely, with REDD funding.

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Annex 1. Conducting the focus group discussions

The schedule for each focus group discussion and complementary interviews was as follows:

Date	Village	Type
Sun 02.12	Kilosa town	Village selection with TFCG officer
Mon 03.12	Kilosa town	Consultation with district natural resources officer
	Kilosa town	Interview with TFCG staff
Tue 04.12	Ilonga	Key resource person interview
	Ilonga	Key resource people focus group
	Ilonga	Female focus group
	Ilonga	Male focus group
	Ilonga	Informal talk/forest walk with VNRC member
Wed 05.12	Nyali	Key resource person interview
	Nyali	Key resource people focus group
	Nyali	Female focus group
	Nyali	Male focus group
	Nyali	Informal talk/forest walk with VNRC members
Thu 06.12	Idete	Key resource person interview
	Idete	Key resource people focus group
	Idete	Female focus group
	Idete	Male focus group
	Idete	Informal talk/forest walk with VNRC members
Fri 07.12	Mfluni	Key resource person interview
	Mfluni	Key resource people focus group
	Mfluni	Female focus group
	Mfluni	Male focus group
	Mfluni	Informal talk/forest walk with VNRC members

Annex 2. Focus group participant characteristics

	Gender		Tribe				Head of Household			Main income				Income level			Forest use			Committee member	
	M	F	Kaguru	Sagara	Vidunda	Other	M	F		Agriculture	Business	Teacher	Other	L	M	H	L	M	H	Yes	No
Total	47	34	33	15	4	20	69	12	68	5	4	4	33	34	7	46	24	4	16	65	
%	58	42	46	21	5	28	85	15	84	6	5	5	45	46	9	62	32	6	20	80	
FG1	3	0	0	0	0	2	3	0	3	0	0	0							3	0	
%	100					100	100		100										100		
FG2	0	8	4	0	0	4	3	5	6	2	0	0	4	4	0	4	4	0	1	7	
%		100	50			50	37	63	75	25			50	50		50	50		12	88	
FG3	8	0	1	2	0	5	8	0	5	3	0	0	3	4	1	5	2	1	1	7	
%	100		12	25		63	100		63	37			37	50	13	63	25	12	12	88	
FG4	3	1	0	2	0	2	3	1	4	0	0	0							4	0	
%	75	25		50		50	75	25	100										100		
FG5	0	5	0	2	0	3	3	2	5	0	0	0	5	0	0	4	1	0	1	4	
%		100		40		60	60	40	100				100			80	20		20	80	
FG6	9	0	5	3	0	1	9	0	5	0	2	2	2	4	3	8	0	1	0	9	
%	100		56	33		11	100		56		22	22	45	33	33	89		11		100	
FG7	3	2	3	0	1	1	5	0	5	0	0	0	0	5	0	4	1	0	5	0	
%	60	40	60		20	20	100		100					100		80	20		100		
FG8	0	8	8	0	0	0	5	3	8	0	0	0	8	0	0	2	6	0	0	8	
%		100	100				63	37	100				100			25	75			100	
FG9	7	0	0	3	3	1	7	0	6	0	1	0	1	5	1	3	3	1	0	7	
%	100			43	43	14	100		85		15		14	72	14	43	43	14		100	
FG10	6	2					8	0	5	0	1	2	2	5	1	6	2	0	1	7	
%	75	25					100		63		12	25	25	63	12	75	25		12	88	
FG11	0	8	7	0	0	1	7	1	8	0	0	0	7	1	0	4	3	1	0	8	
%		100	88			12	88	12	100				88	12		50	37	13		100	
FG12	8	0	5	3	0	0	8	0	8	0	0	0	1	6	1	6	2	0	0	8	
%	100		63	37			100		100				12	75	13	75	25			100	

