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Changes in Local Land Tenure System in Response to Swidden Transformation in Southern Chin State, Myanmar

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Introduction

In Myanmar, more than 2 million households practice swidden cultivation, and most of them are concentrated in upland regions including the Chin State (Win, 2004). In southern Chin State, more than 75% of rural farmers still practice swidden cultivation (Saumya, Hnin, & Takeshi, 2014), and most of the lands are being managed under customary tenure institutions (Andersen, 2015; Thein, 2012). Recent studies have indicated that swidden in southern Chin State has been transforming to permanent type agriculture due to the introduction of new cash crops, particularly the Elephant foot yam (Chan & Takeda, 2016). However, the impacts of such transformation on traditional land tenure institutions have not been systematically investigated. To fill this gap, this study took a case study in southern Chin state in order to understand how swidden transformations to permanent agriculture influence household acceptance on traditional land tenure regulations.

Material and methods

Twelve rural communities located in and around Natma Taung National Park in southern Chin State were selected as case study villages. Qualitative data collection methods such as participatory land-use mapping, focus group discussions, and key informant interviews were employed to get in-depth understanding on existing customary land tenure institutions in case study villages. Customary land tenure systems were analysed based on the bundles of rights concept proposed by Schlager and Ostrom (1992) and eight governance principles developed by Ostrom (1990). Based on qualitative information, household questionnaires were formulated in order to examine households' awareness and acceptance on those practices. A total of 150 households were interviewed between April and May 2017. The samples represented at least 25 percent of all households in each case study village. During the interviews, household heads were asked whether they are aware of the land tenure regulations identified in the questionnaire. If the answer was yes, then the interviewee was asked again whether he will accept if the particular regulation is legalised as formal village regulations. If the answer was yes, the household got a score of "one" for each question. The scores were aggregated for each category of regulations and were later applied for quantitative analysis. For quantitative analysis, households were categorised based on the degree of swidden transformation into other land use types such as, (1) traditional (swidden) group, (2) permanent land-use group, and (3) mixed land-use group. Households without agriculture were excluded from statistical analysis, as they constituted only 4% of sample households. Kruskal-Wallis rank sum tests were applied to analyse the differences in acceptance scores of customary tenure systems across households with different land use types. Dunn's tests with "Bonferroni" p-adjusted methods were later applied for multiple comparisons to understand the association within each pair of groups.

Results and discussion

Customary land tenure system in southern Chin State is complex and can vary from communities to communities. According to existing legislations, all lands in the study communities belong to the State. This is because local farmers do not have formal land titles to claim for the ownerships of their lands. Moreover, existing legislations do not permit the formal registration of swidden lands due to their temporary nature and complex ownerships. As a result, local communities do not respect most of the State regulations and all the lands are still being recognized and managed under customary tenure practices. The overviews of customary land tenure and management practices observed in the case study villages are presented as follows:

