

Models for formalizing customary and community forest lands

The need to integrate livelihoods into rights and forest conservation goals

Anne M. Larson, Iliana Monterroso, Nining Liswanti, Tuti Herawati, Abwoli Banana, Pamela Cantuarias, Karin Rivera and Esther Mwangi

Key messages

- A comparison of community perceptions across the two main forest tenure reform regimes – forestland *designated for community use* versus land *owned by communities* – does not show, on the ground, that one has consistently better outcomes than the other. This is likely due to multiple weaknesses in both types of reforms and the need to better integrate rights, conservation and livelihoods goals.
- Survey results from Indonesia, Peru and Uganda show a disturbing level of food insecurity across almost all sites and, with prioritization of rights and/or conservation, a failure to pay sufficient attention to livelihoods concerns.
- Greater attention to livelihoods requires: (a) increased awareness of food security and livelihoods needs in rural communities; (b) specific livelihoods goals as an objective of reforms; and (c) greater multisectoral and multilevel coordination in order to bring this about.
- Livelihoods concerns should be incorporated as a clear goal in forest tenure reforms and as a measurable indicator in efforts to evaluate reforms.

Introduction

Tenure reforms for indigenous peoples and communities living in forests have taken a variety of different forms. Historically, land tenure formalization has rarely worked to the advantage of poor and marginalized groups (Peluso et al. 2012; Kelly and Peluso 2015). At the same time, many countries require formalization to allow community land rights to be upheld by law (Alden Wily 2018). For people living in forests, securing rights is not the end goal, but rather an important stepping stone toward better livelihoods and, for many, self-determination (Larson et al. 2008). In spite of important progress (Alden Wily 2018; RRI 2018), there is still much to be done.

In general, tenure reforms in forests are seen as a way to address a combination of rights, forest conservation and livelihoods goals. As stated in the Voluntary Guidelines on the Responsible Governance of Tenure, reforms should “improve governance of tenure of ... forests ... for the benefit of all, with an emphasis on vulnerable and marginalized people, with the goals of food security ... poverty eradication, sustainable livelihoods, ... environmental protection and

sustainable social and economic development” (FAO 2012, 1). According to an analysis of dozens of forest tenure regimes in 31 countries, most aim to recognize community rights or promote conservation of natural resources (Almeida 2017).

This Infobrief is based on comparative field research undertaken in 2015–16 as part of CIFOR’s Global Comparative Study on Forest Tenure Reforms.¹ It considers different types of reforms in Indonesia, Peru and Uganda, comparing the two main regimes (following RRI 2018) used to recognize indigenous and community forest rights: land owned by versus land designated for use of communities. We use intra-household survey data to compare reform outcomes across a number of variables; specifically, tenure security, forest practices, income and food security. We compare these results to customary regimes, most of which have not been formalized, and which serve as our control sites. We use key informant interviews and focus groups to explore community perspectives on the reforms at the site level in each country. The evidence suggests that neither regime is doing enough to address local livelihoods needs.

¹ See project website: <https://www.cifor.org/gcs-tenure/>

Reform types and methods

Countries were selected to include one from each world region (Asia, Africa, Latin America) where significant forest reforms are taking place. The project aimed to investigate reforms, engage with key actors, and influence and improve reforms, implementation and outcomes. In each country, we selected reform types and locations that were the most relevant to both research and national implementation.

Most of the reform sites in each country can be grouped under the two regimes, according to the Rights and Resources typology, now widely used for classifying forest land tenure regimes that recognize collective community rights. Forest lands are *owned by Indigenous Peoples (IPs) and communities* “where their forest rights of access, withdrawal, management, exclusion, and due process and compensation are legally recognized for an unlimited duration” (RRI 2018, 8). All of the reform sites in Peru fell under this regime type, specifically the collective titling of native communities, most of which were titled between 1975 and 1998 (and one in 2011).² These titles grant full ownership rights to agricultural and pastoral areas and long-term use rights to forest areas falling within the demarcated area. In Indonesia, titling of customary lands (*hutan adat*) had just begun at the time of the research, hence only one village was included under this regime type (through focus groups and key informant interviews). In Uganda, this regime refers to a community forest, established in 2003. Community forests are owned by a village or clan and managed by a legally constituted organization on behalf of the community. All of these sites have the rights bundle required for this classification for an unlimited duration.

Forest lands *designated for the use of IPs and communities* consist of state lands where communities have been granted rights “to access and withdrawal, as well as to participate in the management of forests or to exclude outsiders” but fall short of the definition of ownership (RRI 2018, 7–8). This was the most important regime in Indonesia. Sites consisted of two different social forestry schemes: HKm (*hutan kemasyarakatan* or community forest) and HTR (*hutan tanaman rakyat* or community plantation forest). HKm establishes forest user groups around state forests, mainly for use and extraction rights; and HTR grants rights to state forest lands and involves commitments to tree planting. Both schemes grant access, withdrawal, management and exclusion rights, but the duration is limited and, in general, rules are subject to greater direct oversight (Banjade et al. 2017). According to Herawati et al. (2017), “The [social forestry] programs were designed to provide forest adjacent communities with management rights to forests in order to support livelihood opportunities while also providing a basis for sustainable forest management.” HKm was introduced in 2010–11 in four villages and in one village in 2000. HTR was introduced in 2013. In Uganda, this regime refers to collaborative forest management (CFM) on state forest land introduced in 2009. Communities have access and withdrawal rights based on a negotiated CFM agreement, and they support the forest authority in monitoring and rule enforcement, as well as excluding outsiders, through regular patrolling (Nsita et al. 2017).

