

Topic 8 : Population, Development and Environment
Session 801 : Population, Development and Environment
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Title : *Family structure and labor migration. A longitudinal study in rural Mali.*

Short Abstract

Large households, family-based production and seasonal migration are common features of Sahelian populations. These characteristics are usually considered as answers to the harshness of the living conditions. On the one hand, important family size helps to face the constraints of the agricultural season by having enough labor force during the short and uncertain time of farming. On the other hand, labor migration may be used as a way to complete the farming resources and to compensate for the food production deficiencies.

According to this framework, one can expect the probability for individual labor migration to vary according to the size and the structure of his domestic group. Pressure for regular seasonal migration should be strong in small households while large families may have more diversified migration behaviors.

This question will be analyzed in the context of rural Mali, using a follow-up survey conducted from 1988 to 2004 in seven villages (about 4000 hab.).

Extended abstract :

Topic and theoretical focus

Large households, family-based production and seasonal migration are common features of Sahelian populations of farmers.

In Sahelian areas, the rains are concentrated on a few months and are irregular in terms of quantity and repartition. The annual supply in food relies on the good management of these short and uncertain rainy seasons. This requires flexibility and availability of labor force during the critical peaks of the season. Large family size helps to face these ecological constraints: enough workers are available and the sickness of one of them can be compensated without tragic consequences on the whole year subsistence.

Seasonal labor migration is another way to manage the harshness of the living conditions. It is a solution to compensate for the food production deficiencies. It is also a possible means to complete and diversify the farming resources without renouncing to the rural activities and way of life.

According to this framework, one can expect the probability for individual labor migration to vary according to the size and the structure of his domestic group. Pressure for regular seasonal migration should be stronger in small households than in large ones. Members of large families may have some leeway either to stay at the village for rest during the dry season, either to move for longer times without the obligation to be back for the farming activities.

The validity of this framework will be questioned using the data of a follow-up survey in rural Mali.

Context of the study

The study covers 7 villages in South-East of Mali, belonging to the ethnic group of Bwa. The social and economic characteristics are those commonly shared by Sahelian farmers

populations. The economy is centred on agricultural self-sufficiency and family-based production. Farming technology is limited to plough. Food crops are dominant with little investment in cash crops and trade. School enrolment rate is low.

Fertility transition did not begun. Fertility is about 8 children per woman and child mortality (before 5) about 170 ‰. The natural growth rate is high in the region (over 3 percent per year) though it is partly brought down by migration. Labor migration is widespread among men since the seventies and among young women since the nineties.

The domestic group (or household) named *zu*, is the farming and consumption unit. It is part of the lineage, which is the social and political unit. Domestic groups do not correspond to residential unit. They often gather several distant residential units of the village.

The size of *zu* is rather large and their structure often complex: over half the population live in poly-nuclear families and belong to an economic unit comprising at least 10 members. Those characteristics have hardly changed in the last thirty years.

Data

A demographic surveillance system is active since 1988, with regular update each 5 years (1994, 1999, 2004).

It involves 2 main surveys :

- a follow-up survey in 7 villages (about 3600 residents). It is based on the matching of individual census data. 7 censuses are included, the 3 national censuses (1976, 1987 and 1998) and 4 local censuses (1988, 1994, 1999 and 2004). The survey is organized to provide a follow up of each individual registered by one of the censuses: for each of them, we know the status and the place of residence at the time of each census. Data are also appropriate to follow the domestic groups (*zu*) over time: the transition (in size, structure, composition) of each *zu* can be described from one census to the other. It is also possible to estimate the properties of the domestic group in the case of specific scenarios, for instance the family size if no emigration happened since the previous census. Finally individual data can be merged with the household data in order to calculate probabilities for individual events to happened according the characteristics of their domestic group.
- a biographical survey in 2 villages (about 1500 residents) which collected the complete marital, reproductive, migratory and religious history of individuals. The first survey was carried out in 1987-89 and it was updated until 2004, including a follow up of migrants.

Analysis and expected findings

Analysis will be based on the probability of individual labor migration according the characteristics of the household.

These characteristics are:

- the observed one: size of the domestic group, structure (number of nucleus), approximation of the labor force;
- the potential one: those that would have been observed without emigration since the previous census.

If family structure is a main determinant of individual migration, one expect the probability and characteristics of migration to vary with the structure of the economic unit.

Expected results are :

- higher rate of seasonal migration for members of small households;

- lower level of seasonal migration for members of large households, with a possible mixture of higher probability to make either no migration, either longer migration.

These results will help to discuss the constraints of households on individual behaviors.

Additional analysis will be done with the calculation of the probability for a household to be concerned by migration and by the level of migration (ie nb of members who migrated) according its size and structure. Household strategies in terms of migration will be discussed according these results.

We will mainly use the data of the follow-up survey. Biographical data which provide more detailed information on each migration will be used for additional developments.