- **Traditional boundaries:** In all study villages, village territories are clearly defined and respected by the neighbouring communities. Swidden fields are clearly delineated by prominent natural features and individual plots within each field are defined by stones, trees, or bamboos. For all types of land property, the initial ownerships of the land were mostly established through the first clearance of the forested land. This practice is also known as “*dama-u-cha*”, which literally means, “wielding the machete”. However, all villagers living within the village territory have the right of access to agricultural plots regardless of their land ownership status. This means that the land owners must share their unused lands to landless farmers whoever want to practice swidden cultivation. However, the land borrowers get the use rights of the land only for one to two years, and therefore, perennial crops or trees are not permitted to grow on the borrowed land. In some villages, swidden plots are usually distributed by lottery or on rotational basics.
- **Land ownerships:** The lands within the village territory can be categorized depending on the ownerships, such as (i) private land, (ii) clan land, and (iii) communal land. However, this classification is rather arbitrary and in some cases, there exist overlaps among these three types. In **private lands**, the removal rights and management rights are solely held by the owners. More specifically, no one is allowed to cut trees or to clear the land for swidden cultivation without permissions from the owners. Private land owners also hold the transfer rights of land within the community. However, selling the land to outsiders is forbidden in all study villages. The same rules apply for the **clan lands**, where cutting trees or clearing the land for cultivation can only be performed with the permission from the clan leader or his clan members. Similar to private lands, selling or giving the land to the outsiders or non-community members is strictly prohibited in all study villages. Moreover, all case study villages have **communal lands** that are set aside for village uses and watershed protection. Within village use forests, cutting trees is permitted only for household consumptions, and cutting for commercial purposes is strictly prohibited. Moreover, clearing the land for swidden cultivation in communal land is restricted without consents from village head or village land-use committee. Watershed protection forests were also observed in all case study villages, where cutting trees or forest clearing is totally forbidden. In some villages, fines may apply to the offenders in terms of cash or other social services.
- **Land transfers:** Selling or transfer of land within the community is accepted without formal contracts. However, the village head should be informed for the land transfer and there must be some witnesses for both sides to confirm the transactions if conflicts have arisen in the future. For land heritage, the Chins are highly patrilineal and only the sons have the rights to inherit the private lands. For clan lands, all male clan members have the rights to inherit without individual allocations. Therefore, once a clan member wants to clear a plot within the inherited clan lands, he needs to have prior consents from other clan members. Plots with high fertility are usually allocated alternatively or sometimes by lottery among the clan members.

- **Conflict resolutions:** In general, damages to the properties of other people have to be fully compensated by the offenders. This also includes damages to the crops by livestock or spread of fire to the fallow lands during land clearing for swidden cultivation. Land conflicts were usually settled in traditional ways, typically with local well-known negotiators and witnesses rather than settling with the authorities. This is because most of the land related cases could not be properly solved by the court due to the lack of formal land titles or other documents for their ownerships. If the land conflicts were not settled by the negotiators and witnesses, both sides have to drink the ‘holy water’ with an oath of cursing to the Spirits in attestation of their innocence. If unusual signs related to the curses are shown within the pre-defined periods, the defendants are considered as guilty and will lose the case. In addition, all conflicts can be completely settled only after both sides have drunk the “local wine” in front of the public confirming that they both will accept and follow the resolutions.
- **Traditional agricultural practices:** Apart from land tenure rules, several other regulations in relation to the agricultural practices were observed in the case study villages. Generally, swidden fields are collectively chosen in one place to grow crops for one to two years. After that, the whole groups have to move to another area for the next crop seasons. Individual clearing of the land is strictly prohibited due to the risk of fire to other fields. Land allocations are usually done by communal meetings and every farmer residing the village get one or two plots in the chosen fields depending on their labour availability. Ritual offerings to the ‘land spirits’ have to be performed collectively before clearing the land. While clearing the land, cutting trees located either at the top of the mountains or near to the streams must be avoided to protect against landslides and soil erosions. Fire breaks must be done collectively before burning the field and members who could not participate in fire break making should pay fines or provide other in-kind contributions. Controlled burning should also be done collectively to protect against the spread of fires. If the fire spreads to other places, every member has the responsibility to compensate for the loss. Crops are usually sown as soon as the burning has been completed. Traditionally, farmers usually exchange labour for weeding and harvesting operations without hiring paid labour. Once the crops are harvested, the farmers have to perform ‘harvest rituals’ individually, and it is still a taboo to consume the first harvests without performing harvest rituals regardless of their religions.

Even though customary land tenure systems are still important within the study communities, a high degree of variations was observed in terms of the awareness and acceptance by local households. Specifically, rules related to the traditional boundaries and land ownerships received higher response rates in awareness and acceptance by sample households. However, the acceptance of local rules was observed to be relatively low in land transfers (72%), conflict resolutions (72%), and traditional agricultural practices (71%) (Figure 1). Moreover, the distribution of households’ acceptance scores on local rules was observed to be significantly different across households with different land-use types. The distribution was particularly significant for rules related to traditional boundaries, land ownerships, as well as traditional agricultural practices (Table 1).

