

# Land Use and Land Right Dynamics under Conditions of Population Pressure

## Trends and Perspectives for Eastern Burkina Faso

Anette Reenberg<sup>1</sup> and Christian Lund<sup>2</sup>

<sup>1</sup> Associate Professor, Institute of Geography, University of Copenhagen, Oster Voldgade 10, DK-1350 Copenhagen K, Denmark. Phone +45 35 32 25 62, Fax +45 35 32 25 01, E-mail ar@geogr.ku.dk

<sup>2</sup> Research Fellow, International Development Studies, Roskilde University, PO.Box 260, DK-4000 Roskilde, Denmark. E-mail clund@geo.ruc.dk

### 1. Introduction

For several decades, environmental degradation has been a key issue when a strategy for sustainable development for the Sahelian region is discussed. Under conditions of increased demographic pressure it is a most pressing issue for farmers to change land use practice or land use patterns (or both simultaneously) in a way which can ensure food security and income. Farmers face a reality with increased demand for staple food, possibly even under conditions of declining yields. Provided that they do not change to another type of agricultural system, but in principle maintain their production strategies, the only possible ways to secure food provision are to cultivate more land or to increase productivity on existing fields. Thus, farmers' response options can be based on land use pattern changes as well as on changes in land use practice (Figure 1).

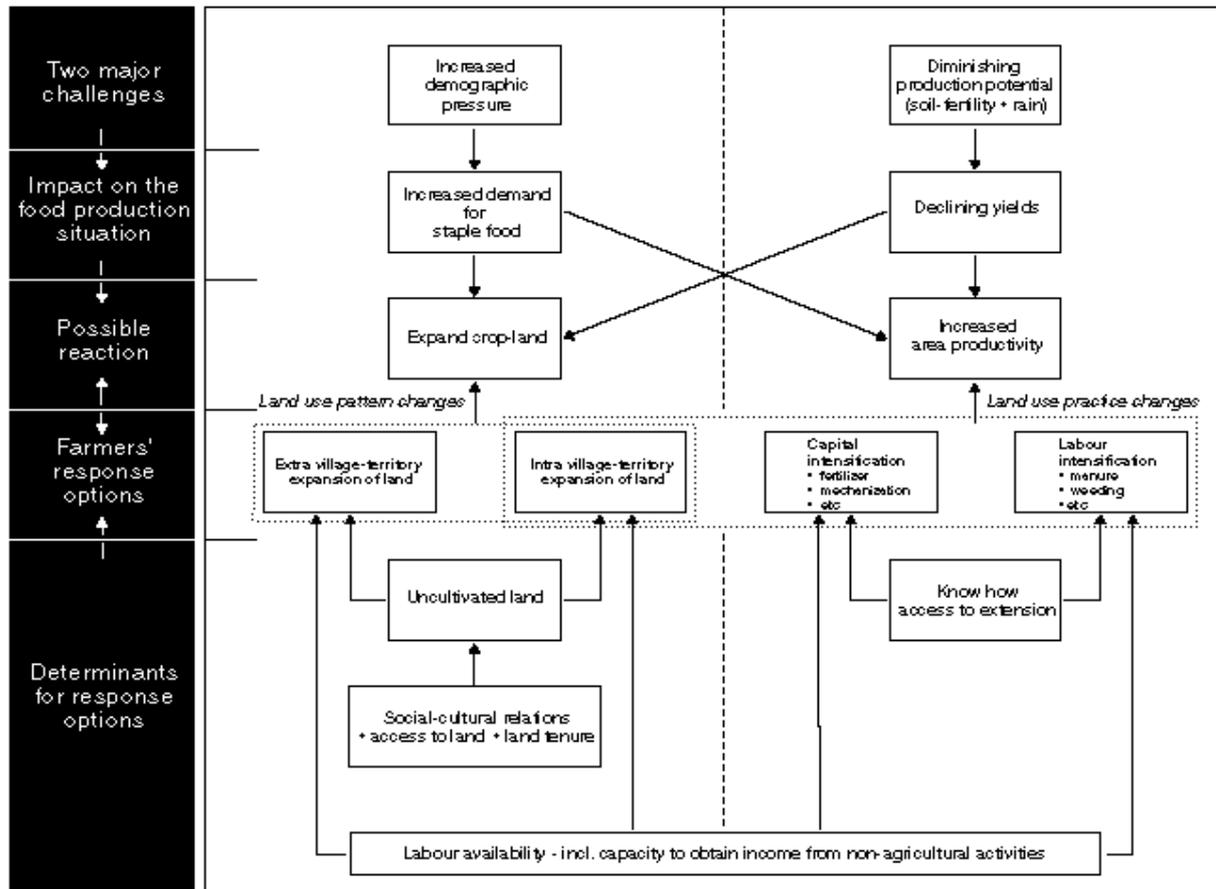
Farmers' response options are, however, highly influenced by a range of factors. Access to labour determines to what extent labour-intensification of agricultural production is a possible means to increase productivity. Likewise, access to labour may greatly influence the household's capacity to earn additional income from non-agricultural sources and thereby condition its capacity to direct production towards more capital intensive strategies. Labour may be in short supply even in a situation of growth and thereby hamper changes in land use practice as well as in land use pattern.

