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International Animal Routes in sub-Saharan Africa: perceptions and dynamics of pastoralists in northern-Benin

H. Edja⁴

Abstract

The widespread depletion of pastoral resources has fueled conflicts in northern Benin among communities bordering protected areas and receiving each year animals from Sahelian countries such as Niger and Burkina-Faso. Five international animal routes have been decreed by ECOWAS to make easy animal mobility and prevent troubles. The paper investigates the herders' perceptions and the controlling practices implemented on these corridors. Individual and collective discussions were conducted for processing qualitative analysis of discourses. Two trends have been discovered. Firstly an international animal route could be qualified as a "Nobody knows". During group discussions, the actors do not agree on the existence of such corridor. The common discourse was crystallized around the non-fixed nature of animal routes. The scarcity of resources induces changes over years. Secondly, an international animal route corresponds to an "Everybody knows". The herders have individually confirmed the existence of a regional animal corridor but have stressed that they have abandoned some portions of it behind because of its nonconformity with the ongoing reality. The output of this research can and must help updating regional policies towards pastoral mobility as well as the inter-professional conflicts reduction mechanisms.

Keywords: Pastoralism, Regional policy, International Animal Route, Benin

Axes internationaux de transhumance en Afrique sub-saharienne: perceptions et dynamiques des éleveurs au nord-Bénin

Résumé

L'épuisement des ressources pastorales a alimenté au Nord-Bénin des conflits entre les communautés riveraines des aires protégées qui accueillent chaque année des animaux en provenance des pays sahéliens tels le Niger et le Burkina Faso. Cinq axes internationaux de transhumance avaient été définis par la CEDEAO pour faciliter la mobilité des troupeaux et prévenir les troubles. L'article analyse les perceptions des éleveurs et les pratiques de contrôle en cours sur ces couloirs. Des entretiens individuels et collectifs ont été conduits afin de procéder à une analyse de discours. Deux tendances ont été découvertes. Premièrement, un axe international de transhumance correspondant à une infrastructure de type « Personne Ne Connaît ». Au cours des discussions de groupe, les acteurs nient l'existence d'un tel couloir. Le discours commun était cristallisé autour de la flexibilité des couloirs. La rareté de certaines ressources induit un changement permanent au fil des ans. Deuxièmement, un axe international de transhumance correspondant à un « Tout Le Monde Connaît ». Les éleveurs ont individuellement confirmé son existence mais soulignent que des portions seraient déjà abandonnées pour non-conformité aux réalités actuelles. Les résultats obtenus doivent et peuvent aider à ajuster les politiques régionales en matière de mobilité pastorale ainsi que les mécanismes de réduction de conflits interprofessionnels.

Mots-clés: Pastoralisme, Politique régionale, Axe internationaux de transhumance, Bénin

INTRODUCTION

The practice of transhumance has experienced significant disturbances in ECOWAS space during the last decades. Climate changes, natural resources variability and grazing land depletion are the main constraints challenging the sustainability of pastoral systems in sub-Saharan Africa (Coulibaly, 2010; Massou *et al.* 2011; FAO, 2012). The increasing of difficulties in accessing productive resources is an undeniable reality for pastoralists who resort to multiple and multifaceted dynamics to safeguard their livelihoods (Djohy, 2010; 2011). The issue of animal corridors remains crucial in the management of animal husbandry in the sense that most of the accesses to grazing areas as well as local livestock markets, go through the possibility of finding safe paths that can facilitate mobility while ensuring useful food and water resources for herds' survival (Bonnet, 2010). The availability of animal routes for

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livestock conveying is strongly correlated with the access to pastoral resources at different scales (Pellissier and Tallet, 2003).

Benin has a very harsh back experience on transhumance. In fact, since the 90s, the peaceful coexistence amid professional co-users of natural resources has completely broken down. The movements of flocks especially those held by foreign shepherds cause bloody and deadly clashes between actors. These situations have even led Benin to the one-sided suspension of cross-bordering transhumance to the foreign herds mainly from neighboring hinterland countries such as Niger and Burkina Faso. Some animal keepers take advantages of the weakness of transhumance management institutions and organizations to lay down their own pushes to those groups they consider as threatening their interests to enjoy freely and unrestrictedly the existing resources. Others wrongly rely on the decision A/DEC.5/10/98 respectively the act C/REG.3/01/03 which promotes the free movement of animal resources and their owners within ECOWAS space (ECOWAS, 1998; 2003). The ECOWAS International Certificate of Transhumance (ICT) which is the main instrument of the application of this decision is sometimes completely dropped. Sahelian herders use to complain about the occupancy of corridors in the host regions while hosting populations accuse foreign shepherds of damaging cultivated plots or operating illegally in the protected areas (Touré, 2010). Through this dual and cross-charging game, numbers of farmers have lost their lives as well as several foresters in the northern Benin which has suffered from this almost warring and abusing transhumance.

