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# REDD+ benefit sharing mechanisms: Does it make a difference in equity?

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## Abstract

The concept of Reducing Emissions from Deforestation and Forest Degradation (REDD+) has become a key debate of international cooperation on climate change. While most countries acknowledge the importance of so called community carbon benefits under REDD+ interventions, they are only just beginning the process of defining institutional arrangements for the sharing of economic benefits in REDD+. The Tanzanian Community Carbon Enterprise and UN-REDD+ models offer two examples of benefit sharing mechanisms which remains to be analyzed. The various actors and groups involved in designing these models have varying degrees of negotiation powers and diverse interests regarding the objectives, design and implementation of REDD+. This raises questions of institutional choices: how REDD+ benefit sharing mechanisms influences equity in forms of recognition of local representation and accountability of the non-governmental organizations to agrarian communities and in various levels of governance.

## 1 Introduction

Climate change poses enormous governance challenges and has profound social implications for people (see Byravan and Rajan 2008, Sovalcool and Brown 2009). It is assumed that the pro-poor climate strategies need public acceptance, thus public involvement in developing such strategies is necessary for their effective implementation. There is also a possibility that people's priorities in facing uncertainty related to climate change is more towards securing the future reactively in the short run, without variations among the various stakeholder groups at a local level (Sapountzaki 2007). The further research is needed to discover whether the proponents of global level climate strategies and interventions are able to understand the aspirations of the local stakeholders and function with responsive governance. This is particularly important for determining future socially-acceptable, climate-compatible development paths for local people (Mustalahti et al. 2012).

In our current study, REDD+ is approached as a global environmental governance<sup>1</sup> reform process, which can lead to both expected and unforeseen impacts, environmentally and socially. Within the global environmental governance regime, there is a proliferation of institutional arrangements and mechanisms involved in initiating a wide range of REDD+ activities in what could be "observed and controlled" as global multi-layered environmental governance. Ribot (2004;2007;2009) has

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<sup>1</sup> Governance here means environmental governance consisting of the set of regulatory processes by actors such as governments, international organisations, communities, the private sector and NGOs which all influence each other (Lemos and Agrawal, 2006:298).

asserted that institutional arrangements necessary to bring actual decentralization are rarely established in so-called decentralization reforms related to the forestry sector. Instead, many interventions, such as REDD+, result in the transfer of powers to central government agencies, in which case governments simply proclaim that they are decentralizing and enact a theatrical image of reform for their donor audiences (Bolin and Tassa 2012; Mustalahti et al. 2012).

Some authors argue that the success of community-based interventions has been limited because elected local governments have not been sufficiently empowered to allow them to work properly (Ribot and Peluso 2003; Lund and Treue 2008; Mustalahti and Lund 2009; Poteete and Ribot 2011). In other words, governmental actions taken to strengthen forest communities' ability to access and exercise their rights through investments in various forms of capacity building activities were lacking or missing altogether (Corbera and Brown 2010; White et al. 2010; Fisher et al. 2011). Brockington (2007) has argued that community-based forest management (CBFM) are not serving the community democratically. The poorest segments of the communities are more vulnerable in capturing the benefits and may even be adversely affected by the CBFM regulations (Lund and Treue 2008). Therefore, the way in which climate change adaptation and mitigation strategies and interventions are designed and implemented can alter power relations at the local level either in favour of implementing the principles of equity, responsiveness and accountability, or vice versa. Democratic representation could create and force social justice, which is strengthened by equity<sup>2</sup>, responsiveness and accountability (Manor 2004; Ribot 2004). Thus, these interventions are not just an economic tool for a post-2012 climate regime but also affect local democracy, citizenship, and constitution of public domain. Thus, our current interest in Tanzania as well as in Laos and Mexico in coming years, is to study further institutional arrangements choices in governance, wherein the outcomes, in terms of equity, remain to be analysed.

## 2 Research methods and cases

In order to understand the particular realities of environmental governance implemented on the ground, the cases in Tanzania have been selected based on their current involvement in the REDD+ activities. The context specific design of the fieldwork aims to reveal how local, national and global configurations of power intertwine in such processes and how they shape, and may be transformed through REDD+ in the case study countries. In January 2012, the RFGI programme<sup>3</sup> organized a methods meeting which helped to define the methods for this current long-term research called "REDD+: The new regime to enhance or reduce equity in global environmental governance?"