The third regime is customary lands. These were our control sites in all three countries. However, during field research, we found some reforms had been implemented or were in progress. In Uganda, 31% of customary villagers interviewed were members of an association established in 2006; three of four villages in Peru had been through a preliminary, formal recognition process but were not titled. We have chosen to keep these as a separate category but include responses for those participating in reforms in Uganda when we report on outcomes of reforms.

The full dataset³ included 55 communities: 22 in Peru, 16 in Uganda and 17 in Indonesia. A total of 2,075 household surveys and 164 focus groups were conducted separately with men and women; 136 key informant interviews were done with village leaders. In Uganda and Indonesia, some villages included both participants and those not participating in reforms. The analysis in this brief is based only on participants in either of the two reform regimes, and on all residents in the customary control sites. This corresponds to 343 respondents (44 in Uganda, 299 in Indonesia) from state land designated for community use; 930 respondents (95 in Uganda, 835 in Peru) from lands owned by communities; and 695 respondents (167 in Uganda, 357 in Indonesia, 171 in Peru) from customary control sites, for a total of 1,968 people (960 men and 1008 women; see Table 1).

Table 1. Tenure regimes and reform types by country

Tenure regimes	Uganda	Indonesia	Peru
State land designated for IP/ community use	Collaborative forest management (n = 4)	HKm*: community forest (n = 5) HTR**: community forest plantation (n = 2)	-
Lands owned by IPs/ communities	Community forestry (n = 4)	Hutan Adat###: formalized customary lands (n = 1)	Titled native community (n = 17) Titled peasant community (n = 1)
Customary lands/ control sites	Customary land/ forest (n = 4)	Adat: customary land/ forest (not formalized) (n = 5)	Untitiled native community (n=3) Untitiled peasant community (n = 1)

Notes:

n = number of villages studied

*HKm: *hutan kemasyarakatan*

**HTR: *hutan tanaman rakyat*

###This village had only just been titled, hence the data only includes key informants and focus groups.

In addition to survey data and interviews with key informants and focus groups, this brief draws upon two other types of data. First, it includes an analysis of legal regimes across the reforms, from the project and from secondary literature. Second, a series of binomial or multinomial logit models were run on the results in order to identify the statistical significance of differences in outcomes between the three types. In order to increase the robustness of the data, the models were run with both members and non-members in each site and across all regimes.⁴

³ Two additional regimes include private lands (four villages, Uganda) and company-community partnerships (four villages, Indonesia), but they were omitted from this analysis.

⁴ Our interest is not only in the outcomes of reforms for those participating, but also for the broader community.

² There is one titled peasant community, which falls under a different regulation but provides comparable rights.

Each model was tested and analyzed through a Synthetic Minority Over-sampling Technique (SMOTE) process to balance the data. Due to space limitations, we refer only to data that is useful for the analysis.

The comparative study of customary and community lands across countries, and especially world regions, is particularly challenging given the highly varied nature of tenure reforms, legal systems and histories, as well as the many styles of implementation. This analysis is not exhaustive, nor are the sites studied representative of the countries or even of the reform type in each country. Nevertheless, such comparisons can be useful for challenging assumptions and highlighting important arenas for research.

Robustness, protection and guarantees of rights

In her review of laws on collective land ownership in 100 countries, Alden Wily finds that legal provisions are strong in all three countries studied,⁵ and, according to the analysis of legal provisions and court proceedings, all three protect community and private property equally (Alden Wily 2018 and pers. comm.). One difference is that Uganda does not specify that provisions for collective tenure are only for a specific type of community (e.g. indigenous), nor does it require that lands be titled for rights to be upheld, as in Indonesia and Peru, although these are strongly encouraged.

In her study of laws covering both reform regimes in 31 of the world's most forested countries, Almeida (2017) finds that, in law, there are three main entry points to reforms: recognizing community rights, conserving natural resources, or regulating use and exploitation of land and resources. She considers regulation to be a residual category that is not primarily aimed at community rights or environmental protection. Few regimes supporting livelihoods fall under this type. Almeida classifies the ownership regimes in Peru and Indonesia as community rights initiatives and social forestry in Indonesia as a regime in this

residual category. Uganda is not included in her analysis, but it is likely that both reforms would fall under conservation (in our research, 90% of reform implementers said that conservation was a goal of reforms, while other researchers found that "bureaucrats involved in local-level reform implementation are mostly involved in forest reserve protection"; Nsita et al. 2017).