Questioning animal corridors and taking real interest in them became a priority for national and regional policies oriented towards natural resources management as well as agricultural and pastoral productions. For this purpose, on February 26th, 2004, during the first extraordinary meeting of the advisory board of W Park/ECOPAS regional program (*Protected Ecosystems in Sub-Saharan Africa*), five (05) international transhumance routes have been defined to facilitate the mobility of flocks and shepherds in the regions bordering W park in order to reduce conflicts between actors (ECOPAS, 2004; Convers, 2008; Michelot and Ouedraogo, 2009).

A decade just ended after the formalization of international transhumance routes under which the influence of various factors has seen several dynamics blooming among communities. This article through the ECOWAS international animal route N°4 (ECOWAS IAR4) analyzes the perceptions of the first beneficiaries as well as the local dynamics they implement in safeguarding their livelihoods. In the next paragraphs, the theoretical and methodological frameworks that have shaped the study will be presented. The results section will follow lighting up the global pastoral trend along the corridor and a discussion on herders' perceptions and dynamics. The paper will be concluded with suggestion of some ideas for political decision-making.

THEORETICAL BACKGROUND

The sustainable livelihoods framework is an important way of organizing the entangled issues of a given community's poverty. Accordingly, some critical spatial factors grouped into natural, human, social, financial and physical capitals have been seen as largely determining for livelihood options, strategies and welfare of agro-pastoral communities (Fratkin *et al.*, 2003; Mearns, 2004; Kristjanson *et al.*, 2005; FAO, 2012). Though largely under-estimated or completely neglected in some studies, physical assets somehow play an important role in enhancing and sustaining livelihoods among different pastoral communities. Dougill *et al.* (2010) argued that the capacity of pastoral communities to respond to droughts and climate uncertainties has something to do with their possibility to benefit from appropriate infrastructures supplied by decision makers, especially the governments (roads, health centers, etc.). Here, it is about the question of how animal route matters for pastoral livelihoods. The particular interest of this study is in investigating the perceptions and the behaviors of herders upon transhumance corridors. With regard to the local circumstances and the priorities related to pastoral activities in the region (multi-scale trading; local, national and cross-border mobility), a commitment has been made to focus on the ECOWAS-IAR4 in northern Benin by assessing the dynamics that animal keepers draw upon in pursuing livelihood strategies within sub-Saharan countries.

Climatic trend in study area

The study region is globally subject to a disrupted climatic scheme upsetting all meteorological predictions. The weather forecasts are more received as untrue and deceitful for the communities. The sudano-Sahelian climate occurring in the region records yearly a rough average of 80 days of rain. The annual raining regime encounters high fluctuations over years and the zone becomes dryer. The temperatures are characterized by a great change through the year. The highest averages are recorded in March-April and the lowest in January. The period of November to April corresponds to the period of high drought. Harmattan prevails over December and January. During the period 1951-2010 the number of rain days has decreased by 11-28% while temperatures have considerably increased (Boko *et al.*, 2012). Further, the probabilistic models predict that on the horizon 2050, the extreme Benin will suffer from an increase of periodic rainfalls, a decrease of rainfalls at seasonal scale and an increase of dry seasons' terms (*ibid*).

Data gathering

Two main methods have been used for data collecting within pastoral communities. Firstly, group discussions have been organized with herders and secondly, individual interviews have been also carried out to get further information on animal mobility through the international corridor.

