Reversed Migration Trends in the Kondoa Eroded Area: Lessons for Future Conservation Activities in the Hado Project Areas, Tanzania

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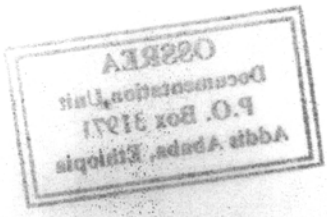

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REVERSED MIGRATION TRENDS IN THE KONDOA ERODED AREA: LESSONS FOR FUTURE CONSERVATION ACTIVITIES IN THE HADO PROJECT AREAS

Abstract: The HADO project was established in 1973 to deal with environmental conservation in Dodoma Region. The main objective of the project was conserving land and water and reclaiming the already depleted areas. During the early years of its existence, the project emphasised land conservation and afforestation programmes. In collaboration with the district administration, the project identified villages that were severely affected by land degradation in the form of gully and sheet erosion. Settlements located in such villages were resettled to other areas. This measure was taken to reduce the impact of population pressure and enable the process of environmental recovery. Similarly, the project destocked the whole Kondoa Irangi Highlands in 1979. Livestock were thought to be a major cause of land degradation and an obstacle to land conservation activities. The removal of human population and the eviction of livestock in the KEA were followed by amendments and enacting of new by-laws to take care of the settlement distribution, land use and environmental conservation issues in the Kondoa district.

Initial demographic studies in the HADO areas indicated strong linkages between migration and the HADO project activities. Migration trends tended to be unidirectional from the highlands to the lowlands. Such migration trends were linked to land scarcity and to the destocking exercise. Many families and individuals remained reluctant to part with their livestock.

The initial phase of people moving out of the HADO project areas is now over. Recent observations and reports demonstrate a reversal of migration pattern of both human and livestock populations from the lowland to the highland. In many cases, the land that was considered to *germinate stones* in the early 1970s is now *coming up*. The germination of stones during that time was actually an indication of severe sheet erosion. The coming up of land can be taken to mean the beginning of the process of environmental recovery in the protected areas.

Recent observations in the areas where the population was removed in the 1970s show a clear evidence of an active resettlement process taking place. New settlements have emerged and livestock are back in the restricted areas. Although there is no official evidence to support the return of people to the protected areas, physical visits to the area show an accelerated pace of return migration. These preliminary observations are contrary to the observations made in the 1980s that migration was from the highlands to the lowlands. These developments have rendered the process of environmental recovery obsolete and almost at a halt. Most of the environmental conservation by-laws that were effective in the 1970s and 1980s have been eased. This laiser-faire-fair type of control upon the district and project administration has created a loophole for people to return. The resettlement process that is occurring in the

protected areas has significant impacts on the environmental recovery achievements attained during the past 25 years. This study aimed at assessing and documenting these impacts.

The study has established that human activities in the new settlements are very detrimental to environmental conservation activities that existed there before. These activities include farming, house building, tree felling for fuel wood and farm expansion, and sporadic grazing of livestock. No close monitoring of how these activities are conducted was made. Similarly, none or just minimal legal measures are being taken on against the offenders of the district by-laws. Generally, the rate of environmental destruction has increased rapidly especially in the areas where reversed migration is a major issue. This generalisation can be extended to other areas located inside the KEA where notable evidences of environmental destruction can be cited. The study concludes that there is need to adopt a partnership management system, which involves all stakeholders in the protection of the environment in rehabilitated areas. This means adoption of a *bottom-up approach.* Environmental conservation activities cannot be successively achieved without community participation. Community participation will, to a larger extent, increase the rights and access of the local communities to the resources available in their surroundings. This encourages villagers to think of long-term effects and develop a sense of pride among the local communities.

1. BACKGROUND TO THE PROBLEM

The relationship between population and environment has drawn the attention of many scholars in recent decades. Often, population has been viewed as a major cause of environmental change and a hindrance to the attainment of sustainable development especially in developing countries. A rapidly growing population can create and accelerate population-resource imbalances, causing serious socio-economic and environmental consequences Most often population growth affects the natural environment and its various resources by increasing the demand for food, water, arable land, wood and other necessities from the natural resource pool (UNFPA 1991). Such linkages have made the topic of population/environment a permanent item on the agenda for various international, regional and national level gatherings as demonstrated by UNFPA (1991).

In 1987, the World Commission on Environment and Development challenged the international community and national governments to work towards a sustainable future*: one that will broaden, not contract, the choices future generations* will have to make. At its 1987 session, the United Nations General Assembly called for a balance between population and environment capacities to make sustainable development possible ... In December 1990, the General Assembly once again emphasised the importance of addressing the relationship between demographic pressures and unsustainable consumption patterns and environmental degradation

> during the preparatory process of the United Nations Conference on Environment and Development (UNFPA 1991, 3)