For the project, lawyers from Indonesia and Peru generated a series of variables to classify the robustness, protections and guarantees of the rights regimes as established by law (Table 2). The regimes included here present the ranking and average results of the two social forestry regimes studied in Indonesia and the community titling regimes in both Indonesia (*hutan adat*) and Peru. Interestingly, in this assessment the robustness of rights is very similar, and reasonably strong, under both types of regimes; however, duration is substantially stronger under ownership rights. Rights protections and guarantees are deemed quite weak in both regimes. Notably for this brief, economic empowerment is very strong in land designated for rights and weaker in the ownership regimes, especially in Peru.

Tenure security

Men and women interviewed at the community level were asked how tenure security has changed over time. There were two types of questions. In the first, we asked about change over time, but adapted the time period to coincide roughly with the reform, without mentioning the reform specifically (e.g. in the past "xx years", with xx replaced in each country or site with the approximate number of years since reforms were implemented). In Indonesia, this was adjusted by site to refer to 5, 15 or 20 years earlier; in Peru, the guide was 20 years; and, in Uganda, the passing of the forest policy of 2001 was used as the benchmark (about 15 years). The second set of questions made explicit mention of the reform and was only asked in reform sites. These questions all began with the phrase, "Since [the reform] was implemented...".

Table 2. Comparative analysis of rights under two legal regimes

Analytical principal	Legal indicators	State lands designated for IP/community use			Land owned by IPs/communities		
		Indonesia HKM	Indonesia HTR	Average	Indonesia customary forest	Peru titled native community	Average
Rights robustness	1.1 Legality*	5	5	5	8	5	6.5
	1.2 Clarity	8	8	8	10	7	8.5
	1.3 Bundle of rights	8	8	8	8	8	8
	1.4 Duration	5	8	6.5	10	10	10
Rights protection	2.1 Conflict management	1	1	1	1	5	3
	2.2 Conflict resolution	3	3	3	3	3	3
	2.3 Compensation	1	1	1	5	1	3
Rights guarantees	3.1 Participation	5	5	5	3	3	3
	3.2 Forest sustainability	1	1	1	1	5	3
	3.3 Economic empowerment	10	10	10	8	5	6.5

Source: Elaborated from internal reports by Safitri (2015) and Soria (2016). Data not available for Uganda.

Notes: The researchers developed a detailed scale of indicators from 1 (weakest) to 10 (strongest). See Soria (2016) for details.

* Example definition: "Legality is strongest when the legal base of the right can be found from the highest to the lowest level of legislation; there are no changes of legislation leading to legal uncertainty; there is a clear division of authority as regulated by harmonious legal provisions."

⁵ Particularly since Indonesia's 2016 regulation for communal rights to joint ownership (Agrarian and Spatial Planning 10/2016).

Comparing responses to the first question across our three main regimes (Figure 1), the most striking result is that the group presenting the most positive response falls under a different regime in each country: land designated for community use in Indonesia (57%), land owned by communities in Peru (53%) and customary lands in Uganda (44%). In customary lands in Uganda and in all the other sites, “same as before” is the most common response. Worsening security is a problem for 20% of respondents in both kinds of sites in Peru, and in state land designated for community use in Uganda (again, all three regime types).

In your view has your tenure security to land/forest resources changed during the last xx years in this village?

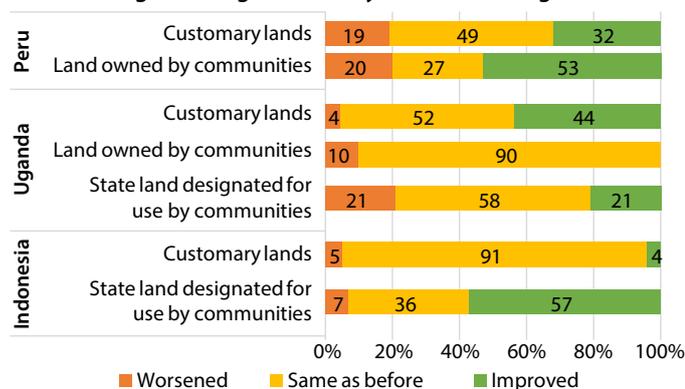


Figure 1. Perception of change in tenure security over time by regime type and country

To assess reforms specifically, we asked reform members⁶ whether they agreed with the two statements: if, since [the reform], they feel their rights and access to land and forests are strong and secure, and, if they have a dispute about forest use and access, whether they feel confident that their rights will be protected and enforced. In all sites, the responses were overwhelmingly positive, with the lowest percent agreeing (76%) in state land designated for communities in Indonesia (and only 5% disagreeing). All other responses ranged from 82% (Peru) to 93% (Uganda).

We ran a multinomial logit model on tenure security across regime types, using the question in Figure 1. The accuracy of the model was very low, even after balancing, and it was particularly bad at predicting improvement in security. That is, regime type is not a good predictor of security. Together, these results suggest that all three regimes can be perceived as secure under different circumstances and that, as we will see below, when the reforms are mentioned in the question, responses tend to be very positive in all regimes.

