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The role of poultry for poor livelihoods in Ethiopia

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Abstract

Numerous studies have demonstrated that village chickens and other extensively raised chicken populations represent a valuable source of roles for producers' and adapted to the local production conditions and selection pressures. Indigenous chickens play many socio-economic roles in traditional festivals and other customs, food security, income sources, as gift payments and serve as an important source of animal protein for rural farm families in Ethiopia. This has become so important due to the valuable traits of indigenous chicken such as disease resistance, adaptation to harsh environments and ability to utilize poor quality feed. These characteristics have a high contribution in achieving sustainability in low-input production systems. Chickens fulfill several household needs that are cultural, economic and/or social. However, the contribution of indigenous chickens from rural localities is not well documented and summarization has assumed prominence. Similarly detailed information will help to develop appropriate interventions in strengthen low-input chicken farming in developing countries.

Keywords: Role, poultry, poor livelihoods

1. Introduction

The diverse agro ecology and agronomic practice prevailing in Ethiopia together with the huge population of poultry, could be a promising attribute to boost up the sector and increase its contribution to the total agricultural output as well as to improve the living standards of the poor livestock keepers (Mekonnen, 2007) [17]. In Ethiopia, village chickens are an integral component of the farming system of nearly all rural families, and they account for about 99% of the poultry production system (Tadelle *et al.*, 2003) [27, 28] and for more than 90% of the chicken and egg output of the country (Nigussie *et al.*, 2010) [21]. Similarly, households in Ethiopia keep birds for household consumption, sale and reproduction purposes including other social and cultural roles (Tadelle and Peter, 2003) [27, 28]. In a country like Ethiopia that attempts to secure food at household level, any development actions that promote the smallholder chicken production system in one way or another helps to secure food at household level. The rural poultry in Africa believed to be a viable and promising alternative source of cash income for the rural resource poor women. At household level poultry keeping is often coined as a livelihoods activity preferential by the poor due to its high return rate compared to its low input investment requirements (Eskin *et al.*, 2010) [7].

In most part of Ethiopia, village chicken represents a significant component of the rural household livelihood as a source of cash income and nutrition (Dhuguma, 2009; Mekonnen, 2007; Solomon *et al.* 2013) [6, 17, 25]. The impact of having income below the poverty line on household's likelihood of being poultry keeper is however mixed across countries. Ethiopia predicted 60% of all Ethiopian households to keep poultry (Eskin *et al.*, 2010) [7]. In addition to this, according to Aklilu (2007) [2, 13], village poultry is the first step on the ladder for poor households to climb out of poverty. Besides this, some specific types of poultry, mainly chickens, may be kept for the sole purpose of using them for specific ritual actions, rather than for consumption or sales, although confirmed by Ethiopian data (Tadelle *et al.*, 2003) [27, 28]. Within this basic understanding the objective this review is:

- To review the role poultry for poor livelihoods in Ethiopia, and
- To review the essentiality of poultry for diversified livelihoods' in Ethiopia.

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2. Literature review

2.1 Poultry insures food security and cash income

The village chicken sector constitutes significantly to human livelihood and food security of poor households (Nebiyu *et al.*, 2013; Dhuguma, 2009; Aklilu *et al.* 2007) ^[20, 6, 2, 13]. In most part of Ethiopia, village chicken represents a significant component of the rural household livelihood as a source of cash income and nutrition (Dhuguma, 2009; Mekonnen, 2007; Solomon *et al.* 2013) ^[6, 17, 25]. Local chicken sector constitutes a significant contribution to human livelihood by being affordable sources of animal protein and contributes significantly to food security of poor households. Similarly in Metekel zone, it serves as source of income and as an affordable source of animal protein, and chickens are also used in many social and cultural or religious ceremonies (Solomon *et al.* 2013) ^[25].

Moreover, village chicken in Ethiopia provides 12.5 kg of poultry meat per capita per year, whereas cattle provide only 5.34 kg” (Kitalyi, 1997) ^[15]. Hunduma *et al.* (2010) ^[14] reported from Ethiopia that most of village chicken keepers used chickens and their by products for home expenditure followed by home consumption. In most developing countries rural poultry play significant roles of improving the nutritional status, income, food security and livelihood of many smallholders (Abubaker *et al.*, 2007; Alders and Pym, 2009) ^[1, 4]. Accordingly, village chicken products in Ethiopia are often the only source of animal protein for resource-poor households and Eggs are a source of high-quality protein for sick and malnourished children under the age of five (Mekonnen, 2007) ^[17].

