

micle policy paper

Social-ecological conditions of migration in the Sahel

The impacts of climate and environmental changes on migration have gained increasing attention in recent years. Yet the role and significance of the climate as an influencing factor for migratory processes is still poorly understood. Case studies are required which consider the specific historical, socio-cultural and environmental context. The micle project examined the interactions between climate change, land degradation and migration in selected regions in the Sahelian countries Mali and Senegal.

Basic insights

1. The study results confirm the recent scientific perspective that migration is a multi-causal phenomenon determined by a complex interplay of social, economic and ecological factors.
2. Climate stressors and environmental degradation clearly play a role, but must be considered in relation to other factors. The significance of climate and environmental factors for migration decisions increases with people's dependence on agriculture.
3. In Senegal and Mali, migration is an important part of the culture. Migration does not serve one single purpose. Instead, several motives interfere with each other and can change over time.
4. Socio-economic development usually improves the financial means necessary for mobility, and generally results in an increase of migration.

Policy recommendations

- ▶ **Seeking to prevent migration is not a viable political option. Migration is deeply rooted in culture and history and is part of people's livelihood strategies.**
- ▶ **Policies should make use of the positive potential of migration for sustainable development. Trans-local relationships resulting from migration favor the transfer of remittances, knowledge and skills, as well as migrants' investments in their countries of origin.**
- ▶ **Strategies for regional development in rural areas should combine investments in sustainable agriculture with impulses for employment and income opportunities in other economic sectors.**
- ▶ **Relationships between rural and urban development processes should be reflected in development strategies. For example, they should consider infrastructure development and the promotion of integrated land and water resources management to prevent land degradation.**
- ▶ **Opportunities should be improved, particularly for young people. Education reduces vulnerability and increases options to cope with climate stressors. Policies should promote and facilitate formal education in terms of quantity and quality.**
- ▶ **Policies should address key leverage points for better adaptivity to climate risks and other stressors: the consideration of gender inequalities and empowerment, and the participation of the people concerned in strategy development and policy implementation.**



Figure 1: micle study regions Linguère in Senegal and Bandiagara in Mali

Climate change and the environment in Mali and Senegal

The micle project examined the social-ecological conditions of migratory processes in selected semi-arid Sahelian regions: Linguère in Senegal and Bandiagara in Mali. Climate change and human activities have contributed to massive changes of the flora, fauna and soils in the rural study areas. After an extremely dry period with severe droughts in the 1970s until the 1990s, rainfall has been increasing in both regions, but its variability is growing. These changes cause the ‘greening phenomenon’ which is supported by agro-forestry, reforestation and protective measures. In spite of this positive trend, the effects of climate change contributed to a decrease-

ing diversity of woody species and favored the increase of robust species. On the other hand, overgrazing, deforestation and the expansion of agricultural areas are significant causes for land degradation in some places. Pictures a) and b) illustrate the co-existence of greening and degradation in two adjacent areas in Linguère, which is caused by a combination of climate factors and human activities. In some areas, farmers protect certain tree species on cropland which provide benefits for yields or erosion protection (picture b). This improves tree cover and soil conditions and protects against degradation (picture a).



Photo a): Degraded area in Linguère, Senegal, September 2012 (M. Brandt)



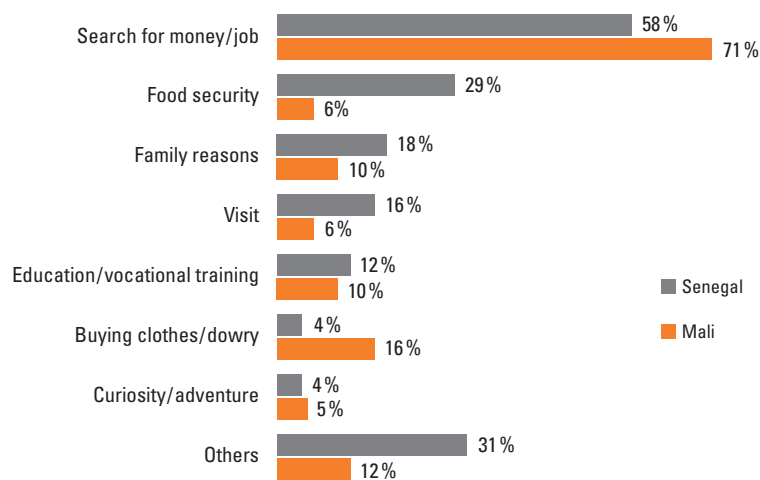
Photo b): Field with high woody cover in Linguère, Senegal, September 2012 (M. Brandt)

