

Gender aspects in livestock farming: pertinent issues for sustainable livestock development in Nepal

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Abstract

This paper assesses and examines gender disaggregated data on gender roles, participation and opportunities in livestock farming in Nepal. A survey based on structured questionnaires was conducted with randomly selected livestock farmers (n=107) in three districts in the Western Development Region of Nepal during the period of July to October 2006. In addition, key-informants (n=30), involved in livestock research and development were also interviewed. Published materials, official statistics and grey literatures were intensively reviewed. Data were analysed with the SPSS 15.0, using proportion, percentage and cross tabulation.

Among the livestock services activities lunched by the public organizations, women farmers' involvement was found up to 45% in slow cash generating activities whereas their involvement in quick income generating activities, as compared to men, was least (8.6% only). Assessment of gender roles in daily livestock activities performed by the farmers revealed that women are mainly responsible for forage collection, cleaning the gutter and shed, and feeding animals whereas milking animals and selling of milk to provide for quick cash income was found to be men's domain. Because of the strong position of men in decision making in the family, their participation was found up to 75% in farmers' groups/organizations related to most important enterprises like cattle and buffaloes whereas women's participation was found higher only in the case of small ruminants and poultry. Women have only a little opportunity (less than 5%) to assume higher positions denoting that their participation in such organizations was not more than the symbolic representation.

The paper concludes with the need of enabling policies for effective and long term gender promotion for the sustainable development of livestock sector in Nepal.

Key words: Farm activities, farmers' groups, gender promotion, policy, symbolic participation, trainings and seminars

Introduction

FAO (1998) defines gender as the relation between men and women, both perceptual and material. Gender is not determined biologically as a result of sexual characteristics of either women or men, but it is constructed socially. It is a central organising principle of societies, and often governs the processes of production and reproduction, consumption and distribution. Gender roles are considered as the social definition of women and men in a society. So, these roles can vary among different societies with regard to religious, culture, classes, values and beliefs. Gender relations are the ways in which a society defines rights, responsibilities, and the identities of men and women in relation to one another (Bravo-Baumann 2000). Hence, the definition of gender should not be misunderstood only as being the promotion of women. Gender aspects are to be understood as "practical needs" (access to technologies) on one hand and as "strategic needs" (revised rules and regulation, long term improvement of women's position) on the

other hand (SADC 2000).

Nepal is predominantly an agricultural country. Eighty-six percent of the total population is found in rural areas. Two-thirds of Nepalese people are engaged in agriculture. Agricultural business contributes about 33 percent to the national gross domestic production (GDP) (Ghimire 2008). The government has adopted an agriculture perspective plan (APP) as a 20-year priority focused forward-looking strategy. The plan aims to accelerate agricultural growth by about 5 percent per year and increase agricultural income from 0.5 to 3 percent over that period (Regmi 1999). APP has given first priority to milk and then to meat. It has identified livestock sector as one of the most potential sectors within agriculture with an expected average annual growth rate of 5.5 percent as a whole in livestock sector and 6.1 percent in the dairy sector (NDDDB 2001). Buffaloes are the main sources producing about 70 and 65 percent of total national production of milk and meat, respectively.

In most low-income countries, women play a major role in attaining household food security (Quisumbing et al 2004). Women are producers of food, managers of natural resources, managing children and providing a proper nutritional balance for households (Brown et al 2001). There is a general lack of gender specific data related to the agricultural sector. In many countries, past policies for agricultural development were often narrowly aimed at product growth, overlooking the importance of human resources as well as the social and welfare aspects of development. Good policy analysis needs sharply focused, accurate, relevant and timely information. In Nepal, as elsewhere in the developing countries, because of the inaccuracies, inconsistencies, data gaps and non-coverage of important variables, there are sometimes serious problems in trying to use such official statistics to satisfy policy makers' needs (Gill 1998). Although women play a significant role in agricultural production, gender disaggregated data on livestock farming are rarely available. The present study has been carried out to assess gender roles, participation and opportunities in livestock farming in Nepal. The main objectives of this research were:

1. To assess farmers' participation to get gender disaggregated data on livestock activities launched by the public organizations.
2. To analyse the gender roles in livestock farming in order to assist policy makers for revision of existing rules and regulations for the long term improvement of women's position.