In the same manner Solomon *et al.* (2013) ^[25] identified and prioritized that purposes of chicken production in Metekel zone were for cash income (98.6%), household consumption (95.2%), extra farm activity (82.8%), job opportunity (60%), use of chicken for cultural/religious ceremonies (39.3%), and to use them as a gift (20%). According to Moges *et al.* (2010) ^[8] sale of live chicken was the first important function of rearing chicken in Fogera (77.8%) and Dale (43.7%) districts of Ethiopia. The domestic market for chicken meat and eggs is yet to be satisfied and Prices for chickens and eggs are becoming increasingly attractive to producers and traders alike (Dessie *et al.* 2013) ^[5]. This reflects that the situation creates opportunity to generate cash from poultry through domestic market.

2.2 Poultry engaging all livelihoods to participate in business making than other livestock

Poultry keepers are found to have a lower number of household members with non-agricultural income and/or lower off farm incomes (Eskin *et al.*, 2010) ^[7]. These results reveal that it is the more agricultural, subsistence or semi-subsistence oriented farm households who are engaged in poultry keeping. This finding also suggested that households located in rural areas are more likely to be poultry keepers, since off-farm income opportunities are fewer in rural areas. Village-based rural chicken production requires less space and investment and can therefore play an important role in improving the livelihood of the poor village family (Samson and Endalew, 2010) ^[24]. Moreover, households who have lower income per capita are more likely to be poultry keepers. Across regions, Tigray supports the highest proportion of households predicted to keep poultry with 87%. Tigray is followed by Afar (86%), Benishangul Gumuz (71%) and Somale (65%) (Eskin *et al.*, 2010) ^[7]. These great participations in the sector are mainly due to their small size

and fast reproduction compared to most other livestock and its well fitness with the concept of small-scale agricultural development. Moreover, it goes eco friendly and does not compete for scarce land resources (Mekonnen, 2007) ^[17]. Similarly, For example in Horro and Ada’a woredas, due to shortage of farmland, the poor and the destitute have to engage in non-farm and off-farm activities such like poultry farming production since it does not require a large investment but exotic chickens are maintained by the wealthier group because of the large initial investment for founding stock and high cost of husbandry (housing, feeding, and disease and parasite control (Dessie *et al.* 2013) ^[5]. In poultry sector, all family members are participating in poultry production (Mammo, 2013) ^[16]. In addition, Permin *et al.* (2004) ^[22] reported that women are the caretakers of poultry in most of the poor countries.

2.3 Savings as a way to reduce vulnerability

In Ethiopia, farmers sell poultry to cover immediate but small expenses, thereby avoiding the sale of larger animals such as goats and sheep (FAO, 2010) ^[9]. Thus, as noted by Aklilu *et al.* (2007b) ^[3], even as farmers build up their asset base, poultry is considered to be an important means to reduce vulnerability. In poor households with limited livelihood assets, a few chickens may be the only livestock owned (FAO, 2010) ^[9]. However, as livelihoods progress and some surplus birds are accumulated owners may convert their poultry assets into other livestock. Bartering chickens for goats, as reported by Guèye (2003b) ^[12] and Riise *et al.* (2007) ^[23] can benefit livelihoods and food security by providing more secure and valuable savings and insurance to bolster against shocks, as well as a source of milk for consumption or income from sales.

In a study on food security and household response strategies to natural hazards and calamities in Ethiopia (Fewsnet, 2006) ^[11] it is estimated that the exchange of two goats for grains would cover roughly 10 percent of annual food needs in an average poor household. With a 1:5 conversion rate from chickens to goats, this would imply that one chicken is worth 1 percent of annual food needs for a poor household in Ethiopia (FAO, 2010) ^[9].

2.4 Socio-cultural value as reciprocity and social networks

Tadelle and Ogle (2001) ^[26] report that in Ethiopia, the local breeds are considered to be the only birds fit to use for ritual sacrifice and for gifts. Aklilu *et al.* (2007) ^[2, 13] documented how prices can rise to more than twice their normal levels during the main social and religious festivals. Across smallholder societies around the world, poultry meat and eggs are used for the feasts held to celebrate festivals such as Christmas and Easter (Christian festivals), Tabaski and Eid (Muslim festivals) and Tet (Vietnamese New Year) (FAO, 2010) ^[9]. And if an important visitor or a relative arrives, a bird or two may be slaughtered in order to prepare a good meal. In Ethiopia, for example, special guests are invited to share the so-called *doro wat* national dish, which is made with both chicken meat and eggs and is considered to be an exclusive feast (Tadelle and Ogle, 2001) ^[26].

In smallholder society, poultry are commonly exchanged as gifts. Smallholders give away live birds as a gesture to visitors who may bring them back home, and to neighbors and relatives – e.g. to thank them for helping out with agricultural work (FAO, 2010) ^[9]. Aklilu *et al.* (2007) ^[2, 13] find that in northern Ethiopia, live chickens are the most common gift presented to sick people. Just like serving a good (chicken)

meal, the practice of giving away live birds as gifts is a way of confirming reciprocity and maintaining important social relations within the community as well as with relatives who live farther away (FAO, 2002) ^[10].