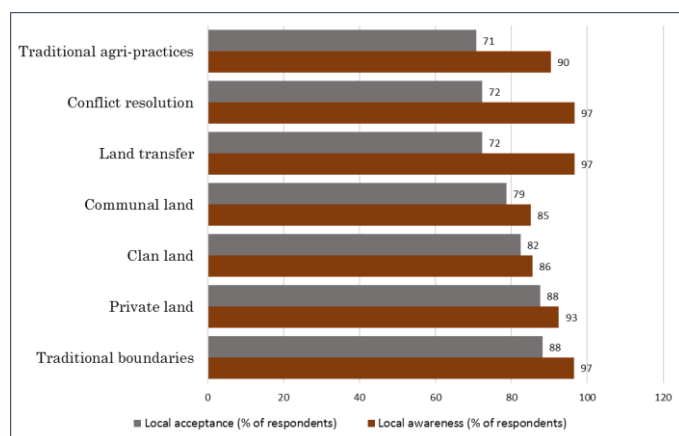


Figure 1 Awareness and acceptance of local rules by sample households

Multiple comparisons also showed that the acceptance scores of boundary rules were higher in households with permanent land-use types than the mixed and traditional land use households. This may be because farmers under traditional practices did not want to accept the land-ownership through first clearance rules (only accepted by 69% of total households) as most of them are landless farmers and land access was more secure under communal tenure rather than private ownership. However, for rules related to communal land tenure including clan lands, land transfers, and local agricultural practices, the acceptance scores were higher in households with traditional agriculture than mixed and permanent agricultural households. Detailed analysis also revealed that households with permanent agriculture agreed less on communal rules regarding prohibiting of cutting trees from communal land without prior consents (only 63% agreed). Moreover, they preferred to sell their private lands to outsiders, as they no longer needed as much land as they needed for traditional swidden agriculture (only 31% agreed on selling land without formal contracts). In addition, labour exchange was observed to be less frequent in permanent cultivation (only 57% agree), and labour market among farmers had already established in some study villages.

Table 1 Distribution of acceptance scores on local rules across households with different land-use types

Customary rules and practices	Chi-squared ¹	P-value	Multiple comparisons ²
Traditional boundary rules	8.7109	0.0128*	P > M > T
Private land rules	4.1399	0.1262	-
Clan land rules	6.8652	0.0323*	T > M > P
Communal land rules	6.1038	0.0472*	T > M > P
Land transfer rules	7.9365	0.0189*	T > M > P
Conflict resolution practices	0.1956	0.9068	-
Traditional agricultural practices	15.9940	0.0003***	T > M > P

¹Kruskal-Wallis rank sum test; *significant at 0.05; ***significant at 0.001

²Dunn-test with “Bonferroni” p-adjusted method. (P=Permanent; M=Mixed; T=Traditional)

Conclusions and outlooks

This study suggests that even though local customary rules are still in practice in all study communities, local acceptances of these rules have gradually declined, particularly in households that engaged more in permanent agricultural practices. Specifically, the acceptance of customary rules related to communal and clan land tenures have declined among the studied households. This particular trend could increase social conflicts as the large proportion of the lands within study area fall into communal and clan ownerships without formal land titles. Moreover, declining acceptance on rules related to selling or transfer of land to outsiders may increase the risks of land grabbing by external investors. This may also increase land privatization and may have negative impacts to landless households who currently have access to land under communal tenure. In addition, less engagements in traditional practices such as collective land management, labour exchange, and ritual offerings may reduce social cohesion within the community. Therefore, this study recommends to formalise customary land tenures with local participation to increase social equity and communal resilience, and to reduce further conflicts between local farmers and State institutions.

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