### Project Update: May 2020

### Why Social Equity in Conservation?

There are increasing attempts to attain the triple bottom line in conservation, where success is measured not only in terms of effectiveness and efficiency in biodiversity conservation but also on the attainment of social equity and broader human well-being goals (Dawson et al., 2017; Franks et al., 2018; Halpern et al., 2013; Klein et al., 2015). Historically, conservation impact assessment has placed greater emphasis on costbenefit analysis of conservation programs (Damania et al., 2005; Gutman, 2002; Naidoo & Adamowicz, 2005; Ramirez et al., 2002). While accurately accounting for the distribution of economic benefits and costs is essential, there is an increasing recognition of the need to address the inclusiveness and participatory nature of decision-making processes as well as respecting different values and knowledge systems in the design and implementation of conservation programs (Roe et al., 2018; Zafra-Calvo et al., 2017). The notion of equity integrates the issue of conservation costs and benefits with issues of governance and holistic well-being (Schreckenberg et al., 2016). Social equity is used as an approach or framework for explicitly recognizing and addressing differences in power between different actors in order to achieve long term social stability and development as well as to enhance sustainable protection of natural resources (Friedman et al., 2018; Guy & Mccandless 2012; Schreckenberg et al., 2016).

### Why Equity in the Bale Mountains?

In the context of Bale Mountains, addressing the multiple and interrelated dimensions of social equity matters for both instrumental and ethical considerations. From an ethical standpoint, there is increasing demand for acknowledging the rights of resource dependent local communities in the region and throughout Ethiopia. This call for recognizing rights of local communities is critical given ongoing political instabilities in the region fueled by demands for equity in economic and political opportunities. From the instrumental goal of ensuring effective biodiversity conservation, exclusionary approaches to conservation in this region have been met with stiff resistance. This is evidenced by the increasing settlement expansion into protected areas, anthropogenic fire, wildlife revenge killings, and conflict with private actors, government conservation organizations, as well as with tourists and hunters. To this end, there is an increasing call for participatory and inclusive conservation approaches in the region. However, community conservation itself not a panacea as there are a multitude of actors and groups with different roles, power relations and access to resources in Bale Mountains. The presence of social diversity implies there will be important differences in how the community hunting programs affect different groups resulting in potential winners and losers. This in turn determines the legitimacy and longevity of the program across communities.



Figure 1: Town of Rira at the heart of Bale Mountains National Park testament to the growing human pressure on protected area

### The Multiple Dimensions of Equity

Distributional equity refers to how costs, responsibilities, rights, and benefits are allocated among different actors which determines who has access to benefits and who suffers from restrictions on access to benefits (Dawson et al., 2018; Krause & Loft, 2013; Sommerville et al., 2010). It involves examining tradeoffs in costs and benefits across communities, places and generations. Procedural equity examines the processes of how decisions are made and who has a voice; whether decision making involves formal rules or informal interactions (Dawson et al., 2018; Law et al., 2018; Schreckenberg et al., 2016). It requires clear communication, free and informed consent for engagement and participation at different stages, accountability and transparency of the process, and ensuring marginalized groups have opportunities to have a say in matters that are important to them (Zafra-Calvo et al., 2017). Recognition dimension of equity considers acknowledgement of and respect for distinct identities, histories, values and interests, knowledge diversity, as well as inclusion of statutory and customary rights (Friedman et al., 2018; Martin et al., 2016; Schlosberg & Carruthers, 2010; Schreckenberg et al., 2016; Sikor et al., 2014; Zafra-Calvo et al., 2017). As equity is a pluralistic concept, it is important to address its multiple and evolving dimensions to account for multiple views, relations and tradeoffs between these. The three most important considerations in equity assessment are to clearly define what is meant by 'equitable', for whom and why (Howard et al., 2016; Zafra-Calvo et al., 2017).

# **Our Approach**

### **Key Questions**

- How does the wildlife revenue sharing program affect a community's perception of social equity?
- How does the devolution of decision-making power in the joint CHA programs affect a community's perception of social equity?
- Are there differences in perceptions of social equity within and across communities?

### Methods

We use a grounded qualitative approach and apply a multi-dimensional equity framework to assess locals' perceptions of equity in the distribution of benefits and costs, the processes of engagement and participation, and the recognition of traditional land use practices and values, paying attention to the inter- and intra-community power dynamics, institutional characteristics, and broader contextual factors that shape perceptions.



