



Contents lists available at ScienceDirect

## World Development

journal homepage: [www.elsevier.com/locate/worlddev](http://www.elsevier.com/locate/worlddev)

# The importance of Ostrom's Design Principles: Youth group performance in northern Ethiopia

Stein T. Holden <sup>a,\*</sup>, Mesfin Tilahun <sup>a,b</sup><sup>a</sup> School of Economics and Business/Centre for Land Tenure Studies, Norwegian University of Life Sciences, P.O. Box 5003, 1432 Ås, Norway<sup>b</sup> Mekelle University, Department of Economics, P.O. Box 451, Mekelle, Ethiopia

## ARTICLE INFO

## Article history:

Accepted 14 November 2017

## Keywords:

Youth  
 Youth groups  
 Primary cooperatives  
 Common pool resource management  
 Group performance  
 Ethiopia

## ABSTRACT

Youth unemployment and migration are growing challenges that need more political attention in many countries, particularly countries with rapid population growth and economic transformation. Proactively mobilizing the youth as a resource in the creation of sustainable livelihoods can potentially be a win-win solution that Ethiopia is currently attempting. The new youth employment strategy includes allocation of rehabilitated communal lands to youth groups. This study investigates the extent to which Ostrom's Design Principles (DPs) are followed and matter for the early performance of youth groups in terms of their stability, trust and overall performance. Data from a census of 742 youth groups in five districts in Tigray in northern Ethiopia is used. This study utilizes econometric methods to assess correlations between the DPs and a range of early performance indicators. The study contributes to the limited literature on local collective action utilizing large samples. We find a high degree of compliance with the DPs. Some of the DPs appeared more important for early performance of the youth groups. The Ethiopian youth group approach to mobilize landless and unemployed youth is promising and should be tested elsewhere. Further longitudinal research is needed on the Ethiopian model as it is still at an early stage of testing as most groups are less than five years old.

© 2017 Elsevier Ltd. All rights reserved.

## 1. Introduction

Despite rapid urbanization, a large share of the youth will remain predominantly rural in sub-Saharan Africa for at least two more decades (IFAD, 2016). This is especially the case in Ethiopia, where urbanization still lags behind, while the country now faces a youth bulge and rapidly growing number of landless youth that seek off-farm employment (Bezu & Holden, 2014). Some associate the youth bulge with potential social instability (Beehner, 2007; Blattman & Miguel, 2010; Collier & Hoeffler, 1998; Goldstone, 2002; Heinsohn, 2003) and youth played a central role in the recent unrest in Ethiopia. A pro-active youth policy is important for the youth to regain trust in the Ethiopian government. It still has officially to renew its youth policy of 2004 (FDRE, 2004). However, new approaches are piloted and this study aims to explore one of these pilot approaches, where rehabilitated communal lands and mineral resources are provided to youth groups formalized as primary cooperatives.

Elinor Ostrom received the Nobel Prize in economics for her contributions to understanding collective action related to natural resource management. Her Design Principles (DP)<sup>1</sup> were first listed in her book (Ostrom, 1990) and later refined (Ostrom, 2010). These conditions for successful collective action to secure sustainable management of natural resources were derived from assessment of a large number of studies. The DPs were used to characterize commons that had been managed in a sustainable way over a long time. However, this triggers the question of how and when the DPs were adopted in the first place? Context, such as resource characteristics and hard infrastructure (Baggio et al., 2016; Schlager, Blomquist, & Tang, 1994) may also matter for which combinations of DPs are more important for group performance. By studying recently established youth groups in northern Ethiopia, we aim to provide evidence on the extent of group compliance with the DPs and how that is correlated with early performance of these groups.

<sup>1</sup> Ostrom defined a Design Principle as "an essential element or condition that helps to account for the success of institutions in sustaining the CPRs and gaining the compliance of generation after generation of appropriators to the rules in use" (Ostrom, 2010, p. 90). She has also commented: "The term "design principle" has confused many readers. Perhaps I should have used the term "best practices" to describe the rules and structure of robust institutions." (Ostrom, 2010, p. 653, footnote 5).

\* Corresponding author.

E-mail addresses: [stein.holden@nmbu.no](mailto:stein.holden@nmbu.no) (S.T. Holden), [mesfin.tilahun.gelaye@nmbu.no](mailto:mesfin.tilahun.gelaye@nmbu.no) (M. Tilahun).

Agrawal (2001) discusses the contributions of Ostrom (1990) and relates them to other milestone contributions in the common pool resource (CPR) literature (Wade (1988) and Baland and Platteau (1996)); by highlighting the complexity of causal relationships in social-environmental systems, data limitations and the methodological challenges in expanding our understanding of the issues. Ostrom (1990) conducted a meta-analysis based on case studies by other scholars. Baland and Platteau (1996) built on a wider literature review of property rights issues. Wade (1988) built his analysis on studies in 31 villages in Southern India. Most studies of CPR governance and management have been case studies (“small sample studies”) and there have been few “large sample studies”<sup>2</sup> that have tested the relative importance of the different DPs (Poteete & Ostrom, 2008). Cox, Arnold, and Villamayor Tomás (2010) and Baggio et al. (2016) are exceptions and have each assessed 91 and 69 cases respectively from the same pool of studies. Cox et al. find a correlation between the number of DPs adopted and success of the CPR in achieving ecological stability. Baggio et al. (2016) expand the investigation of forestry, fishery and irrigation projects and how combinations of DPs matter for each of these in achieving social and ecological success. We add to this literature in two important ways. First, by assessing the degree of compliance with Ostrom’s DPs among new youth groups established through state-community agreements orchestrated in the Tigray Regional State in northern Ethiopia. We utilize a unique new census of such groups for this. Second, by assessing how the degree of compliance with the DPs is associated with four socio-economic performance (success) indicators for these groups. We use the following performance (success) indicators: share of initial group members still staying in the group at the time of the census, group trust (ranked by group leader), Youth Association assessment of performance, and income from joint activity per member.