Tentatively, the RFGI research methods will be used Tanzania, Laos and Mexico during 2013-2017. In Tanzania, during the current pre-study in 2012, in the selected case study region, Lindi region in South-eastern Tanzania, two case studies was studied through qualitative research methods to allow profound understanding of the motivations and interests of the actors involved in environmental

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<sup>2</sup> Equity here relates to negotiation powers, the right to participate in the planning and implementation of global environmental governance mechanisms, and the future allocation of costs and benefits among stakeholders locally and globally in climate change mitigation (Kontinen and Mustalahti 2012). In theory, the term equity is related to attempts to explain perceptions of fair or unfair distributions and citizenship behaviors (Adams 1965; Akan et al. 2009).

<sup>3</sup> RFGI is a comparative local-governance research and training programme of CODESRIA, International Union for

Conservation of Nature (IUCN) and the University of Illinois. More information from:

[http://www.beckman.illinois.edu/strategic/files/RFGI\\_Programme\\_Summary\\_and\\_Introduction.pdf](http://www.beckman.illinois.edu/strategic/files/RFGI_Programme_Summary_and_Introduction.pdf)

governance, the authority relationships, and forms of interaction between them. The methods included participatory observations, interviews of the local representatives and other stakeholders, such as representatives of local and central government, civil society groups, members of the private sector and donors. In addition, the study concerned local by-laws, project related documents and evaluations and research literature addressing policies, laws and past decision-making structure and benefit sharing arrangements in the selected study areas in 2009-2012. In future, selected case study region will be studied through the context-specific approach<sup>4</sup> in order to deeply understand as well as triangulate the qualitative data. In 2013-2017, the research material to be collected is to be analysed and interpreted so that the context-specific impacts could be understood and compared between the different interventions in the three case study countries.

### **3 REDD+ Payments under the UN-REDD Tanzania Programme**

Tanzania is one of nine pilot countries of the United Nations REDD Programme (UN-REDD), receives considerable funding from the Norwegian, Finnish and German governments and is participating in the World Bank's Forest Carbon Partnership Facility. In Tanzania, Zahabu and Jambiya (2007) have estimated that local communities could receive financial benefits of up to US\$ 6,500 annually (if carbon is priced at US\$ 5 per ton of CO<sub>2</sub> in the voluntary market) from the sale of their forest carbon credits gained through REDD+ activities. Channelling funds and power to local communities who should operate as the providers and sellers of REDD+ carbon credits could be a promising way to make REDD+ work for communities: However, clear benefit sharing arrangements at village and individual levels has been highlighted as a very complex issue in capturing these carbon revenues at local levels (Chhatre and Agrawal 2009; Blomley et al. 2011; Peskett 2011). During 2011, UN-REDD Tanzania Programme Management Team selected Angai Villages Land Forest Reserve (AVLFR) as a potential area for the piloting of REDD payments.

AVLFR is located in the Liwale district in Lindi region in Tanzania. The AVLFR encompasses nearly half a million hectares of land, of which about 30 % is forest and the rest is village general land. The AVLFR is managed by 13 villages which were established during the villagisation (*Ujamaa*) period in the 1970s as part of the effort of moving rural people closer to social services. The villagers secured formal ownership of 139 420 hectares of the forest reserve in 2005. A feasibility study of REDD+ project prepared by the Clinton Climate Initiative and participatory forest carbon monitoring (PFCM) demonstrated that AVLFR has high carbon stocks but same time threats to degradation due to land use changes and shifting cultivation in surrounding villages, and because of forest fires impacting to the regeneration. The AVLFR is relatively large in size and therefore have large amount of carbon benefits. Nevertheless the opportunity costs of these forests is expected to be low compared to other sites (Mukama et al. 2012). The selection to be part of the piloting of UN-REDD payments was justified by the fact that, the Angai forest is among the early community based forest management (CBFM) areas in Tanzania but not included in the pilot projects under Norwegian bilateral agreement funding. UN-REDD Tanzania programme is therefore envisaged to pilot REDD payments in the three selected districts in Tanzania including

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<sup>4</sup> This approach focuses on the political and social setting – the 'context' – in which the intervention takes place, seeing the intervention and the context together as a whole simple because the fact that an intervention does not take place in a vacuum: an impact is produced by the interplay between the intervention and the several other processes already unfolding at the same areas or regions (Koponen and Mustalahti 2011:10).

Liwale district taking advantage of the already accumulated experiences on CBFM. In addition the selected village land forests have carried out carbon measurements of their forests which will facilitate the computation of credits for the piloting of the payments. A UN-REDD team of four staff visited the selected districts and carried out separate meetings with villagers, district commissioner, district executive officer, district natural resources officer, district forestry officer, and other district officers. In case of AVLFR, these officials were introduced to the UN-REDD intention of piloting the UN-REDD payments in the three identified villages, Mihumo, Ngongowele and Ngunja.