Figure 2: Preliminary Discussions with Community Groups in the Bale Mountains

# Phases of the Research

## Scoping Field Trip to the Bale Mountains

In May 2018, I conducted a scoping field work in the Bale Mountains, learn about different conservation programs and conduct meetings with community groups and conservation practioners.

As part of this project, we carried out consultations with the implementing government and non-government organizations and co-designed a program theory shown below that outlines that goals, proposed strategies and outcomes of different conservation models (Figure 1 below).

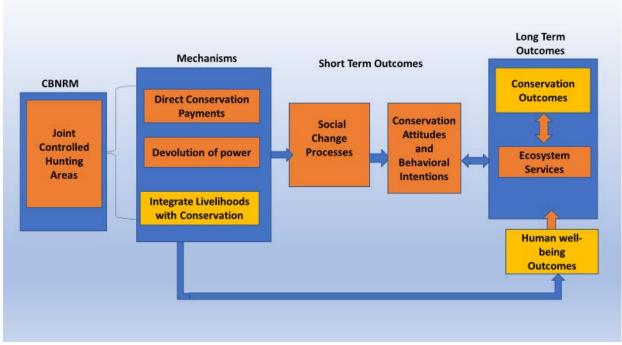


Figure 3: Theory of change for CHA in the Bale Mountains. Boxes in orange represent the mechanisms and short-term social and environmental outcomes that will be examined in this study. The boxes in yellow refer to mechanisms and long-term outcomes that are part of the theory of change but outside the scope of this study.

The initial stakeholder workshops and interviews has been instrumental in building relationships and trust, better understanding the context and co-designing revenant research questions.

The first phase of field data collection was conducted in the Winter of 2019 where we conducted 15 semi-structured interviews across four communities in the selected hunting areas. We have also carried out extensive workshops with diverse community groups that has given us a background on the values the community place on the resources for their wellbeing and their perception of the equitability of the conservation programs. We have shared our interim results with the implementing organizations during our filed work in the December 2019-January 2020 which is a valuable input as these organizations are in the process of revising and scaling up their conservation modes.



Figure 4: Focus group discussions with different community groups

### **Key Findings**

Results from the analysis of community interviews highlight important factors shaping the perceived equitability of conservation benefits and corresponding legitimacy of conservation programs. These include the impacts of underlying contextual dimensions of equity such as population growth and land scarcity, legacy of land use interaction, poverty and lack of community infrastructure, and political instabilities as factors shaping commonalities and differences in equity perceptions. Individual characteristics found important in equity include landlessness and joblessness among the youth, the extreme reliance of women on forest products for subsistence and the traditional knowledge and practices of elders on natural resources. Under these contextual and individual factors, we found community selected representatives, opportunity for participation, and transparency of decision making, presence of monitoring and accountability on resource governance features.





Figure 5: Women and Youth groups in focus group discussion: Results showed both women and youth were the least likely to participate in CBO decision making or perceive these outcomes as fair

### Second Phase of the Research

We conducted **second phase of this research** in the Fall of 2019 through the support of the Rufford Small Grants which allowed me to travel back to the Bale Mountains and conduct 200 household surveys in four selected communities across the two controlled hunting areas. These data are currently being analyzed and will be finalized in the Fall of 2020. The goal is to assess the extents to which the findings from the qualitative study are observable across different socio-demographic groups using a representative sample population and to link equity perceptions with conservation outcomes.

These results will support decision makers in understanding the conditions under which the CHA programs work and factors shaping the perceived equitability of the programs. This will be valuable in improving the existing programs which are in the earlier phases of implementation as well as informing the design of similar other programs. More specifically, our project findings will inform a current management plan being developed by Frankfurt Zoological Society and Oromia Forest and Wildlife Enterprise to devise conservation programs that are locally relevant, equitable and attain desired conservation outcomes.

#### Lessons Learnt so far

Throughout the collaborative research process, we have developed a firsthand experience on the skills of crafting and sustaining meaningful relationships with various actors. We have also developed a much-nuanced understanding on the importance of commitment, adaptability, mutual respect, trust and communication as being key elements that sustain a collaborative process in the face of several unforeseeable challenges.



Figure 6: Training enumerators for second round of data collection

We formed new partnership with Oromia Forest and Wildlife Enterprise, Frankfurt Zoological Society and Ethiopian Wildlife Conservation authority which are organizations that oversee and facilitate the implementation of Community based controlled hunting program. We have also formed partnership with four new communities where the project is implemented.