Annex 3. Forest and mitigation activities

S/N	Mitigation activities A1	Activities to be compensated A2	Reasons for compensation A3	Compensated groups A4
FG1 – R.P Ilonga				
Forest use • Firewood • Timber/charcoal • Poles • Mining (gold) • Agriculture • Some fruits • Herbal plants	(2 ¹) Use forest at selected times per week/month	Reductions in forest use need compensation or alternative	(3) We have no alternative sources	All villagers/ households (equally)
	(1/3) Education on conservation and deforestation		(3) With income no need to use forest	
	(3) Education/use of fuel-efficient stoves		(1/3) Climate change forces us to make use of the forest when agriculture fails	
	(1) Education/use of modern charcoal-making methods		(2/3) Use forest for income/with other income do not need to go to forest	
	(1) Provide seeds/nurseries to plant various trees	(2/3) Do not need compensation to stop burning in forest	(1) Forest burning done for hunting or to collect firewood	
	(1/3) Land-use planning (LUP) for some forests for use/conservation			
	(1) Village natural resource committee (VNRC) patrol			
	(2)) Practice agro-forestry			
FG2 – F Ilonga				
Forest use • Firewood • Charcoal • Timber • Building materials • Hunting • Fire • Shifting agriculture • Fruits	Better fire management to avoid spreading	(7) Compensation for protection	(6) Use the forest as we have no alternative sources	(6) All villagers/ households (equally) (because all use forest and all need to conserve)
	(4) Use forest at selected times per week/month	(7) Protection will store enough carbon for them to sell, giving them compensation		
	(4/7) Loans/assistance for small businesses/income	(7) Lost income needs to be compensated		
	(1) Education on conservation and deforestation	(4/9) Reductions in forest use needs compensation or alternative	(4) Use forest for income/ with other income do not need to go to forest	
	(1) Education/use of fuel-efficient stoves			
	(1/6) Provide alternatives to forest products			
	(6) Education/use of modern charcoal-making methods			
	(4/7) Education/agricultural support to earn a higher income so do not have to go to forest	(7) Do not need compensation to stop burning in forest		
(4) Community bylaws concerned with forest use				
(1) All participate actively in forest protection				

1. The number represents which person the response came from, and corresponds to the participation list for each focus group. Due to ethical considerations, these lists have not been published. In some of the focus groups, this tracking was not done sufficiently and so the information is not shown in these tables. But general experiences and trends were still noted and recollected and included in the analysis.

FG3 – M Ilonga					
Forest use • Charcoal/timber • Firewood • Agriculture • Beekeeping • Poles (building) • NTFPs	(3) Those cultivating in forest given new/equivalent land	(5/6) Lost forest income needs to be compensated (e.g. from selling charcoal)	(5) Use the forest as we have no alternative sources	(7) If compensation is high, give to those with forest income to stop harmful activities and the remaining to social services (those with no forest income then also benefit from new infrastructure)	
	(1) Education/use of fuel-efficient stoves				
	Education/use of modern charcoal-making methods	(3) Do not need compensation to stop burning in forest	(6) Should be paid for the time spent on conservation		
	(3) Better fire management to avoid spreading				
	(3) Have to pay for license to extract timber/charcoal				
	(7) Education/agricultural support for more income				
	(3) Seeds/nurseries to plant trees for various uses				
	(6) Education on conservation and deforestation				
FG4 – R.P Nyali					
Forest use • Charcoal • Timber • Grasses • Poles • Hunting • Beekeeping • Herbal medicine • Fishing • Bamboo • Fire • Agriculture	(1) Timber for personal use i.e. not commercial	(2) If stop agriculture from forest need compensation with new land	(2) Use forest for income/ with other income do not need to go to forest	(2) All villagers/ households (equally) (even those who lose more income)	
	(2/4) Forest use selected times a week/month				
	(2) Education/use of fuel-efficient stoves	(4) Reductions in forest use need compensation or alternative (e.g. timber for building)			
	(1) Education/use of modern charcoal-making methods				
	(4) Provide loans/help for small business income				
	Provide alternatives to forest products	(4) Lost forest income needs to be compensated (e.g. from timber)			
	(2) Better fire management to avoid spreading				
	(2) Community bylaws concerned with forest use	(1) Those earning an income from forest should NOT be compensated			(1) Should not compensate those who degrade the forest for their own benefit/income, rather punish them
	(3) Village natural resource committee patrol				
	(4) LUP with forest for use/ conservation				
	(1/4) Charged with high fines if found breaking the bylaws	(1) Stopping fishing in forest should NOT be compensated			(1) Conserve because it is important not because of compensation
(1) All participate actively in forest protection					