According to UN-REDD payment plans different payment modalities could be used depending on the forest ownership. Since, Angai Villages Land Forest Reserve is owned by the village under CBFM, the REDD fund based payments should in principal be channelled down to the village councils. As a control, the funds will pass through the district council where the forestry department will be responsible for following up on the implementation of activities. For this purpose a portion of the money i.e 15% will be kept at the district council for financial handling charges and implementation of follow-up of activities. The rest of the money (i.e 85%) could be disbursed to the village bank account and the expenditures could be decided by the village forest committees and endorsed by the district forestry department.

#### **4 The Community Carbon Enterprise (CCE) model**

A recent initiative aims to enhance the implementation of local benefit sharing approaches in PFM is the establishment of a ‘Community Carbon Enterprise’ (CCE) model, promoted by the Tanzania Forest Conservation Group (TFCG) and Community Forest Conservation Network of Tanzania (MJUMITA) and which could be managed on behalf of participating forest communities (Kimbowa et al. 2011). The CCE model is based on aggregation of voluntary emissions reductions from different villages, which will then be traded on the voluntary carbon market, after being certified and verified according to VCS and CCB standards. The main advantage of this approach is that it reduces the transaction costs associated with small, individual village’s emission reductions, which would inhibit their participation in carbon markets. However many formidable challenges still need to be overcome such as the appropriateness and fairness of benefits that accrue to different actors, the actors who may or may not be entitled to benefits (equity issue) (e.g., community user groups; individuals; women), their “legitimacy” in receiving benefits; and the rules which govern benefit sharing (e.g., criteria in distributing revenues, rules within community groups, land tenure and carbon rights, etc.) (Mahanty et al. 2009; Schreckenber and Luttrell 2009).

Prior to CCE establishment, an intensive process of social safeguards for community REDD+ projects was implemented in the form of social impact assessment and Free, Prior and Informed Consent (FPIC) procedures. REDD+ has been advertised as a means offering a win-win solution, bringing benefits to communities and reducing deforestation. During the first 18 months, four village land forest reserves (VLFR) covering 6501 ha have been established; draft village land use plans in six villages were developed; analysis of historical deforestation; collection of baseline carbon monitoring data; and market analysis were completed (MJUMITA 2011). The model was created based on the assumption that if REDD+ revenues can be directly channelled to the communities and can be equitably distributed within the communities, they could cover the opportunity costs and the forest management costs for communities.

The CCE model is based on aggregation of voluntary emissions reductions from different villages, which will then be traded on the voluntary carbon market, after being certified and verified according to VCS and CCB standards. Payments are performance-based commensurate with measurable reductions in emissions relative to a historical baseline and are calculated on a village by village basis. That is, after carbon credits are sold on the international voluntary market, each village will receive revenue based on the amount of emissions reduced in their forest areas. Revenue distribution within villages (at the individual/adult level) will be based on individual performance and contribution to the project as outlined in each village REDD+ revenue distribution by-laws. These by-laws are currently being established in each participating village and approved by the village assembly. Apart from the individual payment arrangements, the benefit sharing arrangements can also be established at the community level for the building of school or health centre for example.

MJUMITA aims to play the role of service provider linking communities with REDD+ finance or voluntary carbon markets in future. MJUMITA will be responsible for remote sensing, contracting third party verification, marketing and payment facilitation. Payments to the participating villages will be based on the potential average avoided emissions per year, minus the costs involved in PFM, intermediary costs of MJUMITA, the cost of third party validation, and registration and certification and brokerage fees (MJUMITA 2011). In case of CCE, term “benefit” refers exclusively to the net carbon rent which is the difference between the cost of implementing REDD+ (costs involved in PFM, intermediary costs of MJUMITA, the cost of third party validation, and registration and certification and brokerage fees) and the average global carbon price at which emissions reductions credits from REDD+ could be sold.

## 5 Discussion

The both REDD+ payment models in Tanzania claim to be based on honesty and transparency but in reality, this is hard to achieve, especially when many stakeholders are involved. The risk of corruption may be particularly high for the project implementers, such as District authorities in case of UN-REDD model and MJUMITA in case CCE models who are playing the role of service providers and have considerable control over how funds or benefits are managed. Also, although CCE model have conducted thorough PIFC procedures and social safeguard assessments (Kimbowa et al. 2011), there is always a risk that there was not a real democracy in the decision making process and locally elected representatives are not empowered and made accountable. Same concern and several questions can be raised in case of UN-REDD model: What is the role of different actors in the decision-making over the resources utilization, conservation, benefits and costs? What is the degree and level of local representations? What is the role of different actors' interests and conflicts in design of the REDD+ interventions? Specifically who and how carbon payments are designed and what type of principles are used as an accountability mechanism? In Tanzania, several authors argue that the VLFRs have not been empowered enough to defend their rights and their interests (see e.g. Brockington 2007; Lund and Treue 2008; Bolin and Tassa 2012). Instead, many reforms result in the transfer of powers to central government agents in which case governments simply proclaim that they are decentralizing and enact a theatrical image of reform for their donor audiences (Mustalahti and Lund 2009).