Group interviews

Group interviews can be formal with a specific, structured purpose, or informal taking place in a field setting where a researcher stimulates a group discussion with a topical question (Frey *et al.*, 1991). This method is particularly appropriate when the interviewer with his open ended questions aims at encouraging participants to express with their own vocabulary the issues of importance to them (Kitzinger, 1995). Thus, the traditional symbolic interactionism in interpretative sociology (Bohnsack, 2004) is called upon. The meetings with herders were informal and successively organized in Alfakoara (Kandi) and Karimama-centre (Karimama). Through ethnographic investigation a collectively validated view on the existence and the practicability of ECOWAS IAR4 is sought out. Therefore, factual and qualitative data were generated as means of adding valuable insight to the interpretation of a social or behavioral event about animal mobility along this regional corridor. Acknowledging that the characteristics of the groups and the background of the participants influence the interaction and response patterns within the groups, individual investigation was added to reduce the bias.

Individual interviews

Semi-structured discussions were individually conducted with herders to discover the local dynamics enabling pastoral mobility within country borders. During three months research, thirty (30) herds have been recruited through snowball sampling. The snowball sampling is a chain referral sampling method relying on referrals from initial subjects to generate additional subjects (Coleman, 1958; Biernacki and Waldorf, 1981). It is recommended when the research refers to behaviors, perceptions, habits, in order to describe "typical" cases, which cannot be generalized at the level of the entire population (Drăgan and Isaac-Maniu, 2012). Because of the confusion ruling in the contemporary literature on this method, it has been recommended to scientists to be as clear as possible in defining the meaning of terms upon first use in their manuscript (Handcock and Gile, 2011). In fact, during a peer-driven process in pastoral communities and with regards to the sensitivity of animal corridor matter, interactional units were interviewed focusing on the way each herder perceives, acts and interacts with other actors during animal mobility particularly in dry season. We fortuitously initiated chain with a herder who agrees to be part of the research and increasingly completed the number with their nominated respondents. The process was stopped when additional interview did not provide any extra information.

Data analysis

The discourses collected through the process described above, have been analyzed. Discourse analysis is differently interpreted by scholars working in various disciplines (see Brown, 1983 for a point on this debate). The discourses recorded from interviews and systematically transcribed provide us with textual materials analyzed through a step-by-step approach (Wetherell *et al.*, 2001). We considered how spoken language enacts several perspectives towards pastoral livelihoods (Gee, 2013). Referring to Van Dijk (1993), we have been more critical by deciphering implicit socio-political stances as they have been legitimated during both individual and collective discussions.

RESULTS AND DISCUSSION

ECOWAS-IAR4 and pastoral trend

The ECOWAS corridor N°4 officially goes from “Say” region (Common border Benin-Burkina Faso-Niger) to the hosting areas of “Gogounou” (Benin) crossing Karimama, Malanville and Kandi districts. The itinerary is defined as follow: “Say – Kirtachi – Boumba – Monsey – Karimama – Karigui – to the welcoming zone of Goungoun”. Each year, animal mobility is organized by different groups of inland herders moving from their usual dwelling place to other districts looking for better pastoral resources. Depending on the period, the transhumance is also engaged to escape from crop realms and to therefore avoid conflicts with farmers. This local trend is tightened up in dry season by the inflow of foreign flocks coming essentially from bordering countries. The availability of resources already critical for the national livestock gets worse. Benin country suffers somewhat from the regional solidarity enabling animal free mobility with a lack of companion policies. In addition, animal feeding and watering situation in the concerned area are also presented below in order to show the real face of the top-down initiative of international transhumance corridor.

Animal feeding along ECOWAS-IAR4

The fodder mobilizes herbaceous or ligneous resources used for ruminants feeding. The vegetation in the corridor is halfway between sudano-sahelian and sudanian savannah. Alibori province is occupied by 4,124.22 km² of protected areas out of the 26,242 km² of its total covered lands (MAEP, 2007). Further, 692,210 heads of cattle of 2,058,000 for the whole country, were counted in the region that represents therefore the most important livestock producer in Benin (FAO, 2013). The W park and all the state forests (Goungoun, Sota, Trois-rivières, Alibori-Supérieur, etc.) are totally or partially defended from animal inroads. Only the “zone tampon” of W park and the using bands of the mentioned state forests are somehow conceded to productive forces under a so-called participative management mechanism fed through some formal vouchers. The area is well known with regular conflicting situations fueled by the sharp practices of different involved actors: farmers, herders, foresters, etc. (Djohy, 2010; 2013). The natural vegetation, the farms residues and various post-harvest formations are well used by pastoralists during their mobility in the region. These feeding resources are very diverse and well-off enough, in terms of quantitative and qualitative composition. They vary from woodland forests to different types of savannah with some gallery forests along water resources (Lesse, 2009). After all, rangeland access remains difficult for animal husbandry because of several factors with agricultural expansion playing the leading role.