Forest conservation activities

Respondents were asked if they had participated in any of five different types of forest conservation activities in the past year: (a) monitoring forest management activities; (b) making rules about forest product harvesting, use and management; (c) sanctioning rule breakers (e.g. enforcing fines and penalties); (d) monitoring forest condition (such as patrolling) and compliance with forest use and management rules; and (e) arbitrating disputes. The results for all five questions are summarized in Table 3.

6 This includes the two reform regimes and those in customary lands in Uganda that participated in a reform.

Table 3. Participation in forest conservation/protection activities

	Uganda	Indonesia	Peru
State land designated for use by communities	Very high: a,b,c,e High: d	Medium: a Very low: b,c,d,e	N/A
Lands owned by communities	Medium: a,d,e Low: b,c	N/A	Medium: b Low: a,c,d,e
Customary lands/control sites	High: a Medium: b,d Low: c Very low: e	Low: a Very low: b,c,d,e	Low: c,d,e Very low: a,b

Notes: Very low (0–19%), low (20–39%), medium (40–59%), high (60–79%), very high (80–100%).

“No opinion” responses were removed from the analysis.

In general, respondents in the customary control sites are less involved in forest conservation or protection activities, with low and very low participation in all activities in Indonesia and Peru. Very high participation is only found in state land designated for communities in Uganda. Comparing across the results, it is striking that in all types of reforms, Uganda has better results than the other two countries. This result is logical if conservation is the entry point for reforms in Uganda but not elsewhere.

Income and livelihoods

Two questions were asked about income and livelihoods. First, we asked about changes in income from agriculture and farming relative to xx years ago. We used this as a key indicator because of the importance of farming in our sites. Changes in income from agriculture can also reflect changes in forest rights (e.g. restrictions on land clearing).

The most notable finding (Figure 2) is that in every country all reform regimes performed better than the customary control sites, with the largest proportion saying income had increased in state land designated for communities in Uganda (47%) and community-owned land in Peru (45%). The largest portions reporting decreases in income in each country are those under customary regimes, with a striking 64% reporting declines under customary regimes in Uganda, 40% in Indonesia and 27% in Peru; with a high proportion also reporting declines in land owned by communities in Uganda (33%).⁷ It is worth noting that in state lands designated for communities in Indonesia, the average outcome combines improvements in the more advanced reforms in Lampung with newer reforms with no significant outcomes in Kalimantan.⁸

The second question was asked only in reform sites. Respondents were asked to agree or disagree with a broad statement about income and livelihoods improvement since the reform. Again, positive results increase substantially in all regimes when the question makes explicit reference to the reform. The results on those who agree are very similar across almost all regimes, ranging from 56% to 64%, with the

7 A large portion of respondents (38%) in state lands in Indonesia reported “no opinion”; 20% in Peru customary lands; less than 15% in all other sites. Those results are not reflected in the graph.

8 Progress in the more successful site is also related to other factors, such as strong leadership and social cohesion in the community group, as well as strong support from external actors.

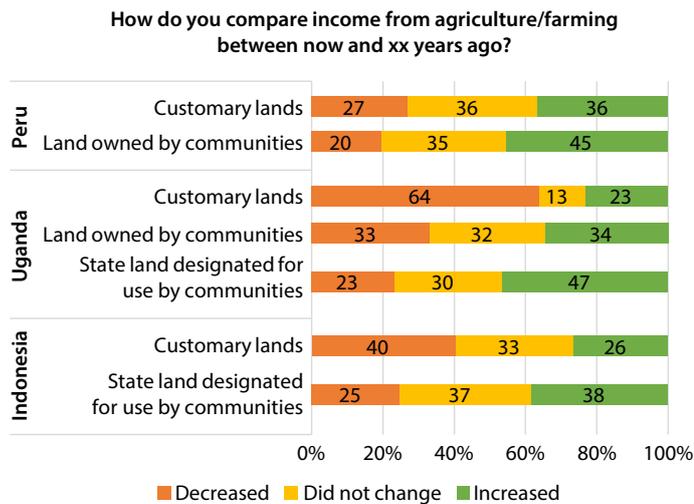


Figure 2. Perception of change in farm income over time by regime type and country

highest percent (85%) in land owned by communities in Uganda.⁹ Notably, 17-24% of reform members disagree with the statement in four of five sites.

Food security

We also asked about food security in two different ways. In the first question, respondents were asked if they had problems meeting their food needs in the past year and, if so, for how long. The second question asked about change over time, again in reference to xx years ago. Food security was not explicitly asked about in relation to reforms.