The allocation of rehabilitated forests and grazing lands to youth groups has a risk of ending as a “Tragedy of the Commons” (Hardin, 1968) unless the youth groups are able to cooperate and establish sustainable livelihoods through local collective action in line with the DPs of Ostrom (1990, 2010).<sup>3</sup> More specifically, the degree of compliance with the DPs can be important for their degree of early success.

Our study is a census carried out in 2016 of 742 such youth groups in five districts in Tigray. The mean initial group size is 19.5 (st. dev. 16.1, minimum 2,<sup>4</sup> maximum 193). Our study therefore covers 14,500 youth organized into groups over the period 2011–2015. Each group is formalized as a primary cooperative under the cooperative law (FDRE, 1998, amended 2004). They have to self-organize and elect a board of five members, develop their own bylaws, develop a business plan that needs approval by the local government, and their accounts are subject to regular auditing. Most groups are allocated a common pool resource<sup>5</sup> of rehabilitated communal land to protect, where they are expected to establish a productive livelihood activity, e.g. apiculture, livestock rearing, forestry, horticulture and use of irrigation. Other groups are given temporary mineral rights to allow them to build a starting capital for another form of business. When a certain amount of capital has been built, they graduate. Except for the mineral groups, which are temporary income-generating groups, the objective of the program

is to create sustainable livelihoods for landless youth.

One of the difficulties of establishing causality in the relationship between the DPs and performance based on survey data is that the compliance with the DPs can be endogenous and a result of long-term institutional refinement and adjustment in complex systems. The advantage of our study is that the formation of the youth groups we study is very recent and that there may be substantial variation in the extent to which the bylaws comply with the DPs. We cautiously attempt to use this variation as a natural experiment. In other contexts such rules may be the outcome of careful testing and evolution of what works better. This is the case for many well-functioning common property regimes like those studied by Ostrom and others (Ostrom & Basurto, 2011). Although the youth themselves have limited experience with such group cooperation at the time of the establishment of the groups, they come from families that have long experience with various types of collective action to produce local public goods, and have been advised by local government. These influences may have served as Ostrom’s “invisible hand”<sup>6</sup> that may contribute to high compliance with the DPs and more successful group performance outcomes.

In light of the growing challenge of rural landlessness, youth migration and unemployment in many countries, it is of high interest to know whether the approach used in our study is a good way to promote youth entrepreneurship by providing youth groups a joint responsibility for environmental stewardship and livelihood opportunity through self-organization. Our findings are indicative of a potentially promising model for youth employment creation.

## 2. Theoretical framework: Ostrom’s Design Principles

An overview of the Design Principles is presented in Table 1. Ostrom (2010) acknowledges that some of the DPs in her previous work (Ostrom, 1990) were too general. She subsequently split three of them in two separate principles, each based on the proposal of Cox et al. (2010). Cox et al. (2010) analyzed 91 studies and coded 77 cases from these, including forest, fishery, irrigation, pasture, multiple and other cases. They coded DPs 1, 2 and 4 into sub-components, which is accommodated in Table 1. e.g., DP1 in Table 1 can be seen as both a demarcation of a physical area and a group of members. DP2 can also be seen as a combination of two principles; the matching of restrictions and resources on the one hand, and provision and appropriation rules on the other (Agrawal, 2001). Similarly, DP4 can be seen as two types of monitoring; monitoring of resources and monitoring of users (Agrawal, 2001; Cox et al., 2010; Ostrom, 2010). Cox et al. classified cases by whether monitors were present (4a) and whether these monitors were members of the community (4b). This was different from what they afterwards recommended and what is adopted in Table 1, a) monitoring of users and b) monitoring of the resource.

Cox et al. (2010) found that two-third of the studies confirm that robust systems are characterized by most of the DPs being in place, while those that are not robust to a lower degree follow the DPs. They found moderate support for DPs 1b, 3, 4a, 5, 6, 7 and 8 and strong support for DPs 1a, 2a, 2b, and 4b. By support, they meant that the presence of the DP was positively correlated with successful management. Bardhan (2000) studied 48 irrigation systems in India and found a positive correlation between having a guard and cooperative behavior. Agrawal and Chhatre (2006) on the other hand, based on a study of 95 community-based forest management systems in India, found a negative correlation

<sup>2</sup> We have adopted the “large N studies” concept from Poteete and Ostrom (2008) and which refers to studies with many observation units and where each observation represents a group of people managing a common pool resource.

<sup>3</sup> In this study we do not aim to study the effect on natural resource management. This will be one of the focuses of our future research.

<sup>4</sup> There were a few groups that were very small in size. Most of these were located in a peri-urban area and having a specialized business requiring limited land or space.

<sup>5</sup> A common pool resource is a natural or man-made resource whose yield is subtractable and whose exclusion is non-trivial but not necessarily impossible (Ostrom, Walker, & Gardner, 1992).

<sup>6</sup> We use the analogy to Adam Smith’s invisible hand for market forces. We think of local institutional responses in form of the DPs as Ostrom’s “invisible hand” that may prevent the tragedy of the commons in many situations.

Download English Version:

<https://daneshyari.com/en/article/7392001>

Download Persian Version:

<https://daneshyari.com/article/7392001>

[Daneshyari.com](https://daneshyari.com)