The Effect of Population Pressure and Internal Migration on Land Conflicts: Implications for Agricultural Productivity in Uganda

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Summary. — Despite the increasing incidence of land-conflicts in sub-Saharan Africa and their deleterious effects on agricultural performance, empirical studies on their determinants and consequences are scant. This study uses community-, household-, and parcel-level data from rural Uganda to examine the causes and consequences of different forms of land-related conflicts. We pay special attention to how population pressure and internal migration affects land conflicts. We find more land conflict cases in migrant host and ethnically diverse communities. We also find a higher probability of having land conflicts in districts that have had high population growth rates. As a consequence, we find that the yield is 22% lower on parcels with land conflicts than on parcels without conflicts, owned by the same household. After unbundling conflicts, we find that evicton conflicts hurt productivity more than other conflict types. Parcels with eviction conflicts have 45% lower yield compared with those without conflicts. Our results suggest that population pressure and internal migration weakens social cohesion and hence negatively affects community-specific informal land arrangements and conflict resolution mechanisms, which in turn, result in land conflicts. Ethnic diversity increases the likelihood of eviction-related conflicts which hurts production. Indeed we find that farmers in migrant host communities are less likely to consult informal conflict resolution channels when faced with conflicts.

Key words — internal migration, ethnic diversity, population pressure, institutions, land conflicts, agricultural productivity

1. INTRODUCTION

Land-related conflicts are increasing in most sub-Saharan African (SSA) countries due to population pressure and the resulting land scarcity (Deininger & Castagnini, 2006; Muyanga & Gitau, 2014; Yamano & Deininger, 2005). Land conflicts occur in many forms. There are conflicts between neighbors which are mainly caused by poor land demarcation mechanisms, inheritance conflicts between relatives, and land grabbing or eviction of the de facto land owners (Muyanga & Gitau, 2014; Wehrmann, 2008). Also, with increased commercialization of land, there is rush to land and reported cases of land grabbing in many SSA countries (Cotula, Vermeulen, Leonard, & Keeley, 2009). The prevalence of land-related conflicts is escalating at a time when crop yields are stagnant or even declining for some countries in the SSA (Otsuka, 2006). Studies have thus suggested that as governments grapple to enhance technology adoption and revamp the agriculture sector’s performance to meet the high and increasing demand for food, land tenure security becomes crucial in attaining this goal (World Bank, 2008). However, institutions governing land, including the protection of property rights, conflict resolution mechanisms, and enforcement of contracts, are still weak in most African countries to curb the conflict threat (Donge & Pherani, 1999; Fred-Mensah, 1999). Coupled with population pressure and hence, land scarcity, land conflicts have raised concerns over likely food insecurity and high poverty incidence in the affected areas (Andre & Plateau, 1998; Deininger & Castagnini, 2006).

Land conflicts, through increasing tenure insecurity, affect portfolio choice of crops, impede land investment, and thus affect agricultural performance. Land conflicts also affect social capital. Indeed, Voors et al. (2012), in their study of conflicts impact in Burundi, found that households that had land conflicts performed poorly in the shares of cash crops grown in total production, and in measures of social capital than their counterparts without land conflicts. Similarly, Muyanga and Gitau (2014) found that farmers in Kenya were less likely to adopt long-term investments and to grow perennial crops on the disputed plots. By weakening social capital, land conflicts reduce risk-sharing mechanisms. Where there are many land conflicts, social stability within society is affected as land conflicts undermine trust and increase fear and suspicion, often between formerly close people such as neighbors and family members (Wehrmann, 2008). In addition, small-scale land conflicts can facilitate widespread civil wars, thereby threatening national security (Andre & Plateau, 1998; Renner, 1997). Renner (1997) notes that the ethnic tensions in Rwanda started from within community land disputes.

The literature on land in SSA widely documents land tenure insecurity and how it affects agriculture performance (e.g., see, Atwood, 1990; Besley, 1995; Feder & Feeny, 1991; Goldstein & Udry, 2008; Holden & Otsuka, 2014; Migot-Adholla, Hazell, Blarel, & Place, 1991; Place & Hazell, 1993). It is believed that land tenure insecurity impedes investment in land because the farmer is not guaranteed of enjoying the investment returns; it increases land transaction cost and hence negatively affects land markets; and tenure insecurity curtails the use of land for credit access (Bellemare, 2013; Brasselle, Gaspart, & Plateau, 2002; Deininger & Ali, 2008; Fenske, 2011; Goldstein & Udry, 2008; Holden & Otsuka, 2014; Otsuka & Place, 2013). While farmers can still cultivate and do short-term investments such as fertilizer application even with the tenure insecurity, land conflicts impede long-term investments such as irrigation and also lead to short-term losses due to crop destruction which has negative effects to production and productivity.