Materials and methods

The study was conducted in Nepal, which is located between 26^o 22' to 30^o 27' North latitude and between 80^o 4' to 88^o 12' East longitude (AICC 2008). It is one of the land-locked countries in Asia (Figure 1).



Figure 1. Map of Asia showing Nepal with its 5 development regions and 75 districts

http://www.lib.utexas.edu/maps/middle_east_and_asia/asia_pol00.jpg; <http://ncthakur.itgo.com/map04.htm>).

To assess the gender roles in livestock farming, a survey based on the structured questionnaires was conducted with 107 randomly selected livestock keepers (farmers) in three districts in the Western Development Region (WDR) of

Nepal. Thirty key-informants, involved in livestock research and development, from district level up to the central level, were also purposively selected and interviewed based on the separately structured questionnaires. In addition to the 107 random surveys and 30 key-informants, the Western Development Region was selected, mainly, to assess gender participation in livestock activities lunched by public organizations. Western Regional Directorate for Livestock Services (WRDLS), Pokhara, and 10 out of 16 districts of this region were directly visited by the first author to collect secondary data on gender participation in livestock related activities. Published materials, official statistics, and grey literature were intensively reviewed to get secondary data for assessing the gender participation in livestock farming in the whole country. The study was carried out during July to October 2006. Data were analysed with the Statistical Package for Social Sciences (SPSS)-PC version 15.0 (SPSS 2007), using proportion, percentage and cross tabulation.

Results

Out of the several programs launched by the Department of Livestock Services (DLS), Nepal through its 5 Regional Directorates (RDs) and 75 District Livestock Services Offices (DLSOs) in 2005/06, five main programs on which gender disaggregated data could be recorded (GEED 2005b) are shown in Table 1 and Figure 2.

Table 1. Gender-wise participation in livestock programs for the year 2005/06 in Nepal

Programs	Women's participation	Men's participation	Total
Improved animal distribution	4571	9792	14363
Forage seed/fodder sampling distribution	15656	23966	39622
District/service centre level trainings	10682	12945	23627
Regional level training	48	145	193
Animal health revolving fund project	98	1045	1143

Figures in the table indicate the number of people who participated in the corresponding program.