This global population/environmental concerns have also been reflected in various World Population conferences. For example, the 1974 World Population Conference held in Bucharest recognised the existence of a strong link between population and development and adopted specific resolutions for integrating demographic and development programs (UN 1975). The 1984 International Conference on Population in Mexico recommended that national and international development plans, programs and strategies should be formulated on the basis of an integrated approach that takes into account the interrelations between population, resources, environment and development (UN 1988). Agenda 21 of the 1992 United Nations Conference on Environment and Development (UNCED) presents the consensus of the international community on objectives and strategies for integrating environment and development. The 1994 International Conference on Population and Development (ICPD) held in Cairo builds upon Agenda 21 on the consideration of the linkages between population and environment (UN 1994). The task put forward here is to re-examine the population/resource imbalances; to correct inefficient and wasteful use of resources; and to seek optimal population growth and distribution patterns in an integrated and comprehensive move towards sustainability (UNFPA 1991). This task is difficult to achieve if population issues are ushered to the sidelines. It should be emphasised that population concerns are central to the search for sustainable development.

The HADO project is a regional land conservation project that was started in 1973 (Mbegu and Mulenge 1984). *HADO* is a short form of the Swahili words *"Hifadhi Ardhi Dodoma"*, which literally means, *"Conserve the Land of Dodoma Region"*. The major objective of the project was to conserve land and water and rehabilitate the already depleted areas. This was in response to failure of past land conservation measures implemented by the colonial administration and during the early years of independence.

During the initial years of the HADO project, most efforts were directed towards land conservation and afforestation. Both mechanical and manual methods were employed to construct contour ridges in the most affected areas. Another notable measure was to resettle the population from the severely degraded to less degraded areas. The HADO project, in collaboration with the district administration, identified villages that were seriously affected by land degradation in terms of gully and sheet erosion. All settlements from such areas were moved elsewhere (Mbegu and Mulenge 1984). Such villages included Kidongo Cheusi, Choka, Gubali, Ausia and Mondo (Aya and Elele sub-villages). This measure was taken to reduce the impact of population pressure and enable the process of environmental recovery. Recent observations in these areas show clear evidence of an active resettlement process taking place. New settlements have emerged and livestock are back in the restricted areas. These developments have rendered the process of environmental recovery obsolete and almost at a

halt. Further, most of the environmental conservation by-laws that were very effective in the 1970s and 1980s have been eased.

In 1979, a deliberate decision was made to remove all livestock from the Kondoa Eroded Area (KEA). Livestock were considered detrimental to the environment and a hindrance to the activities of the HADO project (Madulu 1996). The removal of human population and the eviction of livestock in the KEA were followed by amendments and enacting of new by-laws to take care of the settlement distribution, land use and environmental conservation issues in the district. In 1990, a by-law on environmental protection was enacted (HWK. 1990) and it was put into effect on 1st January 1991. Articles 7 (i) and 7 (iii) of the by-law are very relevant to this study. Both articles are quoted and translated in box 1 below. Most of the environmental conservation efforts that were effected by the HADO project were strengthened by these district by-laws. This led to most of the notable environmental recovery processes seen today. To what extent are these measures relevant today, was the question that this study aimed to instigate.

Box 1. Relevant articles from the district by-laws on environmental conservation

Article 7 (i):	Article 7 (iii):
"Hakuna mtu anayeruhusiwa kulima, kufuga, kuchunga, au kukata mti wa aina yoyote ile katika hifadhi na eneo lililozuiliwa bila ya kupata kibali kinachohusika kama ilivyo kifungu cha 5 na jedwali la pili na la tatu la Sheria ndogo hizi kutoka kwa Afisa Mwidhiniwa (HWK 1990, 3)".	"Hakuna ruhusa kwa mwanakijiji yeyote katika wilaya hii ya Kondoa kuhama katika eneo alilopewa na kijiji kuishi na kuhami katika eneo lingine (matongoni) bila kibali cha Afisa Mwidhiniwa (HWK 1990, 4)".
Translation:	***Translation:***
"No person is allowed to cultivate, keep or graze livestock, cut any type of tree or grass from the conserved/protected area without holding a written permit from an authorised Officer as stipulated in Article 5 and in Annex 2 and 3 of this By-laws".	*"No person in Kondoa District is allowed to move from an area allocated to him by the Village Council and live in another area (specifically areas where they lived before villagization) without a written permit from an authorised Officer".*

SOURCE: HWK (1990).

Initial demographic studies in the HADO areas aimed at documenting demographic changes and linkages between demographic characteristics and the environmental degradation (Madulu 1989; Madulu 1996; Madulu and Mung'ong'o 1990). Various observations have been made in relation to fertility, mortality and migration trends. The most notable observation was the existence of linkages between migration and the HADO project activities. Migration trends were found to be unidirectional from the highlands to the lowlands (Madulu and Mung'ong'o 1990; Madulu 1990). One notable consequence of the destocking exercise was an acceleration of migration from the KEA to other areas, especially to the Kondoa Irangi lowland. This population movement happened because many families and individuals remained reluctant to part with their livestock (Madulu 1990). Alternatively, families had to establish two homesteads, one in the highland KEA area (without livestock) and another in the lowlands (with livestock). This strategy was common in villages like Haubi, Hebi and Kolo in the highlands and Pahi, Mnenia, Busi and Bumbuta in the lowland (Madulu and Mung'ong'o 1990).