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Among the cited causes of land conflicts are weak or non-existent formal land institutions and the failure of current customary land tenure systems to resolve conflicts (Donge & Pherani, 1999; Fred-Mensah, 1999). Other causes include; population pressure, agriculture commercialization which increases the demand and value for land, and across-community migrations (Andre & Plateau, 1998; Deininger & Castagnini, 2006; Fred-Mensah, 1999; Yamano & Deininger, 2005). For instance, Fred-Mensah (1999) observes that customary land institutions have weakened in migrant host communities in Ghana and he, hence, argues that those communities have been plagued by what he terms “ubiquitous conflicts” in the form of land evictions.  

However, despite the increasing incidence of land-related conflicts and their undisputable deleterious effects on agriculture performance, empirical studies on the determinants and consequences of such conflicts are scant. For instance, no empirical study has examined the relationship between internal migration and land conflicts while such migrations have increased in the recent past. Internal migration increases ethnic diversity which can lead to land conflicts through reducing social cohesion. Indeed, country-level studies suggest that ethnically diverse societies are more prone to ethnic violence, riots, and civil wars which negatively affect growth (Gören, 2014; Kanbur, Rajaram, & Varshney, 2011). At the community-level, descriptive studies suggest that migrations weaken customary institutions and lead to conflicts. This study seeks to examine the effect of across community migration and population pressure on different forms of land conflicts, and how land conflicts affect agricultural productivity.

Land is fundamental in sub-Saharan Africa because a large part of the population is employed in agriculture and largely depends on land for survival. In addition, people attach social value to land. As observed in many African countries, original inhabitants oppose the transfer of traditionally owned family land to “strangers” in the form of land evictions.  

First of all, we trace the community migration patterns and examine whether there are more land conflict cases in communities with higher immigrant proportions than non-immigrant communities. We also examine whether there are more conflict cases in ethnically diverse communities than in homogenous communities. From the hypothesis that migrations and ethnic diversity works through reducing social cohesion and hence weakening the existing customary institutions to cause land conflicts, we also examine whether the farmers in immigrant host communities are less likely to consult informal institutions if faced by conflicts compared to their counterparts in migrant sending communities. Secondly, we compute population growth rates and examine whether there are more land conflicts in districts that have experienced higher population growth rate. Lastly, to gain an understanding on how detrimental land conflicts can be, we examine the effect of land conflicts on agriculture productivity by comparing yield (per hectare) on parcels with and without conflicts operated by the same household.

The rest of the paper is structured as follows. Section 2 provides an overview of land conflicts in Uganda and the existing institutional structure handling land issues. In Section 3, we develop a conceptual framework that shapes our hypotheses, and we detail the empirical strategy. In Section 4, we discuss the data and the descriptive statistics. Econometric results are presented and discussed in Section 5. Section 6 concludes and provides policy implications of the study.

2. BACKGROUND

(a) Rural-to-rural migration and land conflicts in Uganda

Uganda provides an interesting case of a country that started with unequal land distribution across regions, followed by massive rural-to-rural migration due to population explosion in the recent past. The country, like most sub-Saharan African countries, is very ethnically diverse, with about 53 tribes that have tremendously mixed due to migrations since the country’s independence in 1962. These characteristics of rural Uganda can enable us to quantitatively explore the sources of land conflicts by mainly relating land conflicts to migration history, community heterogeneity (ethnic diversity), and the functioning of customary institutions.

Land and is an essential pillar of human development and economic growth in Uganda since the agriculture sector employs 73% of the working population and contributes 24% to gross domestic product (Government of Uganda, 2010a). However, land conflicts have become a major threat to rural agricultural communities in the country. The gravity of the issue led to the passing of the controversial and highly contested Land Act of 2010 that aims to protect lawful and bona fide occupants from illegal evictions (Government of Uganda, 2010b). The land issue in Uganda remains culturally and politically sensitive yet recognized as central to economic development.

Land conflicts in Uganda can be broadly categorized into three major types: boundary, inheritance, and eviction (sometimes termed as land grabbing)-related conflicts, which emerge differently. Due to the historically disproportionate population distribution in the country, land scarcity became rampant in densely populated areas earlier than in other parts. Land scarcity, coupled with soil exhaustion due to over cultivation and absence of technology adoption to maintain higher yield on small pieces of land, led to emigration from the densely populated communities. Emigration was sometimes arranged by community leaders who visited other kingdoms that had unoccupied land to secure land for their subjects. For instance; Paul Ngologoza, Mukombe, among others, the then suza (county) chiefs of Kigezi, one of the densely populated regions at the time, played an important role in resettling the Bakiga...