FG5 – F Nyali				
Forest use • Charcoal/timber • Firewood • Poles • Fruits • Hunting • Wild fruits • Mushrooms	(2) Those cultivating in forest given new/equivalent land	Reductions in forest use need compensation or alternative	(2) Will not be able to stop cultivating in forest without new land/agricultural income	All villagers/ households (equally)
	(1) Education/use of fuel-efficient stoves			
	(1) Use forest at selected times a week/month			
	(1) Have to pay for license to extract timber/charcoal	(2) If stop agriculture from forest then need compensation with new land	(1/2) Are conserving because it is important/ for our own benefit not because of compensation	
	(3) Village natural resource committee patrol			
	(2/4) Provide loans/help for small businesses/income	(1/2) Do not need compensation for forest conservation	(2) If stopping cultivating in forest should get land	
	(1/2) LUP with some forests for use/conservation			
(1) Education/agricultural help to earn a higher income				
FG6 – M Nyali				
Forest use • Firewood • Agriculture • Building materials • Charcoal • Hunting/NTFPs	Timber for personal use/not commercial	Reductions in forest use need compensation or alternative (e.g. energy for cooking or building materials)	Use the forest as we have no alternative sources	All villagers/ households (equally)
	Reduce clearing forest for new farmland			
	Reduce illegal hunting and fishing			
	Education/use of fuel-efficient stoves			
	Community bylaws concerned with forest use			
	Village natural resource committee patrol			
FG7 – R.P Idete				
Forest use • Firewood • Building materials • Timber/charcoal • Hunting/NTFPs • Livestock/agriculture	Timber/charcoal for own use/not commercial	Reductions in forest use need compensation or alternative	Are conserving because it is important/our own benefit	Those degrading most get less/are punished
	Education/agricultural help to earn a higher income			
	Better fire management to avoid spreading	Compensation if accidents happen during fire-fighting in forest	Need treatment/ compensation if get injured during fire fighting	
	Reduce illegal hunting and fishing			
	Community bylaws concerned with forest use			
	Education/use of fuel-efficient stoves			
FG8 – F Idete				
Forest use • Firewood/fire • Timber/poles • Hunting/NTFPs • Agriculture	(1) LUP with some forests for use/conservation	(2) No need for compensation, will also conserve without	(2) Are conserving because it is important/for our own benefit not because of compensation	(7) All villagers/ households should get BUT for those spend more time e.g. on patrol need more compensation
	(1) All participate actively in forest protection	(2) Know that protecting the forest will store carbon they can sell/ compensation		
	(1) Charged with high fines if found breaking the bylaws			
	(1) Use forest at selected times a week/month		(2) Compensation will be good motivation to conserve	