A much wider research programme named *"The Man-Land Interrelations in Semi-Arid Tanzania (MALISATA)"* was launched in 1991 to collect and analyse empirical data that will increase the understanding of the man-land interrelationships in semi-arid and sub-humid parts of Tanzania. Similarly, the programme aimed to encourage participatory research and assist in making the research findings implementable (Christiansson and Kikula 1996). With regards to demographic studies, the programme emphasized on fertility changes in relation to the activities of the HADO project (Madulu 1995, 1996; Christiansson and Kikula 1996).

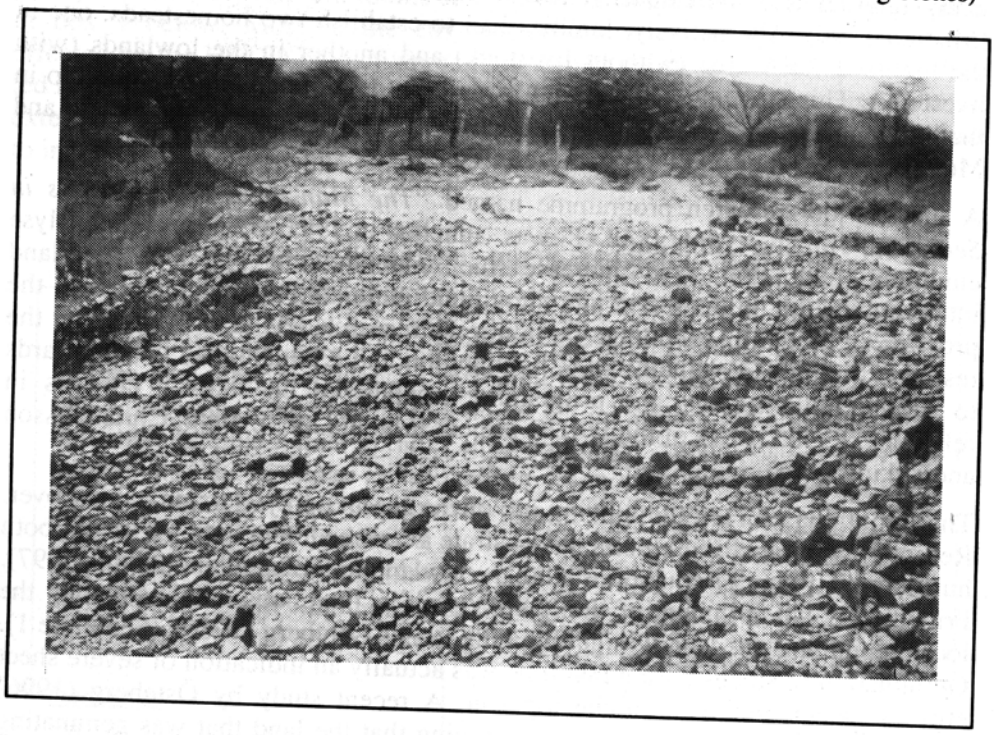
The initial phase of people moving out of the HADO project areas is now over. Recent observations and reports demonstrate a reversed migration pattern of both human and livestock populations from the lowland to the highland (Kikula 1997). Prior to the establishment of the HADO project, there was a belief among the local people that the land was germinating stones Österberg (1986)[i] (See Plate 1). Germination of stones during that time was actually an indication of severe sheet erosion, which removed all the top soil. A recent study by Österberg (1996) reports that the local people are now arguing that the land that was geminating stones in the 1970s has came back.

Although there is no official evidence to support the return of people to the protected areas, physical visits to the areas concerned show an accelerated pace of return migration. These preliminary observations are contrary to the observations made in 1987 that migration was unidirectional from the highlands to the lowlands (Madulu and Mung'ong'o 1990).

One possible cause of the accelerated reversed migration trend is the lack of political push and ineffective implementation strategies for the land conservation by-laws, especially from the district and HADO project administration during the 1990s[ii]. This lesser-fair type of control upon the district and HADO project

administration has created a favourable environment for people to return to the protected areas. This trend has a significant impact on the environmental recovery processes achieved during the past 25 years. Kikula (1997) echoed this concern in his *"back to office report"* after a field visit to Kondoa in early 1997. However, the immediate and long-term implications of this unexpected reversal of population migration to the land conservation activities are not yet documented. This study on *"Reversed Migration Trends in the Kondoa Eroded Area"* aimed at assessing these impacts and documenting them for the benefit of future conservation activities.

Plate 1. People's perception of severe sheet erosion in Ausia (Land Germinating Stones)



1.1 The Research Problem

The return of human and livestock populations to the severely degraded areas of Kondoa District (i.e. the KEA) is an undesirable situation, especially in relation to the environmental conservation efforts done by the HADO areas in the past two decades. To understand the environmental implications of the reversed migration, four research questions have been raised. First, has the land in the protected areas shown significant recovery to the extent of allowing people and livestock to return? Second, to what extent are the changes in migration trends affect the present and future conservation activities in the protected areas? Third, are there any localised demographic and socio-economic changes that are a