

Challenges and opportunities in CBN adaptation to pastoral areas in Ethiopia

Report

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EXECUTIVE SUMMARY

Ethiopian pastoralists:

Ethiopian pastoralist community are more than 12 million occupying 61 percent of the total land mass with more than 29 nationalities and ethnic groups. They inhabit land with natural resources and a wealth of cultural and traditional heritage that remains largely untapped. They are being livestock-centered, seasonally mobile, well adapted to harsh terrain and extreme climates, tolerant of ill health, kinship and social network-oriented. Human survival in these environments would be virtually impossible without livestock that provides for basic needs. The importance of livestock in these areas surpasses the mere fact of meeting basic needs, since they are traditionally seen as the basis of life, wealth and social respect (Thornton PK, et al, 2002). Pastoralists are geographically and socially marginalized groups, inhabiting large regions unsuitable for agriculture and infrastructural development.

Community Based Nutrition (CBN)

The health sector development plan has increased its efforts to enhance good nutritional practices through health education, treatment of malnourished children, and provision of micronutrients to the most vulnerable group of the population in both agrarian and pastoral regions. In addition, the Health Extension Program (HEP) has included nutrition as part of the health packages. A National Nutrition Strategy (NNS) and National Nutrition Program (NNP) has also been developed and implemented. One of the components of NNP is Community Based Nutrition (CBN), which comprises list of nutrition and health care packages. The program has been implemented in agrarian areas and reported to significantly reduce under-nutrition. It is not yet implemented in pastoralist areas. The fact that HEP did not bring significant change in pastoral communities was considered as a challenge to adapt CBN. Therefore, mechanisms of rolling CBN to those areas need to be sought.

Methods

The current study was conducted to investigate challenges and opportunities in adapting CBN into pastoralist communities of Ethiopia. In order to investigate continuous child monitoring practices and assessment of HEP performance was conducted. In the study, four main pastoral regions namely; Afar, Somali, South Omo and Borana were included. In each region 421

households, 3 FGD and 6 KI (HEWs and WoHO) interviews were conducted. In addition secondary data from woreda, zonal, regional and other written reports were reviewed.

Results

Socioeconomic and demographic

The average numbers of under-five year children per household (HH) were in the range of 1.37 to 1.76. The literacy status of heads and care-givers was in the range of 20.8-38.9% (Highest in Somali and lowest in South Omo) and 3.8-9.5, respectively. Over 50% of the household members are dependents according to the classification of Tufts Friedman School of Nutrition. But in pastoralist areas the classification might not work as children in the age range of 7-14 are responsible to take care of cattle, at least goats and sheep. In Afar this children are even fully armed and have great responsibility. Surprisingly, old age groups (age \geq 64) are very few (0.2-1.2%). As reported by care-givers, 60.8-92.6 % of the HHs have cultivable land but only 6.5-44.0% (lowest in Somali and highest in South OMO, particularly the Malee) grow vegetables. Agro pastoralists in Afar and Somali are less than 20% and relatively higher in South Omo and Borana. Browsers (Camel and Goat) were highest in Afar where as cattle and sheep are high in South Omo. As reported by households the numbers of animals on average are decreasing in the last five years due to several reasons among which drought is the major one.

Facilities

Most of the house in Borana and south Omo are permanent (90.5% and 66.7% respectively) while it is less than 44% in Afar and Somalie. Safe water distribution ranges from 28.2-60.3%; the least coverage being in Borana 28.6% and the highest in South Omo 60%. Borana and Somalie (42.3-55.3%) have water source which is far more than an hour than the Afar and South Omo people (25.8-27.8%). About 46.1% of Borana community treat water while the Somalie and south Omo do not (<10%). More than 50% of households in Afar, Borana and Somalie still use open bush/field as a toilet (50.1-67.3%).

Knowledge, Attitude and Practices of care-givers

Of the studied households 40.8-49.6% in Afar, Borana and Somalie use soap to wash hands after toilet while it was less than 16% in south Omo. The use of soap for washing hand before

preparing food was also poor in South Omo (12.9%) while this is in the range of 32.5-48.9% in Somalie, Afar and Borana. The practice of washing hand with soap before feeding children is also low in pastoral areas (33.4-47.0%). In south Omo the practice is only 10%. About 50 % of the pastoral community studied are aware that diarrhoea comes from contaminated food and/ or water. In their last recent pregnancy care-givers who got information on BF ranges 11.8-31.1%, those who took iron folate were 30% and those who reported having difficulty of seeing in dim were in the range of 33.7-57.9%, the case is higher in Borana than other regions. Similarly, taking of deworming (6.6-16.3%) and information/advice on child nutrition (12.9-42.1%) were also poor. And those who took vitamin A in two-months time after delivery were in the ranges of 11.3-24.2%. In south Omo Malee, Benatsemay and Hammer have good health seeking behaviour while Mursi, Bodi and Dasenech rather depend on traditional healers. Over all, only 8.9-23.2 % of the households know vitamin A rich foods and less than 11% know iron rich foods. Households that have information about goitre were less than 35% and more than 93 % don't know the cause or method of prevention. Over 80% of salt tested in Afar was not iodized.

The pastoral children start solid or semi-solid foods (30.6-45.9%) before 6 month. Bottle feeding is high in Borana (79.4%) and Somali (46.5%). Over 70% of children did not have family health card as well as growth card. Pre-lacteal feeding of milk is over 55% in Borana and South Omo. Butter is given in 26% of South Omo new born and 17.4% of Afar infants. On the recent screening for SF only 30% of studied children participated. Less than 25% care-givers were able to show vaccination card. Overall, 39.4-63.4 % of children had BCG scar on their arm. The proportion of children who took DPT and MMR were also below 60% as reported by care-givers.