FG9 – M Idete				
Forest use • Farming • Firewood • Charcoal/timber • Building materials • Hunting • Livestock grazing • NTFPs	Reduce clearing forest for new farmland	If have to stop agriculture in the forest need compensation with new land	Will not be able to stop cultivating in forest without new land/agricultural income	All villagers/ households (equally)
	Education/use of fuel-efficient stoves			
	Timber for personal use/not commercial			
	Village natural resource committee patrol			
	Education on conservation and deforestation			Those who have to stop cultivating in forest also should get new land
	Seeds/nurseries to plant trees for various uses			
	Education/agricultural support to earn a higher income so do not have to go to forest			
FG10 – R.P Mfluni				
Forest use • Building materials • Firewood • Agriculture • Livestock • NTFPs • Charcoal and timber (neighbour)	Reduce clearing forest for new farmland	If have to stop agriculture from forest need compensation by new land	Will not be able to stop cultivating in forest without new land/agricultural income	All villagers/ households (equally) (because all involved in forest management)
	LUP with some forests for use/conservation			
	Village natural resource committee patrol			
	Control charcoal/timber extraction by outsiders	Compensation if accidents happen during fire-fighting in forest	Need treatment/ compensation if get injured during fire-fighting	
	Community bylaws concerned with forest use			
	Education/use of fuel-efficient stoves	Compensation for forest protection		
	Education/agricultural support to earn a higher income so do not have to go to forest			
FG11 – F Mfluni				
• Firewood/fire • NTFPs/agriculture • Timber/poles	(3) Education/use of fuel-efficient stoves	(3) Will conserve without compensation BUT compensation will be a very good motivation		(All) All villagers/ households
	(3) Village natural resource committee patrol			(3) ² Those degrading most get less/are punished
	(3) Better fire management so it doesn't spread			
FG12 – M Mfluni				
Forest use • Timber/charcoal • Firewood • Agriculture • Building materials • Livestock grazing • NTFPs	Stop shifting cultivation	Compensation for stopping shifting cultivation (in terms of agricultural assistance)	Will not be able to stop cultivating in forest without new land/agricultural income	All villagers/ households (equally)
	Village natural resource committee patrol			
	Timber for personal use/not commercial			
	Community bylaws concerned with forest use			
	Reduce clearing forest for new farmland	Compensation if accidents happen during fire-fighting in forest	Need treatment/ compensation if get injured during fire-fighting	Those stopping cultivating in forest should get new land
	Education/agricultural help to earn higher incomes			

2. For instance in this case, at first everyone agreed on equal distribution. However, when asked specifically whether they thought a carpenter should receive a larger payment (because carpenters would have more to lose due to their reduced forest use) one participant changed their opinion from equal distribution of payments to punishing those who degrade the forest.

Annex 4. Compensation levels and frequencies

S/N	Compensation type B1	Reason for choice B2	Compensation level C1	Reason for choice C2	Frequency D1	Total period D2
FG1 – R.P Ilonga	Cash/monetary	(1) Better to get an increased income, more sustainable/ more benefit in future	(3) Calculation to cover opportunity cost to livelihoods (e.g. from charcoal making)	(3) Need to cover opportunity cost	(3) Once (in the beginning only)	In the beginning
	(1) Agricultural support					
	(3) Support for incomes					
	(2) Development projects					
FG2 – F Ilonga	(1) Cash/monetary	(1) Cash makes you feel compensated/ motivated	(6) Cover opportunity cost	(4/6) Need to cover opportunity cost	(7) Every 3 months	(1) Beginning only
	(4/7) Support for incomes		(4) Tsh200,000 per household		(4) Monthly	
	(4) Development projects	(1) If money is given to the government it will not reach them		(4) Compensation is motivation to continue		(4) When produce and sell carbon do not need other compensation
		(4) New developments will remind/motivate them				
(4) Conservation education	(4) If educated can understand why they should do this					
FG3 – M Ilonga	(5) Development projects	(7) To get real benefit: if high payment to households then in cash, but if too small better for development project like dispensary/ school	(6/7) Should depend on their needs and population	(6) Need compensation that reflects our needs	(3) Once a year	(6) When produce and sell carbon do not need compensation
	(7) Cash/monetary payment		(6) Paid according to the carbon stored			
	(6) Establish loans (groups)					
FG4 – R.P Nyali	(1) Development projects/cash (50/50%)	(2) Cash payment makes you feel compensated/ motivated	(1) 15,000 per person (twice a year)	(2) Should be compensated more in future	(1) Once a year	After REDD/5years we do not need more
	Education/support for other incomes (some in favour (1) and some against (4))	(2) Developments remind/motivate	(1) Tsh100,000 per household			(4) Compensation motivates
		(2) If money left to the government it will not reach all	(4) Tsh100,000 per individual	(2/4) Does not cover their needs	(2) Twice a year	As long as the forest is there
FG5 – F Nyali	(1) Establish loans (groups)	(4) Better to get an increased income, more sustainable/ more benefits in future	(4) More than what they are getting now (does not cover their needs)	(4) The amount of compensation does not cover their needs	(2) At least twice a year but frequently so that we can be motivated	After REDD/5 years we do not need other compensation
	(1/4) Education/ support for other incomes					
	(5) Agricultural support					
	(1) Cash/monetary	(1) Cash motivates		(4) Should get more in future		
	(1) Development projects – like dispensary	(1) New developments will remind/motivate them			(2) Frequency depends on carbon amount	

