## The Afar -Ethiopian Pastoralists -Access to safe water and health care

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## 1 Executive Summary

The Afar living in Boromudaitu woreda<sup>i</sup>, Ethiopia are semi-nomadic (transhumant) pastoralists managing livestock as the basis of subsistence. The nomadic lifestyle in the hot and dry climate of the harsh Sahelian zone with scarce water and pastures seems to be the optimal way of coping.

However, nomadic pastoralists face similar problems throughout the world due to their differentness. Mobile peoples are marginalized; they lack access to political and economical representation, they lack access to education and infrastructure, they specifically lack access to basic services, health care and water.

In 2004 the International Committee of the Red Cross started implementing a "health and water project" in Boromudaitu woreda. A household based, cross-sectional survey was carried out to ascertain knowledge, attitude and practice of the widely unknown population. 225 female caretakers of children under-five were randomly chosen and interviewed. The structured questionnaire focused on water and sanitation, waste disposal, general health, mother and child health and nutrition.

In this master thesis parts of the analysis are discussed comprehensively. The objectives are the assessment of level of access to basic services such as access to safe water, sanitation and waste disposal as well as access to preventive and curative health care. The particularities of the seminomadic population are taken into account and propositions to improve access are worked out.

The study shows low access to basic services. 70.8% of the respondents have to walk more than one hour per day to collect water (45.2% more than two). The median quantity of water per capita per day is 6.3 litres, which allows mere survival. The quality of water is low, a total of 6.2% use an improved water source and there is virtually no treatment at

<sup>&</sup>lt;sup>i</sup> Administrative units in Ethiopia: region, zone, woreda, kebele

household level. In addition the lack of awareness using unsafe water and the dangerous hygienic practice puts the population at risk of disease, specifically diarrhoeal disease. Access to safe sanitation is very low in comparison with national and international levels; open defecation is practiced in the area practically exclusively. Waste disposal practices are hazardous; knowledge and awareness of the dangers originating from waste (specifically animal and human faeces) is negligible.

The population needs a median walking time of seven hours to the closest health facility (HF). A mere 17.8% have access to health care according to the Ethiopian definition of access (distance of 10km). Moreover During rainy seasons around two thirds of the people are completely cut off from health care due to flooding. Classical health care is highly accepted. For 78.1% of the respondents it is the first choice to seek treatment; only 8% prefer the traditional healer. The perceived quality of care is low; only around one third found the HF open, stated prices per consultation are 63-times higher than official prices and medicines are often unavailable (62.1%). Almost a third (61.5%) of the questioned stated no problems with affordability of treatment but the only income generation is selling livestock, which can pose problems when money is needed quickly. None of the children was fully vaccinated. Antenatal- and obstetric care is not utilized and births take place at home attended by untrained persons.

After an extensive literature search the following propositions have been developed.

• To increase access to safe water support small, locally acceptable, protected wells for humans and animals (livelihood approach). Adhere to a minimum standard of at least "basic access" as suggested by Howard and Bartram (maximum collection time of 30 min). Community participation, local ownership, gender sensitivity (positive discrimination of women managing water) and integral approach (including local water bureau and relevant agencies at every step) are of utmost importance. Focus on water treatment at household level preferably using the solar disinfection technique and/or slow biosand household filters. Hygiene promotion should concentrate on hand washing with soap (or substitute) at crucial moments (using adequate motivators) and safe handling of faeces (human and animal).

• Safe sanitation is crucial but not easy to achieve. A step-by-step approach to eliminate open defecation (first teach to cover faeces, then build appropriate sanitation facilities per household) may be the way forward. To assure safer waste disposal practices the building of sanitary landfills and the teaching of garbage separation appears suitable.

• To improve access to health care long distances should be reduced by building at least one additional HF on the west side of Awash river and/or improving the roads and providing an "ambulance-service" (together with mobile-/satellite phones). Additional HF may operate seasonally according to the moving patterns of the population. According to national standards there ought to be inpatient and surgical facilities and at least one medical doctor in the target area (consider lobbying or financing). In addition, train nomadic community health workers (CHW) and traditional birth attendants (TBA) and supply with basic medical packages. Strengthen the link between the community and the HF and include programmes into national policies of primary health care (mulitsectoral, integrated approach). Teach and assist medical staff at existing HF in special health needs of nomads, in supervision of CHW/TBA and in managing medicines and vaccine stock. At last, the model of "one medicine" to coordinate human public health and livestock production services in vaccination outreach programmes should be implemented as it has been proven to be an excellent way of reaching and serving nomadic pastoralists needs for healthy people and animals.