Our local contacts on the ground including our collaborators played invaluable roles in continually keeping us updated with the latest, facilitating our logistics such as finding key gate keepers. We made changes as circumstances on the ground required us to. Some of the changes included the changing research sites and establishing prior rapport with the communities we were going to as far as who we are and what the purpose of our research is.

### References

Damania, R., Milner-Gulland, E. J., & Crookes, D. J. (2005). A bioeconomic analysis of bushmeat hunting. *Proceedings of the Royal Society B: Biological Sciences*, 272(1560), 259-266.

Dawson, N., & Martin, A. (2015). Assessing the contribution of ecosystem services to human well-being: a disaggregated study in western Rwanda. *Ecological Economics*, 117, 62-72.

Franks, P., Booker, F., & Roe, D. (2018). Understanding and assessing equity in protected area conservation. *IEED Issue Paper*.

Friedman, R. S., Law, E. A., Bennett, N. J., Ives, C. D., Thorn, J. P., & Wilson, K. A. (2018). How just and just how? A systematic review of social equity in conservation research. *Environmental Research Letters*, *13*(5), 053001.

Gutman, P. (2002). Putting a price tag on conservation: cost benefit analysis of Venezuela's national parks. *Journal of Latin American Studies*, 34(1), 43-70.

Guy, M. E., & McCandless, S. A. (2012). Social equity: Its legacy, its promise. *Public Administration Review*, 72(s1), S5-S13.

Halpern, B. S., Klein, C. J., Brown, C. J., Beger, M., Grantham, H. S., Mangubhai, S., ... & Possingham, H. P. (2013). Achieving the triple bottom line in the face of inherent tradeoffs among social equity, economic return, and conservation. *Proceedings of the National Academy of Sciences*, 110(15), 6229-6234.

Howard, R. J., Tallontire, A. M., Stringer, L. C., & Marchant, R. A. (2016). Which "fairness", for whom, and why? An empirical analysis of plural notions of fairness in Fairtrade Carbon Projects, using Q methodology. *Environmental science & policy*, 56, 100-109.

Klein, C., McKinnon, M. C., Wright, B. T., Possingham, H. P., & Halpern, B. S. (2015). Social equity and the probability of success of biodiversity conservation. *Global Environmental Change*, 35, 299-306.

Krause, T., & Loft, L. (2013). Benefit distribution and equity in Ecuador's Socio Bosque Program. *Society & Natural Resources*, *26*(10), 1170-1184.

Law, E. A., Bennett, N. J., Ives, C. D., Friedman, R., Davis, K. J., Archibald, C., & Wilson, K. A. (2018). Equity trade-offs in conservation decision making. *Conservation biology*, *32*(2), 294-303

Martin, A., Coolsaet, B., Corbera, E., Dawson, N. M., Fraser, J. A., Lehmann, I., & Rodriguez, I. (2016). Justice and conservation: the need to incorporate recognition. *Biological Conservation*, 197, 254-261.

Naidoo, R., & Adamowicz, W. L. (2005). Economic benefits of biodiversity exceed costs of conservation at an African rainforest reserve. *Proceedings of the National Academy of Sciences*, *102*(46), 16712-16716

Ramirez, O. A., Carpio, C. E., Ortiz, R., & Finnegan, B. (2002). Economic value of the carbon sink services of tropical secondary forests and its management implications. *Environmental and Resource Economics*, *21*(1), 23-46.

Roe, D., Mohammed, E. Y., Porras, I., & Giuliani, A. (2013). Linking biodiversity conservation and poverty reduction: de-polarizing the conservation-poverty debate. *Conservation Letters*, 6(3), 162-171.

Schlosberg, D., & Carruthers, D. (2010). Indigenous struggles, environmental justice, and community capabilities. *Global Environmental Politics*, *10*(4), 12-35.

Schreckenberg, K., Franks, P., Martin, A., & Lang, B. (2016). Unpacking equity for protected area conservation. *Parks*, 22(2), 11-26.

Sikor, T., Martin, A., Fisher, J., & He, J. (2014). Toward an empirical analysis of justice in ecosystem governance. *Conservation Letters*, 7(6), 524-532.

Zafra-Calvo, N., Pascual, U., Brockington, D., Coolsaet, B., Cortes-Vazquez, J. A., Gross-Camp, N., ... & Burgess, N. D. (2017). Towards an indicator system to assess equitable management in protected areas. *Biological Conservation*, *211*, 134-141.