The most striking results from the first question is that in three out of four reform sites, between 38% and 57% of respondents had some trouble meeting their family's food needs during the previous year (Figure 3), even though the Uganda and Peru reform sites performed better than customary sites. A very small proportion of the respondents in each type of regime in each country had had problems for more than 9 months or always; this was highest in land owned by communities in Uganda (14%). An important proportion, from 14% to 21%, had problems for 6 months of the year in customary control sites in Peru and Uganda and in state lands designated for community use in Indonesia. These three also had the *lowest* proportions reporting that they never had a problem feeding their household in the past year (Uganda 21%, Peru 44% and Indonesia 52%), together with land owned by communities in Uganda (43%). State lands in Uganda had the highest proportion with no food security problems (86%). Statistical analysis on Uganda found that these reforms were seen by respondents "as having a significant and positive impact on their food security" (Mwangi 2017). This may be because the site is considered the "food basket" of the country, and parallel reforms during this period involved the deregulation of agricultural products and an increase in food prices.

When food security today is compared with the past, people in reformed lands overall (state lands in Uganda and Indonesia, and

9 Due primarily to technical problems, there were very high rates of abstention on the responses to these questions in two regimes in Uganda, 68% in state lands and 86% in land owned by communities. These are not reflected in the graph.

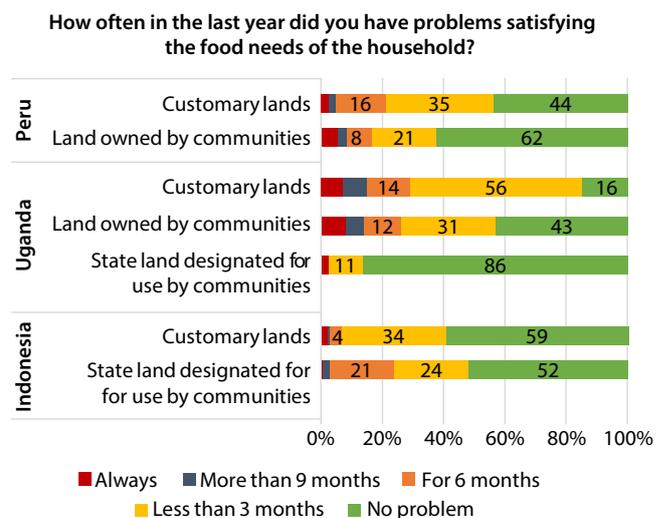


Figure 3. Perception of food security over the past year by regime type by country

community lands in Peru) appear to have more improvements (36-42%) and fewer declines (7-19%) than those in customary lands (21-29% improved, 18-28% declined), with the exception of land owned by communities in Uganda (23% improved, 24% declined). The largest improvements are for respondents in lands owned by communities in Peru (42%). The largest declines are in customary lands in Peru and Uganda (both 28%).

We applied a binomial logit analysis to the food security question. Responses were coded to compare those with less than three months of food insecurity and those with six months or more. The results found that that neither of the reform regimes was significantly more or less likely to be food secure than customary lands.

Reforms at the site level

This section provides a brief overview of the sites based on qualitative data from focus group and key informant interviews at the community level, as well as regional-level workshops. Whereas the survey results above only present the members' perspective,¹⁰ the results here gather broader community information, which suggests tensions over resources and decisions in some cases.

State land designated for communities

In Indonesia, in most of the communities investigated, villagers live in or near forests that the state has classified for specific purposes, such as production or protection forests. Hence, even if villagers had been there for many years, their legal situation, at least with regard to forest use, was problematic; legal recognition procedures were required to guarantee their rights. In our sites, assessments of HKm were quite positive. Informants and focus groups reported that villagers were pleased to be granted legal rights, because previously they were always worried about being evicted. In one village, HKm was referred to as a conflict management scheme to reduce conflict between communities and government. One HTR site, however, presents a different view. In this case, the village had a prior customary claim to their *damar* (resin) forest, and people interviewed continue to assert their ancestral claim to this area.

10 Relevant only in state lands in Indonesia and in all regimes in Uganda.

Informants in state lands designated to communities in Uganda for collaborative forest management were quite critical. They suggested that rule enforcement is severe and not always fair, with at least one focus group saying wealthier people, such as those who can pay bribes, are favored. Benefits of association membership include training in environmental management and in alternative income sources. The difference between the critical view in these qualitative results from the community generally and the significantly positive responses from the survey of members is striking, suggesting much stronger benefits accrue to members.

Land owned by communities

Community-owned lands are found in all three countries, but they are so new in Indonesia that the first title was granted after all our other field research was completed. The village studied, the first one titled, has strong customary institutions including for forest protection, and the community was fighting the loss of territory to a private company. The title helped resolve the problem of overlap with a production forest (see Fisher et al. in press).

In Uganda, this category refers to a community forest managed for sustainable use under a community land association. The members of the association are the forest owners, and the executive committee makes decisions about its use and management. The forest provides wood fuel and medicinal plants. People outside of the association can request permission to use the forest, and although the idea was to have members from several communities, only the community closest to the forest continued to remain involved with the association activities.

In the Peruvian Amazon, collective land title is the most important reform type available to indigenous communities. The reforms grant full title to the entire community, although forest areas, included in demarcated maps, are officially designated a separate use contract in perpetuity (many community members are not aware of this fact). Communities have full decision-making rights over the agricultural land, but forest clearing and logging require permits. The problems seen in the 18 communities studied include titles that have not been registered, overlaps with mining, logging and petroleum concessions, and incursions by outsiders for resource extraction, which are seen as threats to rights.