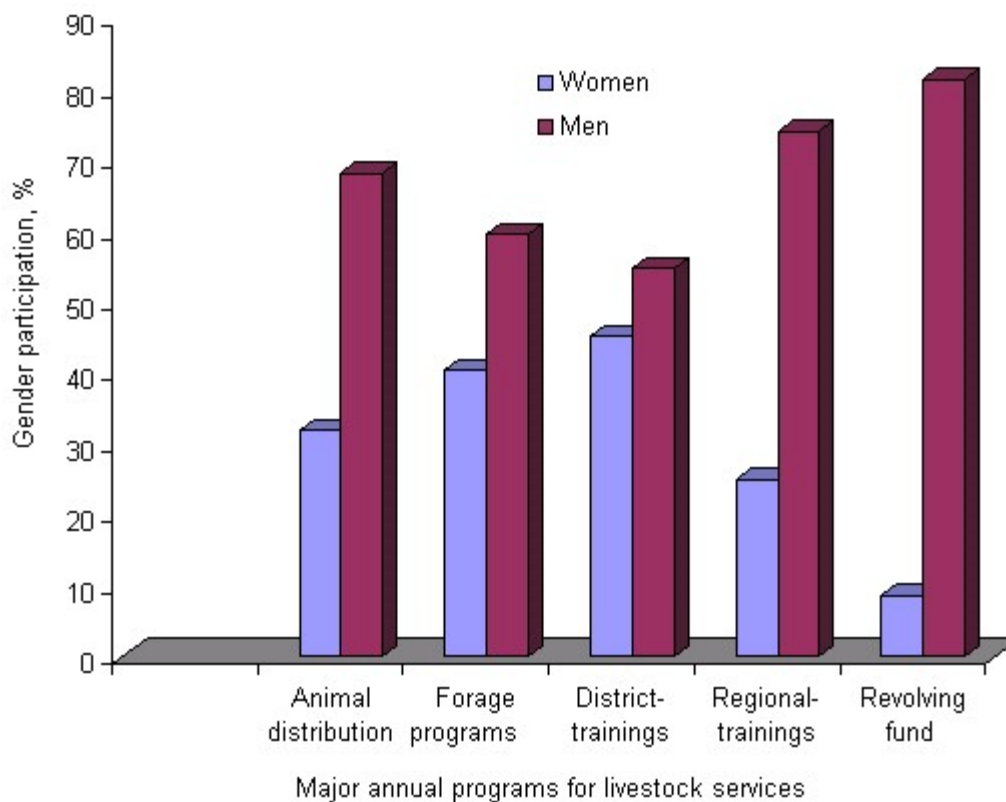


Figure 2. Gender participation in major livestock programs in Nepal (GEED 2005b)

Farmers' participation in trainings and seminars related to livestock activities for the period of 2004 and 2005, as responded by the farmers under the survey, is shown in Table 2. It shows very low participation of women farmers, as compared to men.

Table 2. Farmers' participation in livestock related trainings and seminars in last 2 years (n=107)

Programs	Women, number	Men, number	Women participation, %
Trainings	32	72	30.8
Seminars and observation tours	20	76	20.8

Gender roles, as defined as who does what, in different activities of livestock farming, as responded by the farmers, in the surveyed areas (n=107) has been presented in Table 3.

Table 3. Responses of the farmers on gender roles and responsibilities with respect to major livestock activities (n=107)

Activities	Gender			
	Women	Men	Both women and men	Children
Cleaning the gutter and sheds	86(80)	5(5)	16(15)	0(0)
Feeding animals	75(70)	8(7)	24(23)	0(0)
Forage collection	98(92)	0(0)	9(8)	0(0)
Milking animals	45(42)	15(14)	47(44)	0(0)
Selling milk	21(19)	49(46)	33(31)	4(4)

Figures in the table outside the parenthesis shows the number of respondents and inside the parenthesis shows the percentage for the activities with the corresponding gender.

Farmers' roles, gender-wise, in different livestock activities as responded by the key-informants have been presented in Table 4. The results are almost similar with the responses of the farmers (Table 3). It shows that women are supposed to work in most of the difficult tasks like forage collection and transportation, cleaning the gutter and sheds and feeding animals whereas men are involved relatively in easier and attractive tasks of the livestock activities such as milking animals and selling of milk.

Table 4. Responses of the key-informants on gender responsibilities with respect to livestock activities (n=30)

Activities	Gender			
	Women	Men	Both women and men	Children
Cleaning the gutter and sheds	25(83)	2(7)	3(10)	0(0)
Feeding animals	22(73)	1(3)	7(24)	0(0)
Forage collection	28(93)	0(0)	2(7)	0(0)
Milking animals	7(23)	8(27)	15(50)	0(0)
Selling milk	2(7)	15(50)	11(36)	2(7)

Figures in the table outside the parenthesis shows the number of respondents and inside the parenthesis shows the percentage for the activities with the corresponding gender.

Table 5 presents the gender participation in different livestock related farmers' groups in Western Development Region (total of 16 districts) during the year 2005/06. It clearly shows that men's participation is higher in larger animals, which are perceived as the prestigious animals in the society, whereas women's participation is higher than that of men in goat and poultry farming only.