If land use pattern change is to be a possible option for meeting increasing needs for food production or to mitigate declining yields, a larger area must be brought into cultivation. This can be done by decreasing the ratio between fallow and cultivated land within a given village territory or by including new territory for cultivation. One obvious premise for this is that idle, uncultivated land must be available within an acceptable distance to the farmer. Whether this is the case is, however, influenced by social and cultural parameters which enable and constrain access to land.

In most parts of Sub-Saharan Africa, initial rights to land have generally been established through clearing of the bush and first occupation. The person and his descendants who first cleared the land retained a preeminent right over it and could thenceforth grant more or less extended and more or less temporary rights to others. Most African societies thus operate with a notion of 'first occupants' and their descendants who enjoy rights to use and allocate land, and the notion of 'late comers' or 'strangers' and their descendants who depend on the

benevolence of the first occupants to access land. Consequently, when a piece of land is accessed by someone who is not a descendant of the first occupant, a transfer transaction takes place. This transfer is, on the one hand, essential to the flexibility of African land tenure systems and on the other, a source of conflict due to its ambiguous nature since concrete arrangements and rules are the result of a constant socio-political process of negotiation.

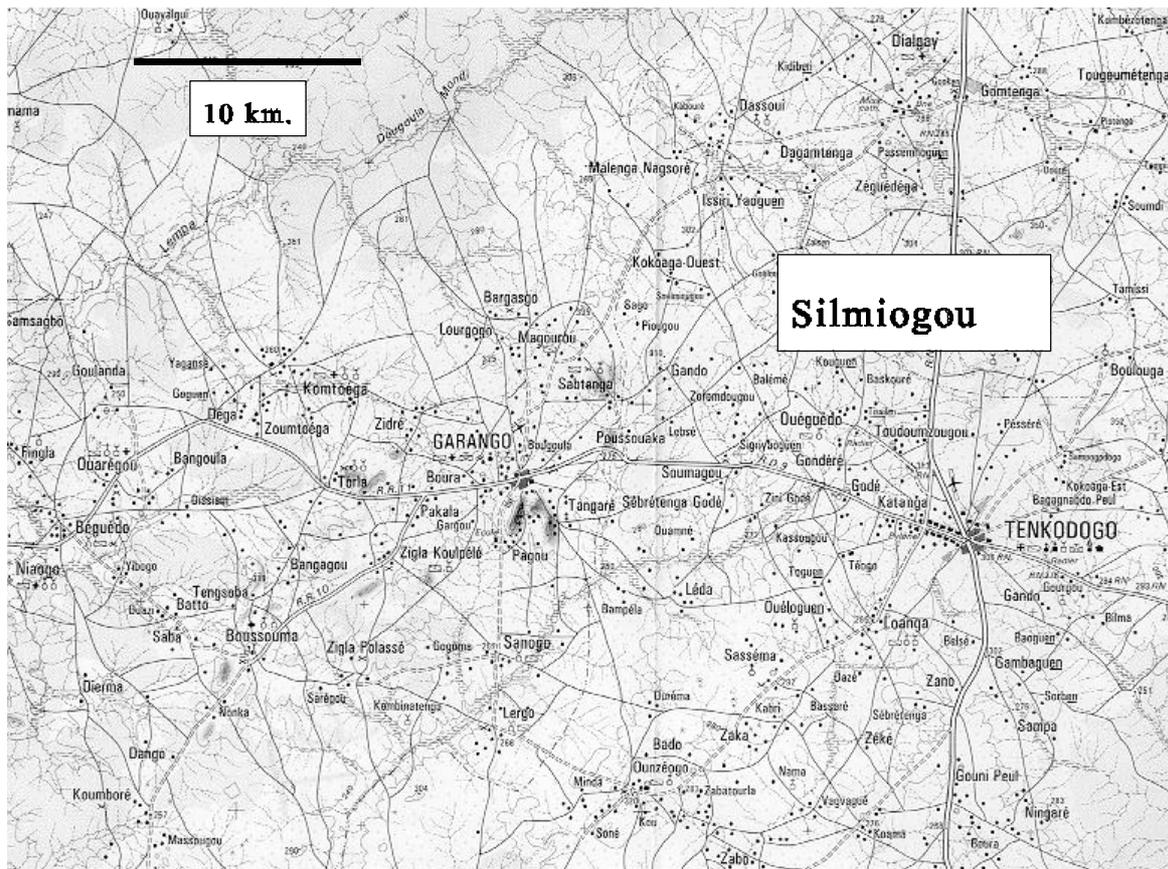
**Fig. 2 The location of Silmiogou Village in the dept. of Tenkodogo, East Burkina Faso.**