Customary lands

In Indonesia, there are various types of land rights, and some Maluku people have land certificates, but overall there are strong customary rules without recognized rights. There are also threats, such as logging company activity, and sometimes deals between community leaders and companies that are not entirely transparent. Some people expressed concern that the state might designate protection or production forests and further restrict people's activities.

In Peru, all four of the villages studied had been formally recognized (in 1998 and 2009) or were in the process (2016), but they were not titled. Recognition makes the community a legal entity and is required before beginning the titling process. All four

communities have problems with overlaps (with concessions, neighboring communities or private lands) and/or land invasions. All four are planning to or are already moving forward on titling and believe that the title will improve livelihoods in part by improving the presence of state and non-governmental organization programs.

In Uganda, the land in Lamwo is owned communally under clan leadership. In this region, 62% of forests are on customary or private lands, and some of the 38% of national forest reserves are under co-management with communities (Mshale et al. 2017). Different rules and authorities apply depending on the type of forest. The most important in the four villages studied is the Lamwo Environmental Protection Association, which was formed with members from seven clans in surrounding communities to conserve one important forest area and protect the traditional management system. Community members can access and use forest resources based on rules and permissions decided by the association and the community; these are seen as fair and effective. However, some residents feared that titling the land in the name of the association might permit elite or powerful individuals to hijack the association in the future, thus decreasing tenure security.

Discussion

This discussion uses the focus group and key informant interviews to reflect further. Though it is difficult to generalize across such diverse countries, reform regimes and sites, the combination of the legal analysis, survey data and site-level interviews allows us to suggest the following propositions, before turning to the specific analysis of livelihoods.

Respondents are positive about reforms. When the reform itself is specifically mentioned, respondents tend to provide much more positive answers on all questions, in comparison to responses to similar questions asked about the time period since reforms. This could be interpreted as a bias toward reforms, which suggests that respondents tend to support them, even if the results are not overwhelmingly positive. These positive answers were much stronger on the question pertaining to improved tenure security (with 76–93% responses of “agree” and 0–10% “disagree”) than on improved livelihoods and income (56–82% “agree” and 0–24% “disagree”).

No regime is necessarily better than the others. In most questions, the responses failed to point to any particular tenure regime as necessarily better than another, with one exception: generally, the reform sites in each country tend to perform better than the customary control sites. That is, some reform is usually better than no reform, but in the sample studied, it is not the type of regime (land owned versus designated) that determines the outcome. The failure of the majority of logit models to establish high levels of predictive accuracy is also evidence of this. Clearly, other factors are relevant.

Uganda stands out on forest conservation priorities in both reform regimes. Table 3 on forest activities clearly shows that more people in Uganda state they are participating in forest conservation activities relative to the other countries and across all regime types. This is not surprising, given the emphasis on reforms for conservation in Uganda. This also reflects Uganda's much lower forest cover (9%, compared to 58% in Peru and 53% in Indonesia; FAO 2015) and country conservation priorities. The results are not always positive for people, however. In some

Uganda sites, people living in communities perceive heavy restrictions on resource access. In the customary site, however, community members generally have a positive appreciation of forest rules and monitoring. The government and the community may have different ideas about this. In the customary site of Maluku, Indonesia, for example, a future scenarios workshop brought out the importance of conservation for the former and rights for the latter (Liswanti et al. 2017).

Rights can be secure across all regimes, including customary regimes, depending on the threats to security. In Uganda, for example, some people expressed concern over elite capture if association lands are titled. But, in most customary sites, the threats associated with not having rights formalized are greater, and in both Peru and Indonesia, people are taking steps to formalize their claims.

Even if ownership regimes have a longer duration and sometimes a larger rights bundle, those who have been granted rights generally feel more secure under either reform regime. More important is what the situation was before reform, and what other options were available. This is apparent in the Indonesian social forestry sites where in some cases the reforms offered stability by securing what was previously considered illegal occupation, whereas in others, the granting of a use right was seen as undermining a prior customary, ancestral right.

The problem with livelihoods...

The results, from law to outcomes, raise concerns about the integration of the livelihoods needs of local peoples into reforms. In Indonesia, livelihoods are an explicit goal of social forestry regimes, and the legal analysis gave these regimes a 10 on economic empowerment; but the ownership regimes ranked lower in both Indonesia (8) and Peru (5). The survey outcomes on income and food security show a variety of results. On agricultural income, both reform regimes appear to do better than customary regimes, with larger proportions of people perceiving income increases (34–47% compared to 23–36%, respectively) and smaller perceiving declines (20–33% compared to 27–40%¹¹). The results are more mixed for food security; the statistical model found no difference between reforms and the customary control group.

Several aspects of the results are alarming. First, even if both regimes appear to do better than customary sites, 38–57% of people in reform sites report difficulty in feeding their families for some part of the year. In customary lands, the range is 41–84%. Second, in reform sites, although many people report improvements or no change, 20–33% report declines in farm income compared with the past, and in spite of the optimistic results on questions mentioning specific reforms, 17–24% in reform sites still report declines in income since reforms.