Migration patterns in Mali and Senegal

The social-empirical analysis comprises data derived from qualitative interviews, participant observation, and from a standardized survey of more than 900 individuals in Mali and Senegal. In the West African Sahel, migration is an important characteristic of the culture: 87 percent of the survey participants have personally experienced migration, and about an equal number would recommend migration to other family members. Temporary, seasonal and circular migration are the most dominant migration

types. Migration is predominantly internal and regional. 86 percent of the respondents moved within countries and to larger urban areas, with the capital cities Bamako and Dakar as major poles of attraction. In Senegal, only four percent of respondents crossed international borders. The majority of them moved to European destinations (France, Spain, Italy). In Mali, the percentage of international migration is significantly higher (25 percent), with the Ivory Coast being the main destination.

Figure 2: Motives for migration
(multiple answers possible)
Source: micle survey 2012
(Senegal n=388; Mali n=398)



Motives for migration

Economic motivations are the main reason for moving. Food security is mentioned by 29 percent of respondents in Senegal and six percent in Mali. For many interview partners, shifting rainfall patterns and insufficient yields are an important rea-

son to migrate during the dry season. However, seasonal migration is a long-established strategy to deal with the harsh environmental conditions in semi-arid rural regions. Today, it cannot be understood only as an immediate response to climatic conditions, since seasonal migration is also prevalent in times of favorable rainfall patterns and successful harvests. Family reasons and education are further important motives for migration. Migrant networks and social relations at destinations strongly influence migration choices.

In Bandiagara and Linguère, people adopt different strategies to cope with the negative effects of environmental changes such as crop failures. Key compensation strategies (particularly in Mali) are an increase in financial support from family members who have migrated, and a rise in migration itself. In Senegal, there are other important strategies, such as the sale of cattle and mutual aid among the villagers. Thus, migration is not the only risk-minimizing strategy.

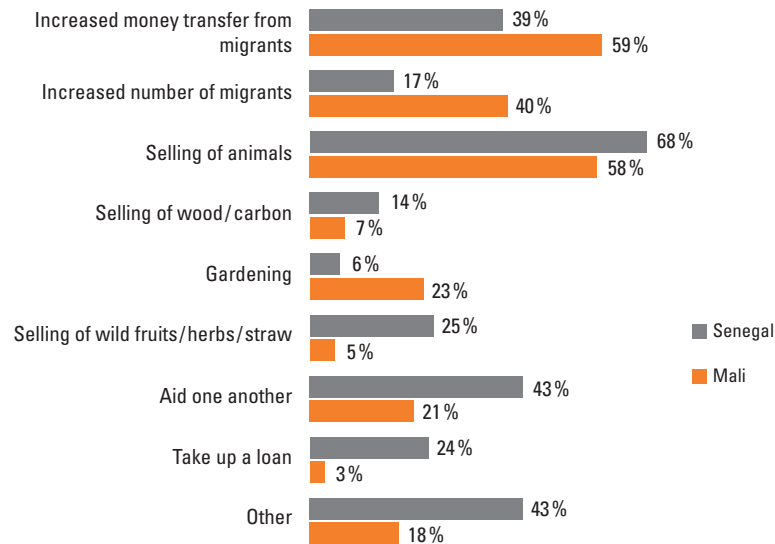


Photo c): Interviews with viallagers in Linguère, micle survey (V. van der Land 2012)

The majority of the people in the study areas rely on small-scale and subsistence farming. Today, food security cannot be guaranteed only on the basis of local agricultural production. The significance of climate change and land degradation for migration decisions increases with the following

factors: when the population's dependence on agriculture and thus on local agro-ecological conditions and rainfall patterns is high, when opportunities for income diversification and non-farm activities are few, and if access to social and financial capital is low.

Figure 3: Strategies for compensating harvest losses (multiple answers possible)
Source: micle survey 2012 (Senegal n=460 ; Mali n=445)



Migration, the environment and social inequalities

Motives for migration are highly differentiated across social characteristics such as gender, age and level of education. Though the quest for income and employment is the most important motive for both genders, this motive is mentioned more often by male respondents. In contrast, family reasons and social visits are particularly important for women. For younger women, economic reasons become more important. The education level in the study regions is fairly low, with about three-fourths of survey participants having no formal education. Motives for migration differ considerably depending on the level of education. People with higher levels of formal education are less vulnerable to environmental hazards since they are less dependent on environment-sensitive economic activities.

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