## 2. An Empirical Example

The case study from Burkina Faso illustrates the dynamic relationship between land use pattern and land rights. Fieldwork was conducted in the Boulgou province in the southeastern part of Burkina Faso. The data for the study were collected through field measurements, interviews of households and key-informants and satellite images. They concern issues such as land rights, land use and socioeconomic and cultural conditions.

A general characterization of the region would be as follows: The climate is semi-arid with an approximate average yearly precipitation of 800 mm. In line with these production conditions, the dominant crops are millet, red sorghum, cowpea, pea and groundnut. The land is primarily occupied by farmers who cultivate on a relatively permanent basis. Crop-land is occasionally left uncultivated, but a regular, rotational fallow strategy is not pursued. Large zones that border the river valleys and low-lying areas are under low cultivation pressure. This is explained by the fact that these zones belong to the areas, which were formerly heavily infested by river blindness. Thanks to the WHO/Onchocerciasis Control Program river blindness has been eradicated in this part of Burkina Faso.

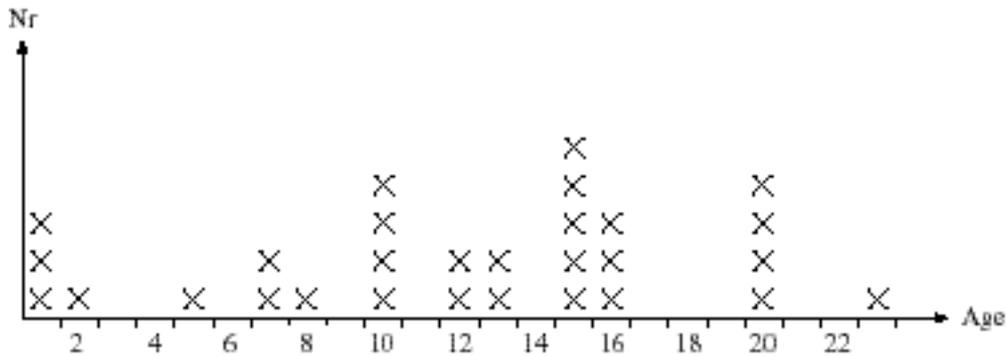


**Figure 2. The location of Silmiogou Village in the Dept. of Tengodogo, East Burkina Faso.**

The village Silmiogou is located in the northern part of the Department of Tenkodogo (see location in Figure 2), approximately 10 kilometres to the north of the Tenkodogo-Garango road and 15-20 kilometres to the south of the valley-areas which constitute the bush territory of the neighbouring village Malenga Nagsore. As for the majority of villages in the region, the dominant ethnic group is the Bisa, but Mossi families are also found in the village. The village territory is 5.5 sqkm and it consists of four village 'quarters'. The cultivation intensity is high compared to other villages in the region. Silmiogou appears as a well-endowed village. Almost all compounds have one or two plows at their disposal as well as animals for traction, and donkey-carts are used for transport.

Silmiogou is a special case with respect to access to land as it has access to the bush-land of neighbouring village Malenga Nagsore, which became even more attractive after the elimination of river blindness. No less than 176 persons from 22 households spend a substantial part of the year (most of the entire growing season) in '*Gabon*' - the name given to the bush on Malenga territory because of its fertility and 'greenness'. Several factors have played a role in this process of making land available to farmers in Silmiogou.