Finally, the last point which is at the root of this research project is the issue of equity and recognition. Particularly, the question of who are the recognized and accountable institution in case for carbon payments is unclear at various level of governance and little is known about how the carbon revenue will be shared between communities and service providers as well as within communities and the implications in terms on individual's income improvement, recognition and accountability. There is a risk that the performance based-payment will not necessarily result in an equitable distribution of benefits if it is difficult to identify the rules affecting the eligibility criteria. The "pay for performance basis" at the community level involves that payments are based on demonstrable reduction of emissions. Once again, it is very difficult to assert that the project implementers have measured robustly the real emission reductions which are highly sensitive to the choice of baseline methods and data availability.

On the other hand, the individual performance (adult above 18 years old) based on the contribution to the avoided deforestation activities is still woolly-minded and may lead to social conflicts. Related to the first point of elite capture, there is an issue of equity and fairness here because the costs of REDD+ as estimated in the project's assessments are unlikely to include the "survival and local communities' perceived costs" since these lie outside of standard calculations. The poorest groups are likely to be compensated less because they are, well, poor. In this situation new policies improving livelihoods strategies (agricultural intensification or agro forestry) or alternative livelihoods (non-farm), referred as adaptation costs are critically important.

Benefit sharing is usually used in the context of REDD+ to refer to how financial incentives transferred from international funds or carbon markets are shared between actors within a countries (Peskett 2011). This raises questions surrounding exactly what is being shared; which actors the benefits are being shared between; and as a cross-cutting issue, the formal and informal rules that govern benefit sharing between actors. The relationships between different actors and rules and other types of benefits apart from the carbon sales revenues are also included in the schema to give a general overview of how REDD+ benefit sharing needs to be analyzed at the local level. Additionally, types of REDD+ policies related to benefit sharing mechanism have already been distinguished; those that aim to generate "compensations" and those that generate "incentives", where compensations are benefits aiming to cover the foregone opportunity costs of deforesting the land, and incentives are the benefits of incentivizing positive choices of behaviour (Brown et al. 2008). Both incentives and compensations can be delivered up-front, to permit the commencement of REDD+, or dispensed over time, to guarantee the continuance of REDD+. Other category of REDD+ policies related to the distribution of benefits include also those that aim to generate "interventions". Interventions in this context are actions designed to create legal, administrative and technical benefits and include the regularization of land tenure, institutional arrangements, monitoring systems and other actions that are necessary to permit and guarantee positive outcomes for REDD+.

Another important consideration is the process by which sharing of benefit can be implemented: directly or indirectly (Peskett 2011). Direct benefit-sharing includes direct benefits to individual households (individual based performance) and indirect benefit-sharing includes benefits that aim to foster broader development and adaptation actions that enhance co-benefits (e.g. building of school or health centre). REDD+ benefits will be therefore distributed at national and local levels. The institutional choices in REDD+ policies used to establish the benefit sharing mechanism will affect the whole structure of a REDD+ scheme.



## 6 Conclusion

Both cases from Tanzania shows that by improving the chances of community participation in forest management, REDD+ interventions could contribute to reducing forest emissions and increasing forest carbon stocks. However, based on our pre-study material from Tanzania, we argue that locally elected village authorities and representatives should be devoted meaningful legislative, executive and judiciary powers in order to be able to represent their constituents' interests. Most importantly, vulnerable groups (poor, women, elderly and disabled people) could have been identified in earlier phases of project design. Democratic decentralization can increase equity and efficiency in natural resource management and benefit sharing mechanism (Ribot 2009). This could be done for example by involving forest-dependent communities in carbon monitoring which is seen as an effective and efficient way of measuring offsets and of ensuring that communities benefit from REDD+ (Zahabu et al. 2008; Mukama et al. 2011).

This raises question on how REDD+ is designed and implemented, and how it influences equity in forms of recognition and accountability of locally elected representatives and village governance involved REDD+ interventions. While the long-term review of the REDD+ in Tanzania may show that the interventions are not equitable in terms of access to benefits or impact to the local livelihoods because of various problems like elite capture and corruption, it may also show us that the scheme gives more possibilities to recognise local responsive representation and create counter powers through greater accountability to local people. In the long-run, these types of interventions in Tanzania could be expected to lead to a more equitable access to benefits and have a greater impact on the local livelihood through local democracy.

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