A comparison of reform regimes shows that declining food security is higher in land owned by communities (19–24%) than in lands designated for community use (7–14%). Similarly, over the past year, in lands owned by communities, respondents experiencing food insecurity at any time ranged from 38% to 58%, compared to 13% to 49% of respondents from lands designated for community use. Respondents experiencing more than 3 months of insecurity ranged from 16% to 26% in community-owned land compared to 2–23% for designated-use land.

11 And a very high 64% in one site in Uganda.

Again, the specific results depend on many variables beyond the reform regime, but there is enough information to raise concern that neither tenure reform regime is doing enough for livelihoods. Two other sources of data back up these results. First, a survey we conducted of reform implementers (government officials) in the three countries (Ojwang 2018) found that only 40% of respondents mention any livelihood activities among their responsibilities. Across countries, there are important variations. Whereas 60% of government officials in Uganda consider improving livelihood benefits as a reform objective, only 46% in Indonesia and 12% in Peru do. The results in Peru demonstrate important gaps in how livelihood concerns are approached by the state, as to some extent the state's responsibility to its indigenous citizens is seen as completed once the title is delivered (Monterroso and Larson 2018).

Second, a review of the focus group data¹² also demonstrates broad concern over livelihoods. Groups were asked about their level of satisfaction with rights and, if there was dissatisfaction, what they would change. In land owned by communities, 53% of focus groups expressed livelihood concerns: 100% in Uganda, 50% in one of the two regions in Peru, Madre de Dios, and none in the other, where 7 communities said they were very satisfied.¹³ In land designated for communities, 61% reported livelihood concerns.¹⁴ In comparison, only 27% of focus groups in customary sites reported livelihood concerns.¹⁵

Conclusions

The results presented here suggest reasons for concern about rural livelihoods in forest tenure reforms and the need for future research to address this topic more fully and over a larger range of countries and reforms. If, by law, the vast majority of forest tenure reforms are focused either on rights or forest conservation (Almeida 2017), then perhaps the livelihoods outcomes of reforms should not be surprising. Nevertheless, the results here suggest that we must find a better way to integrate livelihoods goals into forest tenure reform policy and implementation; and livelihoods outcomes should be included in indicators for monitoring the quality of tenure reforms. The failure to address livelihoods undermines the long-term tenure security of forest peoples and, therefore, the sustainability of the world's forests.

Improvement of livelihoods requires: (a) increased awareness of food security and livelihoods needs in rural communities; (b) specific livelihood goals as an objective of reforms; and (c) greater multisectoral and multilevel coordination in order to bring this

12 Data from 125 focus groups in these three regimes.

13 Concerns in Peru and Uganda were related to restrictions on resource access; in Uganda, groups also mentioned the need to increase forest and agricultural extension services to provide training, inputs, access to finance to increase their income.

14 Most of these were related to access to forest and agricultural extension services, including access to markets, seedlings, training, technology and credit that could allow increased production and improved household income.

15 Throughout the focus group discussions there is greater reference to conflict, derived mainly from incursion of recent (e.g. migrant) settlers and outsiders squatting and poaching customary lands. These are indirectly related to livelihood concerns, but respondents make more direct reference to the conflict rather than potential restrictions over livelihood.

about. This last point recognizes that there are important gaps not only in the law regarding livelihoods in reforms, but also between law and implementation on the ground. Attention should be focused on the appropriate governance level where implementation occurs. Food security concerns, for example, tend to be discussed at the national level, while many reforms are implemented by subnational officials. In addition, it is important to emphasize that the role of the state – the responsibility of the state to indigenous peoples and local communities – does not end when the implementation of a reform is completed.

Acknowledgments

CIFOR's 'Global Comparative Study on Forest Tenure Reform' is funded by the European Commission and the Global Environmental Facility (GEF) with technical support from the International Fund for Agricultural Development (IFAD) and the United Nations Organization for Food and Agriculture (FAO). We would also like to thank Giulia Baldinelli and Elisabetta Cangelosi of the International Land Coalition, Fernanda Almeida and Safia Aggarwal for their helpful reviews and comments on earlier versions. This study forms part of the Program on Policies, Institutions and Markets (PIM), led by the International Food Policy Research Institute (IFPRI); and the CGIAR Research Program on Forest, Trees and Agroforestry (FTA), led by CIFOR. The opinions expressed in this paper represent the analysis of the authors and do not necessarily reflect the views of CIFOR, CGIAR or the financial sponsors.