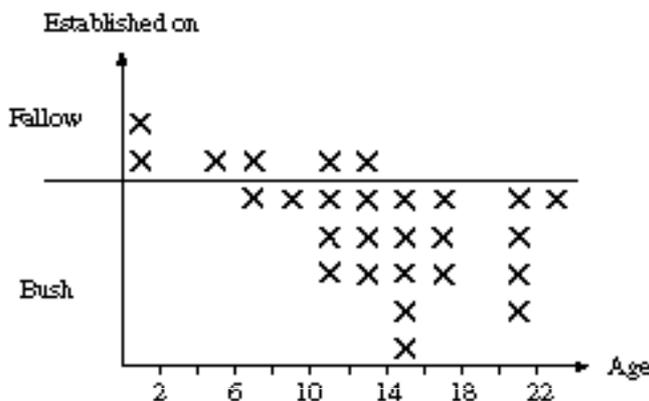
Historically, cultivation in *Gabon* was very sporadic. Nonetheless, three villages close to the area, Malenga Nagsore, Sabtenga and Gando began to cultivate in the area in the late 1950's, and some form of mutual agreement developed that the area belonged to them. The status as territories of these villages was sanctioned around 1960 when villagers from a fourth village, Garango, also began to clear the bush and cultivate. Assisted by the local administrator, the 'prefect', the village chief of Malenga Nagsore was able to have the villagers from Garango evicted and *Gabon's* status has not since then been disputed; however, no official record of the land and its status has been made.



**Figure 3. Age of the fields cultivated by Silmiogou farmers in Gabon**

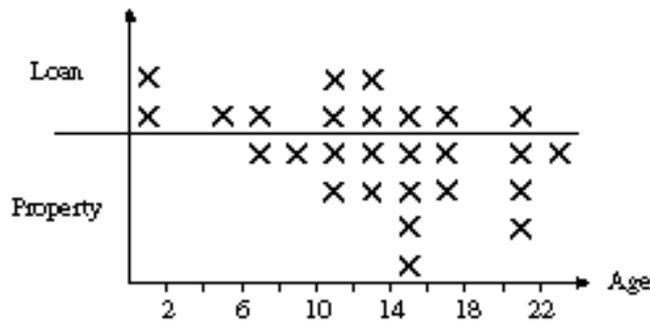
The villagers of Silmiogou only cultivate the part of *Gabon* that is considered the territory of Malenga Nagsore. In order to get land in *Gabon* a farmer from Silmiogou must contact some one in Malenga Nagsore to whom he is related or to whom he is a close friend. A farmer from Malenga who has cleared land is free to transfer it to a villager of Silmiogou without consulting anybody, including the village chief of Malenga Nagsore. Some farmers even claim land that they have in fact never cleared but have only marked as 'theirs' by marking trees and other features in the landscape. Thus, the chief's control is limited to a symbolic control over the village territory.

The rhythm of colonization of *Gabon* by farmers from Silmiogou seems to be declining though fairly evenly. Silmiogou farmers have gradually increased the number of fields cultivated outside their own territory within the last 20 years, as can be read from Figure 3. Some 2/3 of the fields were acquired 10 or more years ago; 22 out of 35 households cultivate in *Gabon* today (1996). Between 1/4 and 2/3 of the total number of family members in these households reside more or less permanently in *Gabon* during the agricultural season. Some households are in *Gabon* for the entire growing season (180 days) whereas others spend less time there, some as little as 30 days. Although large intra-household variations are observed, it might be suggested that households with a long-standing presence in *Gabon* seem to become more established, semi-permanent residents in the area. The data quite clearly show that virtually all the oldest fields were established in uncultivated bushland (Figure 4). Only more recently have fields been established on fallow land, and during the past 6 years no one from Silmiogou has reclaimed virgin land in *Gabon*.



**Figure 4. The age of the fields and the land use prior to the cultivation by the present user.**

A rough estimate of the land cultivated in *Gabon*, based on satellite images, leads to the conclusion that it enlarges the land resources available to Silmiogou farmers by more than 20%. There are, however, significant differences between the four village 'quarters'. If four simple parameters are chosen to characterize households and distinguish between more and less endowed farmers, it becomes clear that the capacity to expand coincides with the resource endowments of the household. The parameters selected were: possession of plows for weeding, possession of plows for soil preparation, donkey-carts and size of household.