Table 5. Gender participation in livestock services groups in 16 districts of WDR in 2005/06

Types and number of groups	Total members	Women participation,
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Types of enterprises						%
	Women	Men	Mix	Women	Men	
Cattle farming	2	33	107	466	1511	23.6
Buffalo farming	40	167	339	2026	6046	25.1
Goat farming	857	1369	431	11654	5098	69.6
Poultry farming	40	10	55	835	613	57.8
Improved forage farming	6	14	30	169	295	36.4

Sources: Site visits, personal communication with the officers and annual progress reports of WRDLS and DLSOs of WDR

Discussion

Gender roles in agriculture became an important subject of inquiry after Boserup (1970) questioned if women and men benefited equally from development programs. The livestock sector offers advantages to women over other agriculture sectors because of the reason that almost all household members of most societies have more access to livestock than to land, for example (Bravo-Baumann 2000). Gender balanced programs and projects have become an important goal for many public as well as private agencies (Schindler 2008). Participatory methods, involving both women and men were supposed as important tools for success in any development programmes (Farrington 1997). So, gender and gender related aspects are given lip-service by the politicians of most of the developing countries. However, the actual implication of the concept in the real field is very difficult because of the values, norms and moral codes which are embedded in the culture and tradition that determine attitudes and the organizational set-up of the whole community system (SADC 2000).

Nepal has one of the highest livestock population per capita and per unit of cultivated land among Asian countries (Shrestha 1992; Shakya 2004; MOAC 2005; AICC 2008; http://www.narc.org.np/org/pasture_fodder.php). The national average per family livestock holding includes 3.8 cattle/buffalo, 2.2 goats and 4.5 poultry (AICC 2008). The farm activities of livestock production and management are jointly conducted by men and women in rural areas (Paudel et al 2007). So, for the promotion of gender aspects in rural areas of developing countries like Nepal, the livestock sector is the most important entry point. Hence, projects like Third Livestock Development Project (TLDP), Community Livestock Development Project (CLDP), have given high priority for the gender aspects in livestock farming in Nepal. Out of five major components of CLDP, an Asian Development Bank funded project, which is at full run now, the first one component, is clearly stated as community development and capacity building (<http://www.cldp.gov.np/>) on which gender component has received very high priority.

The results of the assessment of gender participation in programs launched by the DLS, as shown in Table 1, indicate that the women participation varies from 8 to 45% as compared to 55 to 92% for men. Women's participation is still minimal (Figure 2) even in the programs of their interest (Singh et al 2002; Banstola et al 2004), e.g., forage seed and fodder saplings distribution, and regional level trainings. It is a common phenomenon in almost all developing countries that, in general, men have the control over the land and larger animals like cattle and buffaloes (SADC 2000). Women may have control to smaller animals like goats, sheep and poultry (Nsoso et al 2005). In Nepal, only 8% of the total numbers of land holdings are owned by the women where as 92% of the total land holdings are owned by men (NPC 2002). So, a limited percentage of women have their rights to the land and large animals. In this context, women participation in improved animal distribution might only be a symbolic participation.

Though this study shows women participation up to 45% in district and service level trainings but there could be the doubts on the effectiveness of such trainings. It has been stated that the productivity of labour could be altered depending on the accessibility of the technology and trainings between men and women (Lubwama 1999). The important points to be considered would be whether the technologies were gender neutral or blind, the favourable time and considerations of social restrictions for the women, as well as content of the training to provide better assistance to the women. In general, official livestock services are generally controlled by men and extension personnel are also primarily men who may not be accustomed or trained to teach technical subjects to women. The educational materials are mainly designed by men and oriented towards men. In such circumstances, the mere participation of women may not have significant impact on gender mainstreaming.

The results of women's participation in the animal health revolving fund program, which was meant to provide seed-money to the farmers who had at least some knowledge on animal husbandry (e.g., one month training course on animal husbandry and health-care) to provide first-aid veterinary services in village level and to operate cash generating enterprise, was found less than 9% (Figure 2). It clearly shows that wherever there is the possibility of quick income generation, men are always at the front. It may be because men have a strong position in decision making as a head of the household and greater access to off-farm mobility.