Animal watering along ECOWAS-IAR4

For long time, serious threats have compromised the protection and the conservation of water resources to the interest of actors. But since 1998, Benin has adopted the Integrated Water Resources Management approach (IWRM). This option was reinforced during World Congress on Sustainable Development of Johannesburg (2002) leading to many policies and strategies documents elaborated to rebuild the necessity of favoring water access for communities' needs and activities and reducing related costs. Some of them can be mentioned: the National Management Policy of Hydraulic Infrastructures of 2000, the National Strategy 2005–2015 of Drinking Water Supply in Rural Area of 2005, the National Policy Document of Water Management for Sustainable Development of 2007, the Blue Book of 2009, the law N° 2010-44 on Water Management and its application decree, etc. Further, about 194 structures (water services, NGOs, farming promoters, social mediators, technical and financial partners, etc.) work at national, regional or local level to preserve water and insure access for the populations. Over 50% of these actors have drinking water as priority and about 34% are consecrated to water access for agricultural and pastoral productions (Konnon, 2009). This institutional environment has granted livestock mobility along ECOWAS-IAR4 with relatively interesting animal watering conditions while prohibiting pastoral practices liable to have negative incidence on hydraulic cycle and water quality. However, conflicts regularly occur between farming communities and mobile livestock keepers who are assumed to be victims of a politic of exclusion in different districts bordering the corridor (Matchoudo, 2010). About seventy (70) water resources of all categories (dams, water retention installations, etc.), are available in the region for agro-pastoral and pastoral purposes (Sossou and Agossou, 2005; Azonsi *et al.* 2008) and 2352 infrastructures exist for drinking water provision (DGEau, 2010). But, climatic disturbances influence considerably the availability of those water resources along the corridor (PANA-Bénin, 2008; Djènontin, 2010; Boko *et al.*, 2012; Djohy *et al.*, 2012). This local trend does affect the coexistence between actors.

ECOWAS-IAR4: PERCEPTIONS AND DYNAMICS OF HERDERS

ECOWAS-IAR4 as “Nobody Knows”

During group discussions, actors do not agree on the regional status of the route followed by animals in this region. Nobody was able to define the limits of the international animal route. Indeed, animal routes are legitimated as non-fixed dispositive. The availability of resources makes some villages more attractive than others for herders and their animals, but the scarcity of some strategic resources induce the modification of their trajectory over years. Each herder seems to have his own trajectory depending on his priorities, the needs of his animals and the possibility to gain easy access to some privileged resources. In the district of Karimama for example, two different routes resulted from the same route in relation with the perception of our discussion participants:

For a first group of herders, their mobility is organized around some villages included in their legitimated animal route. During transhumance, pastoralists go over 37 villages to feed and water their animals. The trajectory is figured as follow: “*Mékrou – Ganganoga – Amani Koara – Missira – Pétchinga – Goumbitchigoura – Monsey Dendi – Monsey Haoussa – Foulamey – Bongnami – Bonwalou – Loumbou-Loumbou – Kondji Bangou – Tchantangaré – Illa – Kompa – Dangazori – Soumaï Koara – Kombéï Gata – Kompaïzé Koara – Tawé Koara – Kara – Garbéïkoara – Garou – Tchatcha Tounga – Bogo Bogo – Kompanti – Torioh – Mamassy Gourma – Kofounou – Goroukambou – Karimama – Tondikoara – Tondibouka – Birni Lafia – Kargui – Kangara*”.

A second group disagrees with the first one, arguing that some infrastructures such as vaccination parks (ex. case of Monsey-Dendi, Mamassy-Peulh and Kargui), the position of Niger River and its valley where fresh vegetation can be found during dry period, are determinant of nominating their animal trajectory. The animal movements are organized around those strategic feeding, watering, health care and other infrastructures. Therefore, they move through 21 villages as plotted here: “*Pétchinga – Goumbitchi Goura – Monsey Dendi – Monsey Haoussa – Dangazori – Soumaï Koara – Kombéï Gata – Kompaïzé Koara – Torioh – Koara Tédji – Alfari – Banikani – Tin Tin – Goroubéri – Mamassy Peulh – Karimama – Bello Tunga – Tondikoaria – Maligoungoun – Birni Lafia – Kargui*”.