FG6 – M Nyali	Cash/monetary payment	Easy to manage – money, targeted development projects	Tsh100 million for the village	Make a development that benefit/motivate all	Once a year	Until we/project are ready to take over
	Development projects – e.g. dispensary, running water, school	New developments will remind/motivate them				After REDD/5 years we do not need other compensation
FG7 – R.P Idete	Cash/monetary payment		Tsh70 million for the village	Will be enough to make a development project for all	Once a year	As long as the forest is there/ we manage it
	Development projects e.g. dispensary, school	Developments will remind/motivate them				Until we/project are ready to take over
FG8 – F Idete	(6) Development projects (dispensary, road) (50% of compensation)	(6) If money left to the government it will not reach them (only a few will benefit)	(8) Tsh50,000 per household	(1) The amount of compensation does not cover their needs	(1/8) Monthly	After REDD/5 years we do not need other compensation
	(6) Cash/monetary payment		(1) Tsh100,000 per household (50/50 cash/social service)			We will continue after compensation
FG9 – M Idete	Development projects	Easy to manage – money, targeted development projects	Paid according to the carbon stored	Compensation is like motivation to continue	Twice a year	As long as the forest is there
	Cash/monetary payment	Cash payment makes you feel compensated and motivated to protect the forest	Tsh20,000 per person	Will be enough to pay for a development that benefits/motivates all		Until we/project feel ready to take over
FG10 – R.P Mfluni	Development projects – like dispensary	New developments will remind/motivate them	Tsh150 million for the village	Will be enough to make a development project that will benefit/motivate all	Every/once a year	After REDD/5 years we do not need other compensation
	Cash payment					
FG11 – F Mfluni	(1) Cash/monetary payment	(2) If money left to the government it will not reach them (only a few will benefit) (so best to get the money ourselves)	Tsh300,000-500,000 per household 50/50 cash/social services	The amount of compensation does not cover their needs.	Monthly	(5/7/8) Continue even after compensation stops
	(3) Development projects – like dispensary					Compensation is like motivation to continue
FG12 – M Mfluni	Cash/monetary payment	Cash payment makes you feel compensated/motivated	Tsh70 million for the village	The amount does not cover their needs	Every/once a year	Until we or the project feel we are ready to take over/have learned
	Development projects – like dispensary, running water, school	Easy to manage – money, targeted development projects		Compensation is like motivation to continue		

Annex 5. Distribution and governance

S/N	Distribution of compensation E1	Reasons for distribution E2-3	Effort or output? E4	Who to govern distribution? G1	Rules and responsibilities G2	Likelihood of success? G3	Strengths and weaknesses of REDD H
FG1 – R.P Ilonga	(3) Development projects benefit all	(1) Criteria for compensation should be given by the project	(1) Paid according to output (carbon)	(1) All village is under village government	(2) Village government will oversee	They will do it fairly (because of gender balance)	(1) Better forest and environment/ climate
	(3) Community/ committee will decide the use				(1) Negative that people will lose income		
FG2 – F Ilonga	All should be compensated the same	If compensated differently some will still use/will not want to protect	(6) Paid according to output (carbon)	(1/4) Project/ REDD people (do not trust village leaders)	(1) Information sharing should go from REDD to village and sub-village to the people	It will be good/work	It can make things more honest and open than they are now
	(1) Some can receive training and teach						
FG3 – M Ilonga	(All) Development projects benefit all	(6) The compensation should work as a motivation for all to take care of the forest	(6) Paid for both output and effort, in case output is low (e.g. after a fire) so have some compensation	(3/6) A community-elected committee (under village government)	(3) Village government will oversee	(6) It will be good/work	Negative if people will lose income but if REDD does as it promises then OK
	All should be compensated the same				(3) Community/ committee will decide one use		
	(6) ³ Those patrolling should be paid more because they spend more time protecting				(6) Committee responsible for accounting for the money		
FG4 – R.P Nyali	All should be compensated the same	(1) If compensated differently some people will still use/ not want to protect the forest	Paid for both output and effort, in case output is low (e.g. after fire) so have some compensation for their time	(3) A community-elected committee	(3) Community/ committee will decide one use	(4) They will do it well/fairly because they work under the village government	Did not expect trial payment so good motivation
	Those patrolling the forest should be paid more or get tools, food when patrolling				(3) Committee responsible for accounting for the money		Education on agriculture/ conservation very positive
			(3) Committee make sure distribution is good/ fair	It can make things more honest and open than they are now			
			(3) The government is not involved/ included	Negative that people will lose income			
						(2) Weaknesses compared to benefits are few	