The results obtained from the survey with the farmers revealed that out of about 800 members (average family size was 7.4 per household in the survey area) of the 107 households, 104 and 96 farmers have got the chance to participate in the livestock related trainings, and seminars/observation tours, respectively for last 2 years (2004 and 2005) period. Out of the total number of farmers participated, only about 31 and 21% women have participated in trainings and seminars, respectively (Table 2). It was found that about 70, 80, and 90 percent of the works related to feeding animals, cleaning the gutter and sheds, and forage collection, respectively were performed by the women whereas the most important cash generating job, selling of milk, which provides direct cash income, women's participation has been found only 19% (Table 3). The information obtained from the key-informants also revealed the same trend (Table 4). It clearly shows that women's involvement is very high in non-cash activities whereas men's participation is very high in direct cash generating activities. Researches carried out in different countries have already shown that women tend to spend the money they earn from livestock on the welfare of their families but in many situations, the money earned by men from direct milk sales is sometimes used by men for drinking (IFAD 1999). This situation creates negative impacts on family nutrition and welfare which further widens the gender gap.

The secondary data on gender participation in livestock related farmers' groups and organizations, obtained from WRDLS and 16 districts of WDR, revealed that women participation is around 25% in the case of larger animals, cattle and buffaloes, which are the most important enterprises in the society, whereas their participation is very high, up to 70%, in small ruminants (Table 5). The participation in goat farming is increasing because the government of Nepal has been giving high priorities for the goat keeping through women farmers for income generation (DLS 2005). Ownership of goats in other developing countries, e.g., Botswana, Kenya, Bangladesh, etc., by the poorer sector of farmers and women is encouraged by the government through a number of projects/policies and programmes (Oledele and Monkhei 2008). So, smaller animals, such as goat and backyard poultry which are kept near the house, are more women's domain.

Women participation in improved forage farming groups was found still discouraging. As stated above, out of the major activities of livestock farming, women perform up to 92% of the works of forage collection but their participation in improved forage farming groups has been found just about 36%. It clearly denotes that those who actually need the opportunity have not yet mainstreamed in the programs. This is proposed to be one of the reasons of low productivity and unsustainable development of livestock in Nepal (Tulachan and Neupane 1999). These results also agree with GEED (2005a) which reported that though women's participation in livestock organisations is around 25%, their involvement in decision making positions, e.g., chairperson, vice-chairperson, treasure and secretary, is less than 5%. Ramaswamy (1999) has rightly stated that women only achieved symbolic representation and there are none or little opportunities for them to assume positions such as manager, planner or director in the organisations. In most cases, even in women cooperatives (GEED 2005a), it has been found that the success of the women's organisation is possible if the husband, first, fully agrees to his wife's participation.

Conclusion

The following conclusions can be drawn from the present study:

- Participation of women in livestock programs launched by public organisations is still very low in Nepal. It is least in the case of quick income generating activities such as animal health revolving fund program.
- High variation was found between the gender participation in farmers' groups/organisations. Men's participation

was found more in large animal related groups such as cattle and buffaloes whereas women's participation was higher in small ruminants and poultry farming groups. However, according to the secondary sources, women's participation in decision making positions is still negligible.

- Women have less chances for trainings and seminars. In most of the cases, their participation was thought to be minimal because of the gender biased trainers, teaching materials, seasons and time for the trainings, seminars and observation tours. So, to make training programs more effective, the background of the target groups should clearly be understood.
- Women's involvements are higher in the case of non-cashable farm activities, such as, forage collection, cleaning and feeding of animals whereas men's approach is more on attractive jobs related to cashable activities, such as, milking of animals and selling of milk.
- Research and experience confirm the importance of gender equity, not only as a fundamental human right, but also as essential to poverty reduction and improved living standard (<http://www.adb.org/Gender/policy-gad.asp>).
- It is therefore enabling policy should be formulated for gender empowerment, gender mainstreaming, and ultimately for the sustainable development of the livestock sector in Nepal.

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