**Figure 5. Age of fields and corresponding land right (loan or property).**

Several observations can be made concerning the tenurial aspects in terms of loan/property over time (Figure 5). First, it is interesting that people from Silmiogou can consider some of the land in *Gabon* as their property, although it does not lie within the bounds of their village territory. Second, if we compare the distribution of bush/fallow over time with the data on the users' perception of the tenure arrangement, there is not a complete match. While the fields established on fallow fields are

all considered borrowed, not all fields established on uncultivated land are considered property. This indicates that farmers from Malenga Nagsore have attributed uncultivated land to farmers of Silmiogou while maintaining a right to it. There is thus no correspondence between first occupation of the land and a permanent right over it. Interviews showed that while this basic principle was known and recognized by people from Silmiogou as well as Malenga Nagsore, concrete arrangements would part from this under certain circumstances.

The rights, which are transferred when a farmer from Malenga Nagsore attributes land in *Gabon* to a farmer from Silmiogou, are formally long-term exclusive rights. There is a general consensus among attributors and attributees that attributed land in theory eventually can be retracted. However, there is equal consensus that there are important limitations in the attributor's rights to do so. First, with time it becomes increasingly difficult to retract the land. Considered together with the observation made above, this means that the clear distinction between 'first occupant' and 'latecomer' co-exists with more subtle and contrasting notions. The attributor can thus hold rights of the first occupant although he has never actually cultivated the land. And the 'latecomer' can eventually be considered the owner in the sense that his land cannot be expropriated by the attributor. This may also explain why most of the 'owned' fields have been cultivated for more than 10 years; they gradually become owned over time. Even in case of retraction, a number of conditions must prevail. Land cannot be retracted for the purpose of attributing it to someone else; the need for it must come from the family itself. Even then, however, retraction will only take place if the need of the original attributor cannot be met otherwise. Finally, if land is eventually retracted, it will not be the integral holding but only a part of it. One particular reason that land is rarely claimed back is that the attribution forms part of a larger arrangement such as marriage.

Consequently, what are formally considered temporary transfers of use rights, though long-term, generally become permanent transfers. The right to transfer the land further is, however, restricted and the farmer does not possess the land as property, which he can alienate. The land can only be transferred to the heir of the attributee, and only upon a formal request. Thus, land attribution in *Gabon* currently produces a very stable or locked tenure arrangement; the attributor cannot retract it and the attributee cannot transfer it outside of his lineage.

## 2. Conclusions and Perspectives

The findings point to some perspectives of more general interest which deserve attention in research for development of sustainable natural resource management strategies.

First, the example suggests that the possibilities to expand the fields beyond a household's present domain depend not only on access to land but also on the household's capacity in terms of labour and equipment. Good social and cultural relations and nearby idle land is a necessary (but not sufficient) condition to allow alleviate of demographic pressure or declining soil fertility. Only sufficiently enabled households are able to use possible opportunities. Thus, the perspective is that an increasing inequality between enabled and less enabled households can be expected to develop.

A second issue concerns the management of land rights. On the one hand, knowledge of them is obviously important for development projects because they must know on which basis they encourage with people to change and improve resource use. On the other hand, land tenure regimes change and adapt to circumstances all the time and a 'mapping' of land tenure rights cannot be established once-and-for-all. Thus, rather than entertaining an ambition of complete knowledge of the land tenure regime (let alone of controlling it by establishing new and 'clearer' rules), projects dealing with land management and rural development should investigate the possibilities of strengthening existing 'forums for negotiation and management' of land tenure disputes which will inevitably exist.

The third issue points to the problem of conceptualizing 'village' as a spatial entity. In development planning for rural areas in West Africa an understanding that the village's natural resources constitute its 'terroir' and that management hereof is performed by the village community has gained ground over the past 15 years. However this understanding presupposes a social and political homogeneity which is often not found in the communities, and it neglects the out-of-'terroir' activities, social relations and sources of income. The case of Silmiogou exemplifies this clearly. Since the majority of farmers cultivate fields in *Gabon* - outside the terroir of Silmiogou - their home 'terroir' does not constitute the complete productive base of the community. Hence, a resource management plan directed only at the 'terroir of Silmiogou could well leave out a significant proportion of the total cultivated area. On the other hand, a project directed at managing the 'terroir' of Malenga Nagsore would have to include an important number of non-residents in order to embody all parties that decide on land management. The management of village 'terroir'-concept might hold the promise of integrating the social and physical environment, but in the light of our findings it seems not well suited to address a reality in which the two dimensions are superimposed in a spatially complex or random way.