In synthesis, there is not only one way for herders to move forward in keeping animals and preserving their livelihoods. These results confirm the dynamics observed by Reounodji (2011) in Tchad where both farming communities and transhumant animal keepers found non pertinent some initiatives of materializing animal corridors in terms of sustainable natural resources management. The principle is that all infrastructures which do not fit well with the sustainability of actors’ livelihoods are left behind. Both inland agro-pastoralists and foreigners pastoralists define their own pathways to get away from scarcity. There are routes for animal mobility and they cannot be counted as steady apparatus beacons for definitive animal movements across a country for watering and grazing purposes. The ways taken by animals and shepherds in 2004 where a regional dialogue on animal mobility around W park was made, is certainly not those pastoralists are drawing upon in 2014 in pursuing livelihood strategies.

ECOWAS-IAR4 as “Everybody Knows”

The current study reveals that herders individually are almost all aware of the existence of such regional animal corridor well used by herders from Niger and Burkina-Faso to get into Benin rangelands during scarce periods better manageable to them with flocks than in the Sahelian zones where they come from. However, herders admit that a lot of changes have occurred over the last ten years, damaging the corridor partially in certain regions and completely in others. The agricultural growth is the main factor generally evoked, followed by the environmental changes that have affected some important water points and grazing species well palatable for animals. Now and then, no barrier hinders herders from changing their mobility ways in this context of precariousness. This appears in their discourses wanting to accuse ECOWAS norms to be responsible of the hardness of animal mobility in sub-Saharan Africa. The oldness of the regional norms and particularly the lack of controlling measures throughout the policy implementation period are pointed out during our investigations. Actors complain that continue following such confuse matter will empty them of their animals. Therefore, they use to change regularly their trajectory according to the availability of resources and get into different arrangements with famers, foresters and borders officers enabling them to secure their livelihoods over seasons. We understood that both inlanders and foreign herders have a good knowledge about ECOWAS-IAR4, but nobody does want to follow it for it will probably drop animal productivity and worsen social relationships between competing actors. Pastoralists

assume having no ability for example to thwart farmers' plan of cutting the trees used as reference for the corridor or pulling out the official beacons. They cannot also repair the areas where crops are installed upon the corridor. All the corridor buoying policies implemented by different partners are seen by herders as unsustainable matter. The livelihoods security seeking leads sometimes to the subversion of all barriers as justify by a herder interviewed in Kandi during fieldworks: "Where is the corridor? Where is it supposed to be? Is it not where the road is? Is it not where farmers grow crops? ...where there is bush and water for my animals, it is there my way. ...The animal route is at nowhere else...Otherwise, I won't have any cattle" (Interviewee: S.H., Kandi 2009). The result of it is the social unrest among socio-professional groups. Other herders met in Karimama showed us a portion of the so-called ECOWAS animal route confused with the main traffic road and also occupied by crops (Figure 2).



Figure 2. ECOWAS-IAR4 mixed with traffic road and crop field in Karimama

Source: Djohy, 2010

In sum, everybody knows the concerned animal international corridor, even if it is with a dim recollection of it, but nobody can respect it to ensure the sustainability of his livelihood. These dynamics have been observed in Rogogo region (Niger) where the milestones of some rehabilitated animal corridors find themselves in the middle of crop lands. Therefore, pastoralists with regard to the progressive narrowing of animal routes coupled with weeds proliferation throughout these routes and on pasture spaces; use to feed the animals alongside crop fields bringing about miscellaneous conflicts (Abdou, 2006). The obsolescence of the international animal route is a fact of both pastoral and agricultural dynamics describing a dialectics of "nobody is guilty" but "everybody is liable" at the same time. We assume that the proper contribution of endogenous animal systems to the achievement of the Millennium Development Goals (MDG) as strongly supported by Gbaguidi *et al.* (2011) can be damped this way.

CONCLUSION

The study highlights the complexity of the local dynamics challenging ECOWAS animal route N°4 from solving mobility and conflicting issues. All the regional efforts for favoring animal husbandry and biodiversity preservation do not wipe out. Some progress and the regional collaborative initiative towards pastoralism will be successful only after much exertion. More regular updating of the regional norm of herds' mobility within ECOWAS States members is necessary to make easy resources access in a changing environment. It is also important to improve pastoral infrastructures and to enhance monitoring strategies, but corridor materializing has to be rethought. Security measures have to be well quoted in the new perspective.

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