References

- Alden Wily LA. 2018. Collective land ownership in the 21st century: Overview of global trends. *Land* 7(2):68. doi:10.3390/land7020068
- Almeida F. 2017. *Legislative pathways for security community-based property rights*. Washington DC: Rights and Resources Initiative.
- Banjade MR, Herawati T, Liswanti N and Mwangi E. 2016. Tenure reform in Indonesia: When? What? Why? Infobrief No. 163. Bogor, Indonesia: Center for International Forestry Research.
- Fisher MR, Workman T, Mulyana A, Balang Institute, Moeliono M, Yuliani EL, Colfer CJP and Adam UEFB. In press. Striving for PAR excellence in land use planning: Multi-stakeholder collaboration on customary forest recognition in Bulukumba, South Sulawesi. *Land Use Policy*. <https://doi.org/10.1016/j.landusepol.2017.09.057>
- [FAO] Food and Agriculture Organization. 2015. *Global forest resources assessment 2015*. Rome, Italy: FAO.
- [FAO] Food and Agriculture Organization. 2012. *Voluntary guidelines on the responsible governance of tenure*. Rome, Italy: FAO.
- Herawati T, Liswanti N, Banjade MR and Mwangi E. 2017. Forest tenure reform implementation in Lampung province: From scenarios to action. Infobrief no. 169. Bogor, Indonesia: Center for International Forestry Research.
- Kelly AB and Peluso NL 2015. Frontiers of commodification: state lands and their formalization. *Society & Natural Resources* 28(5):473–495.
- Larson AM, Cronkleton P, Barry D and Pacheco P. 2008. *Tenure Rights and Beyond: Community access to forest resources in Latin America*. Occasional Paper no. 50. Bogor, Indonesia: Center for International Forestry Research.
- Liswanti N, Tjoa M, Silaya T, Banjade MR and Mwangi E. 2017. Securing tenure rights in Maluku, Indonesia: searching for common action. Infobrief no. 179. Bogor, Indonesia: Center for International Forestry Research.
- Monterroso I and Larson AM. 2018. Challenges in formalizing the rights of native communities in Peru. Infobrief no. 231. Bogor, Indonesia: Center for International Forestry Research.
- Mshale B, Musaka C, Tibazalika A, Mwangi E, Banana AY, Wamala P and Okiror G. 2017. Securing the customary tenure rights of forest-dependent communities in Lamwo district, northern Uganda: Insights from participatory prospective analysis. Infobrief no. 195. Bogor, Indonesia: Center for International Forestry Research.
- Mwangi E. 2017. Main findings on the global comparative study on tenure in Uganda. Flyer. Bogor, Indonesia: Center for International Forestry Research.
- Nsita SA, Nakangu B, Banana AY, Mshale B, Mwangi E and Ojwang D. 2017. Forest tenure reform implementation in Uganda: Current challenges and future opportunities. Infobrief no. 196. Bogor, Indonesia: Center for International Forestry Research.
- Ojwang D. 2018. Forest tenure reform implementation in Indonesia, Nepal, Peru and Uganda. Project report. Bogor, Indonesia: Center for International Forestry Research.
- Peluso NL, Kelly AB and Woods K. 2012. *Context in land matters: The effects of history on land formalisations*. Bogor, Indonesia: Center for International Forestry Research.
- [RRI] Rights and Resources Initiative. 2018. *At a crossroads: Consequential trends in recognition of community-based forest tenure 2002-2017*. Washington, DC: Rights and Resources Initiative.
- Safitri MA. 2015. Assessing tenure security of land and forestry rights of indigenous peoples and other forest communities in Indonesian legal framework. Consultancy report. Bogor, Indonesia: Center for International Forestry Research.
- Soria CAM. 2016. Legal analysis of Peruvian communal land tenure legislation and proposal of indicators to monitor improvement. Consultancy report. Bogor, Indonesia: Center for International Forestry Research.



RESEARCH PROGRAM ON
Policies,
Institutions,
and Markets
Led by IFPRI

The CGIAR Research Program on Policies, Institutions, and Markets (PIM) leads action-oriented research to equip decisionmakers with the evidence required to develop food and agricultural policies that better serve the interests of poor producers and consumers, both men and women. PIM combines the resources of CGIAR centers and numerous international, regional, and national partners. The program is led by the International Food Policy Research Institute (IFPRI). www.pim.cgiar.org



RESEARCH PROGRAM ON
Forests, Trees and
Agroforestry

The CGIAR Research Program on Forests, Trees and Agroforestry (FTA) is the world's largest research for development program to enhance the role of forests, trees and agroforestry in sustainable development and food security and to address climate change. CIFOR leads FTA in partnership with Bioversity International, CATIE, CIRAD, ICRAF, INBAR and TBI. FTA's research is supported by CGIAR Fund Donors: cgiar.org/funders/



Food and Agriculture
Organization of the
United Nations

cifor.org

forestsnews.cifor.org



Center for International Forestry Research (CIFOR)

CIFOR advances human well-being, equity and environmental integrity by conducting innovative research, developing partners' capacity, and actively engaging in dialogue with all stakeholders to inform policies and practices that affect forests and people. CIFOR is a CGIAR Research Center, and leads the CGIAR Research Program on Forests, Trees and Agroforestry (FTA). Our headquarters are in Bogor, Indonesia, with offices in Nairobi, Kenya; Yaounde, Cameroon; Lima, Peru and Bonn, Germany.