The proportions of children weighed at birth were very few (6%). Three months prior to this assessment only less than 12 % got growth monitoring service. Fifteen days prior to the interview children who were sick with diarrhoea were in the range of 14.1-36.8% and only less than 10% got zinc supplement. Similarly children who were sick with cough 15 days before the assessment were in the range of 12.1-26.7%. The prevalence of malaria was also in the range of 31.6-34.4 in Afar and south Omo while it is less in Borana and Somalie. The use of mosquito bed net is high in Afar followed by Borana and south Omo (76, 63.8 and 55.7% respectively). In

those households which have mosquito bed nets, priority is given for children and pregnant in more than 70 % of household in Afar, Borana and south Omo.

Nutritional status and feeding practices

Over 44% of the pastoral communities are severely food insecure. The highest acute malnutrition as accounted by wasting (GAM < -2zscore) was observed in the range of 8.0-27.6 %, the highest being in Afar. The result from MUAC also show similar trend (1.7-5.2%). Under weight ranges 20.1-44.9% and stunting ranges 32.9-45.2%, lowest in Somali and the highest in Afar. Nutritional status of care-givers as assessed by BMI (<18.5) ranges 17.2-42.8% and MUAC (≤ 22) 9.9-22.3%; respectively. Skipping meals or eating less portion than sought, borrowing food or money, sell of animals, sell of charcoal and fire-wood, and in few cases being daily labourer and hand craftsman were mentioned by respondents as a coping strategy against food insecurity. The pastoralists depend mainly on two types of food categories; cereal (97%) and dairy products (>50%). Coffee is considered as food among South Omo nations. Legume in Afar, dark green leafy vegetables in South Omo and Borana are consumed by one-third of the study households. A Vitamin A rich vegetable, specifically moringa is consumed by South Omo nations. The consumption of fruits, meat, egg and fish is almost none.

Infant and Young Child Feeding (IYCF) practices are very poor among Ethiopian pastoral communities. Breast feeding initiation within an hour is in the range of 31-64.5%. The minimum dietary diversity of 4 food groups recommended for infants and children is only practiced by less than 5% of the study population. Minimum meal frequency of at least two-times recommended for children in the age range of 6-9 months is practiced by less than 52% of the households. Minimum acceptable diet recommended by WHO (IYCF, 2006) is practiced by 30% of the study group (22.4 - 36.8%). Breast feeding among Ethiopian pastoralists is almost universal (96.6-98.9%). Breast feeding up to 2 years is in the range of 35.3 – 71.1%.

Major challenges and opportunities

The major challenges in the endeavor to provide adequate healthcare service to Ethiopian pastoralists and recommendations are summarized as follows:

- ✓ The food insecurity and consequently the widespread acute and chronic malnutrition is directly or indirectly associated with chronic poverty, poor infrastructure, ecological constraints, limited arable land, absence of irrigation, disease, poor water and sanitation, inadequate nutritional and health knowledge and ethnic conflicts.
- ✓ The reasons behind the low performance of healthcare service are associated mainly with pastoralist lifestyles that include dispersed settlement pattern, seasonal mobility, pervasive prevalence of harmful traditional practices, which, among other things, perpetuate under utilization of services even when and where the health services are available.
- ✓ Health facilities in pastoralist communities are limited in number, are under-staffed and service delivery is poorly organized. Most facilities operate at a level far below their potential capacity. Those which give service did not meet the need of pastoralists as they only provide preventive than curative.

- ✓ Recruiting, training and retaining female HEWs is most difficult. In some areas, female who completed their secondary school are scarce. In few places the recruitment was conducted not based on merit and performance but just to benefit clan members and family. As a result it became difficult for woreda health offices to take disciplinary measures when those HEWs underperform due to fear of conflict. In all the studied areas staff turn-over are among the major problems.

- ✓ Absence of commitment of frontline armies (HEWs & WoHO), very low salary, absence of means of transportation together with dispersed settlement of pastoral community and absence of incentives despite the livelihood hardships (Hardship (temperature , Water, Housing, food items, ...))

- ✓ Prevalence of endemic diseases, such as malaria, trachoma, and zoonotic diseases (e.g. bovine TB) and infectious diseases associated with poverty (poor housing, poor environmental and personal hygiene, lack of potable water, etc) are common.

Recommendation

- ✓ Integration of veterinary services with human health is another area which is not exploited in Ethiopia. Pastoralists give as much weight as their family to their herds. So attaching human health care services with veterinary and involving the veterinarians in nutrition works might help the service delivery.

- ✓ The irrigation schemes just started in Afar, Somali, South Omo in association with sugar plantation in Selamago shall be further developed and coverage multiplied into borena, dasenech, eastern and northern part of Afar, Southern part of Somali region. Irrigation might be an important instrument to settle people into areas where health and other important services can address the pastoralists. Moreover it might also be used to establish modern ranches, fattening, dairy processing enterprises and husbandry in general.

- ✓ When milk is sufficiently available, Borana women collect the milk from all households and sell the milk and share the money according to their contribution. The money is used to purchase sugar, maize and other expendables for the household. If the initiative is supported with knowledge, skills and necessary processing apparatuses as elsewhere in agrarian area it can easily be developed into union and small scale dairy processing.

- ✓ More work shall be done in reserving feeds when it is surplus and keeping some areas of grazing for later use as in already started in Borana might also help in decreasing the mobility as the latter had great impact on service delivery.

- ✓ Training and involvement of TBAs and traditional healers in primary healthcare program might help as those people have acceptance by the communities

- ✓ Involving pastoralists in any health planning and execution program will also maximize the achievement.