3. This answer came about after asking specifically what their opinion was on those patrolling.

FG5 – F Nyali	(1/2) All should be compensated the same	(4) Compensation is motivation	(1) ⁴ Paid for both output and effort, in case output is low so get some compensation	Project/REDD people (do not trust village leaders)	Village government oversee	It will be good/work	No weaknesses
		(4) If compensated differently some people will not want to protect the forest			Community/committee will decide on use		It is good (we have got an office already)
					The committee distributes the money		
FG6 – M Nyali	Size of the forest, quality, management and control activities should decide how much	The compensation should motivate all to conserve	Paid for both output and effort, in case output low	A community-elected committee (under village government)	Village government will oversee the activities	They will do it fairly	Better forest and environment/ climate
							Education on agriculture/ income/ conservation is good
							No weaknesses so far
FG7 – R.P Idete	Size of the forest, quality, management and control activities should decide how much	The compensation should motivate all to conserve	Paid for both output and effort, in case output is low	A community-elected committee (under village government)	Village government will oversee the activities	They will do it fairly	Education on agriculture/ income/ conservation is good
							No weaknesses so far
							Do not know if REDD will work
FG8 – F Idete	All should be compensated the same	It is fair that those who do most deforestation get paid less and those conserving the forest get paid more	Paid according to effort to conserve the environment	(All) A community-elected committee	The committee distributes the money		Better forest and environment/ climate
	Those patrolling the forest should be paid more because they spend more time protecting it			(All) Project/ REDD people (do not trust village leaders)			It is good (we got an office and land for cultivation)
							(2) Negative for those who shift from forest and are given bad land
						(1) Negative that people will lose income	
FG9 – M Idete	Size of the forest and carbon storage should decide how much	The compensation should motivate all to conserve	Paid for both output and effort, in case output is low/ while we wait for carbon	A community-elected committee (under village government)	Village government will oversee the activities	They will do it fairly	Education on better agriculture/other income very positive
		If compensated differently some people will not want to protect the forest					Education on forest conservation very positive
							Negative that people will lose income

4. Here, the first answer was to pay according to carbon stored only, but when asked what should happen if the forest burnt down, it changed to a preference for a combination of carbon stored and effort made as the basis for payment.

FG10 – R.P Mfluni	Size of the forest, quality, management and control activities done by the community should decide how much	The compensation should motivate all to conserve	Paid for both output and effort, in case output is low (e.g. after fire) so have some compensation for their time	Project/REDD people (do not trust village leaders)	Project/REDD will oversee activities	It will be good/work	Better forest and environment/ climate
		If compensated differently some people will still use/ not want to protect the forest				Not sure if REDD payment will work	LUP not agreed/ imposed Education on agriculture/ income good It is good (we have already got an office) Negative when have to shift from forest, new land given not as good
FG11 – F Mfluni	All should be compensated the same (even those patrolling the forest and those who use a lot of trees because we all should take care of the forest)		If output is high, then according to carbon, but if low should have a minimum payment for effort (e.g. protection against forest fires)	(6) Project/ REDD people (do not trust leaders)	(3) The community/ committee will decide what to use the money for	They will do it fairly	It is good (we have already got an office and fuel-efficient stoves)
				Accompanied by community-elected committee			No weaknesses (6) Negative that we have to build our new office without payment for labour
FG12 – M Mfluni	Size of the forest, carbon stored and management and control activities like fire-fighting should decide how much	The compensation should work as a motivation for all to take care of the forest/because we all take care of the forest	Paid for both outputs (carbon and effort) in case output is low so have some compensation for their time	Project/REDD people (do not trust village leaders)	Project/REDD will oversee activities	It will be good/work	Better forest and environment/ climate Education on forest conservation very positive Education on agriculture/ income very positive Negative when have to shift from forest/set aside land, new land given not as good