2.5 Poultry as cultural communication: ritual, sacrifice and symbolism

There is also unflinching festivals markets chicken being a popular festival food in the Ethiopia (Dessie *et al.*, 2013) ^[5]. In smallholder society, poultry are an integral part of spiritual and religious life (FAO, 2010) ^[9]. As noted above, in African settings certain types of chicken may be associated with specific rituals and sacrifices or with religious or magical beliefs (Tadelle *et al.*, 2003, Tadelle and Ogle, 2001; Thomsen, 2005) ^[27, 28, 26]. Also, a number of symbolic meanings are ascribed to poultry. As such, some specific types of poultry, mainly chickens, may be kept for the sole purpose of using them for specific ritual actions, rather than for consumption or sales, although confirmed by Ethiopian data (Tadelle *et al.*, 2003) ^[27, 28]; some of these birds may also fetch a better price than those destined only for consumption. Rituals are undertaken for many different reasons, and it is mainly chickens and chicken blood in particular that are used for these purposes (FAO, 2010) ^[9]. Tadelle and Ogle (2001) ^[26], reporting from African field studies, describe how chickens of different colour, sex and age may be used for purposes such as assuring good harvest returns and for honouring ancestors or spirits. Tadelle and Ogle (2001) ^[26] and Naidoo (2003) ^[19] find that Ethiopian and South African (Zulu) traditional healers, respectively, may prescribe the sacrifice of a specific bird in order to cure a sick person or to “bless”, or bring good luck to, a future activity for example, if an accident has killed someone’s relatives and protection against more accidents is needed. In such cases, the sacrificed birds are usually eaten after the ritual (FAO, 2010) ^[9].

2.6 Poultry as nearby market utilization

Another reason for the women preferring to sell the birds on their own, also noted by Aklilu *et al.* (2007) ^[2, 13] for East Africa (Ethiopia), is that by letting her husband take the birds to the market, the woman risks losing control over the spending of the money earned (Riise *et al.*, 2007) ^[23]. Sometimes, however, women are left with no choice, and thus depend on intermediaries to take their birds and, occasionally, eggs to the market (FAO, 2010) ^[9]. This may be the case, in Africa as well as in Asia, when markets are too distant to be reached within a couple of hours on foot. Under these circumstances, the women prefer to stay at home to take care of household work, and therefore sell their birds to intermediaries passing through the village, albeit at a lower price (Riise *et al.*, 2007; Guèye, 2003; Aklilu *et al.*, 2007) ^[23, 12, 2, 13]. Another reason for the women not taking their birds to the market is that in some parts of Africa, as for example in northern Ethiopia men dominate livestock markets (and also engage in poultry keeping, as noted above) (FAO, 2010) ^[9].

2.7 The use of poultry money

The Amhara and Tigray regional states collectively own about 43% of the total national poultry population and the average number of chickens per household (flock size) is estimated at 7.2 and 4.4 in Tigray and Amhara regional state respectively, the values of which are above that of the national average of 4.1. Annual poultry meat and egg consumption per household is estimated at 2.19 Kg and 1.72 kg respectively in the Tigray regional state as compared to the national average of 0.12 and

0, 14 kg respectively (FAO, 2008) ^[8]. These figures represent, indicating that village poultry in extremely poor areas of the country play important economic, nutritional and socio-cultural roles in the livelihoods of the rural households. According to Aklilu (2007) ^[2, 13], village poultry is the first step on the ladder for poor households to climb out of poverty. It is also the only capital that households have left when livelihoods are threatened by various reasons such as drought. An important function of poultry is their bartering value. Layers and cocks are exchanged for farm implements in remote areas where there is no circulation of currency (FAO, 2008) ^[8].

For example, in Alaje Woreda, two layers or cocks are bartered for a Maresha (the traditional ox-plough). Poultry is a source of self-reliance for women, since poultry and egg sales are decided by women (Aklilu *et al.*, 2007) ^[2, 13] and provide women with an immediate income to meet household expenses such as food. For poor families, poultry are often one of their few sources of petty cash and so the birds are kept for sale rather than home consumption. In a study conducted by Dessie, Tadelle and Ogle (1996) on poultry production systems in the highlands of Ethiopia, it was observed that women look after the birds and the earnings from the sale of eggs and chicken are often their only source of cash income.

3. Conclusion

In this review the thoughtful inspected that role of poultry in the poor livelihoods of country impacts on peoples can maintain themselves even in uncertain situation. The country provided a spectrum of roles in household income. Poultry production is a livelihoods activity mainly undertaken by women and children of the household to meet their immediate cash expenditure needs (e.g., school expenses, unexpected health expenditures etc). These shows, the importance of poultry in intra-household gender equality, and for development outcomes where incomes managed by women have been found to result in improved outcomes for family, particularly for children (for example in terms of health, nutrition, and education. Therefore, the poor often have diversified livelihoods strategies and therefore an all your own shock that affects only one of the many livelihoods strategies.

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