



GENDER AND FOREST RESOURCE MANAGEMENT: A COMPARATIVE STUDY IN SELECTED AREAS OF ASIA AND AFRICA

POLICY BRIEF

CAUSES AND CONSEQUENCES OF CHANGING LAND TENURE INSTITUTIONS IN WESTERN GHANA

Keijiro Otsuka, J.B. Aidoo, Towa Tachibana and Agnes R. Quisumbing

Land tenure institutions in customary land areas of Sub-Saharan Africa have been evolving towards individualized ownership. Communal land tenure institutions aim to achieve and preserve the equitable distribution of land (and hence, income) among community members. Uncultivated forestland is owned by the community or village, and as long as forest land is available, forest clearance of forest is easily approved by the village chief. Forest clearance is usually rewarded by relatively strong individual rights to land, which are further strengthened by long-term or permanent improvements in the land. Land rights, however, tend to become weaker if land is put into fallow over extended periods. In communal ownership systems, individual rights to transfer and inheritance are limited and controlled by leaders of the extended family. Thus, incentives to invest in land and tree resources under such land tenure rules may be weaker due to unclear and uncertain individual rights.

Changes in mode of land acquisition. Based on a survey of 60 villages in Western Ghana, where cocoa is the dominant crop, this study identifies statistically the determinants and the consequences of changing customary land tenure institutions. Traditionally, uterine matrilineal inheritance has been practiced in indigenous Akan villages in this region, in which land is transferred from the deceased man to his brother or nephew (sister's son) in accordance with the decision of the extended family. Recently, however, land is increasingly being transferred from a husband to his wife and children, after the wife helps the husband in planting trees. Such inter vivos transfers are termed "gifts" and individual rights on such land are firmly established. Gifts are used to circumvent existing matrilineal rules so that children may become heirs to their parents' land. Land rights have also been more clearly individualized among migrants, who either have nuclear families or practice patrilineal inheritance. The incidence of land renting under share tenancy and land purchase also seems to have

increased over time.

The process of individualization of land tenure institutions may have been strengthened by the passing of the Intestate Succession Law (PNDCL 111) in 1985, which provides for the following division of the farm: three-sixteenth to the surviving spouse, nine-sixteenth to the surviving children, one-eighth to the surviving parent, and one-eighth in accordance with customary inheritance law. Thus, the law allows children and wives to gain access to land that they were previously denied under traditional law.

Determinants of modes of land acquisition. We analyzed statistically the determinants of the modes of land acquisition at the village and household levels. At the village level, increased population pressure, as indicated by the man-land ratio, leads to a higher incidence of gifts, confirming that population pressure induces institutional innovation towards individualized land tenure. Distance to town also has a positive effect on the proportion of forestland, which indicates that the remaining forests are largely concentrated in areas quite remote from roads and urban centers.

At the household level, forest area acquisition is highly affected by the age of the household head, which indicates that cultivable primary forests have largely disappeared in recent years due to the clearance of primary forests on a first-come-first-served basis. Migrant households also have a strong desire to acquire land for cultivation. Patrilineal households, on the other hand, which are usually long-distance non-Akan migrants, have no rights to clear forests, unlike short-distance Akan migrants. Patrilineal households and those who have migrated to their current villages of residence also have smaller areas of family land, since they do not inherit family land in the area of relocation. When traditional methods of land transfer forest clearance and family acquisition are insufficient, households seek additional land through renting and purchase. In short, land

Keijiro Otsuka is with Tokyo Metropolitan University and the International Food Policy Research Institute, J.B. Aidoo is with the Institute for Land Management and Development, University of Science and Technology, Ghana, Towa Tachibana (formerly of IFPRI) is with the University of Hokkaido and Agnes R. Quisumbing is with the International Food Policy Research Institute. This policy brief is from one of six papers prepared by the International Food Policy Research Institute for a research project on "Gender and Forest Resource Management: A Comparative Study in Selected Areas in Asia and Africa" submitted to the United Kingdom Department for International Development. Copies of the paper and additional briefs are available from Cristina A. Quintos at c.abad@cgiar.org.

scarcity stimulates land market transactions. Land market transactions also transfer land from land-rich to land-poor households.

Determinants of tree planting and cocoa yields. We examined the determinants of the proportion of each parcel planted to cocoa. A strong and negative relationship exists between parcel size and tree planting, implying that larger parcels are likely to have smaller proportions planted to cocoa. This indicates that the land rental market is imperfect, because some portions of the parcel could have been rented for tree planting if the land rental market worked effectively. Neither does stronger land tenure security necessarily encourage tree planting. In fact, a larger proportion of cocoa is planted on land which is owned and allocated by the extended family. This suggests that tree planting on allocated family land, which has the weakest land rights, may in fact be used to strengthen tenure security. If trees are not planted, allocated family land may have to be returned to the extended family for use by other family members. If trees are planted, there is a possibility that the land parcel may be transferred to the desired person as a gift.

We also estimated the determinants of cocoa yields on mature cocoa parcels. These results contrast markedly with those of tree planting. First of all, while the proportion of tree planted area is larger, tree planting density, subsequent management intensity, and yields are lower on allocated family land. Such behavior is understandable if one plants trees in order to obtain permission to transfer land as a gift. Second, share tenancy in Ghanaian cocoa is inefficient, consistent with the inverse correlation between parcel size and the proportion of area planted to trees, because it is not necessarily advantageous for a landowner to rent out a portion of a large parcel to a tenant if tenancy is inefficient. Third, yields are not necessarily higher on parcels with stronger tenure. Once cocoa trees are planted, individual land rights are enhanced such that management incentives do not differ significantly among various land tenure institutions. To sum up, the contrasting estimation results of cocoa tree planting and cocoa yield functions can be understood only if land rights are enhanced by tree planting, so that incentive structures are different for tree planting and management of trees.

Policy implications. Under increasing population pressure, shifting cultivation becomes unsustainable since gradual decreases in the fallow period reduce soil fertility. Under such conditions, more labor-intensive and land-saving farming systems must be established. In Western Ghana, customary land tenure institutions have evolved toward individualized systems in order to provide appropriate incentives to invest in tree planting and management. The increasing scarcity of land has also led to the development of land transactions through markets. So long as population continues to grow, the profitability of long-term investment for intensified land use will further increase, which will either sustain or accelerate the evolution of customary land tenure institutions.

The evolution of land tenure institutions is neither frictionless nor complete. Incentives to acquire stronger land rights by planting trees resulted in extensive tree planting and inefficient management of cocoa fields in allocated family land. The observations of inverse correlation between tree planting and parcel size and the lower cocoa yield under share tenancy point to the

inefficiency of both land use and allocation, due, at least in part, to insufficiently established individual land rights. At this point, however, it is probably premature for governments to accelerate the process of individualization by land titling. Nonetheless, one should expect that the twin forces of commercialization and individualization of land rights will lead to a more widespread demand for titling over time by smallholder farmers. While many titling programs have failed largely due to premature implementation, they have been popular and sustainable in areas of high market and property rights development such as Central Kenya. Land titling programs will become feasible, once communal land tenure institutions have become sufficiently individualized. Governments should begin now by developing strategies for predicting and meeting demand for more formal property rights by farmers. •

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