Annex 6. Sustainability of forest conservation and REDD

S/N	When forest is good what happens? D4	Who decides the forest is good enough? D5	What is 'sustainability'? F1	Main factors contributing to sustainability F2
FG1 – R.P Ilonga	(1) When forest cover is good they do not need compensation – forest will compensate	Village natural resource committee can decide	(All) Controlled/small but regular use	(1) Education on good forest management
				(1) Transparency in what they do
FG2 – F Ilonga	(4) When forest cover is good they do not need compensation – forest will compensate	Village natural resource committee can decide		(4/5/6) Existence of REDD project/payment
FG3 – M Ilonga	Should continue to be compensated		(1) Controlled/small but regular use	(1) Bylaws that everyone has to follow
	Continue conserving without compensation		(6) Plant (fruit) trees so can benefit in future	
FG4 – R.P Nyali	(1) When forest cover is good they do not need compensation – forest/carbon will compensate them	(1) Village government	Good forest management leads to good compensation	Education on good forest management
		(1) Experts	Good conservation of the forest	
FG5 – F Nyali	After the project/5 years then we can answer		Good conservation of the forest	
FG6 – M Nyali		Village elders	Good conservation of the forest	Training for VNRC on measuring carbon
			Good forest management leads to good compensation	Existence of REDD project/payment
FG7 – R.P Idete	They should continue to be compensated for conserving	Project/REDD should decide	Good conservation of the forest	Good management so carbon is stored
				Existence of REDD project/payment
FG8 – F Idete	Will continue conserving even without compensation (but compensation motivates)		Good community management	Bylaws that everyone has to follow
				Existence of REDD project/payment
FG9 – M Idete	When forest cover is good they do not need compensation – forest will compensate	Project/REDD should decide	Good conservation of the forest	Training for VNRC on measuring carbon
				Existence of REDD project/payment
FG10 – R.P Mfluni	They should continue to be compensated for conserving	Project/REDD should decide	Good conservation of the forest	Community participation in protection
				Training for VNRC on measuring carbon
				Support/motivation from leaders/REDD
				Existence of REDD project/payment
FG11 – F Mfluni	They should continue to be compensated for conserving			Support/motivation from leaders/REDD
FG12 – M Mfluni	If forest across the world returns to original levels there is no reason for carbon trade.	Village elders and project/REDD decide	(4) Good community management	Good management so carbon is stored
				Existence of REDD project/payment

Annex 7. REDD trial payment versus focus group suggestions at village level

Village name	Amount paid to village (Tsh/USD) *	Amount suggested per village (Tsh/USD)	Amount per individual (actual and expected)	Ratio (expected versus actual)
Nyali	29.4 million/17,828	100 million/60,606		3.3 times higher
Idete	10.8 million/6,594	70 million/42,424		6.4 times higher
Mfluni	6.6 million/4,010	70-150 million/42,424-90,909		10.6 – 22.7 times higher

*Source: Enos 2013b

Annex 8. REDD trial payment versus focus group suggestions at individual level

Village name	Amount received by individual (Tsh)	Amount received by individual (USD)	Suggested amount to individual (Tsh)	Suggested amount to individual (USD)
Nyali	12,663	7.67	43,047	26
Idete	7,499	4.54	48,242	29.2
Mfluni	8,148	4.93	86,206-184,729	52.24-111.95

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