

Full Length Research Paper

Impact of poultry extension services for the rural women

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A research in poultry extension services was conducted between August 2010 and February 2011, to assess the impact of poultry extension services on the rural women. Participation of rural women is very little to register in the official papers of government in spite of their role in the farm and non-farm activities. All these activities are much more restricted by rural customs, traditions and values etc. Okara district of the Punjab province was selected as universe of the study area. A number of 750 respondents were involved in the data. The data was collected with the help of pre-test and validated interview schedule. The paper recommends a fair treatment to the rural women and calls for social upliftment by enhancing education, employment, training, and poultry production and management. It was concluded that a large majority of the rural women showed an excellent interest in gaining agricultural extension education services related to poultry production.

Key words: Agricultural extension services, poultry, rural women, education.

INTRODUCTION

In recent years, development practitioners have become gradually more interested in questions relating to scientific change in the agricultural sector. The economy of Pakistan (GOP, 2010) is largely dependent on agriculture, which directly supports three quarters of the population and satisfies the hunger of 163.76 million people. Gender relates to socially assigned roles and behaviors attributable to men and women. The rural literacy rate is only 41.6% (GOP, 2010). It is interesting to note that the female literacy rate of 26.6% is far below the literacy rate of male people 56.3% in rural areas. Gender

equity has gained currency worldwide especially, in the agricultural sector in developing countries where women comprise half or more of the workforce. Women's active contribution in agricultural growth has been promoted and many recent agricultural extension projects have been making efforts to increase women farmers' participation (Felsing and Baticados, 2001; Saito and Weidemann, 1990; Stuart, 1994). Women's role in food security has remained practically invisible to many policy-makers and has failed to explain the expected results. Their works and responsibilities are not fully recognized and as such, they are usually undervalued.

Extension education

The original concept of extension education was that of

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bridging the gap between the farmers and the sources of information or knowledge. Furthermore, the understanding of the extension concept is based on three factors namely: education, philosophy and scope (Memon et al., 1997).

Extension education services for women

Poultry extension messages do not reach the majority of the women in the agricultural sector. While there is a growing awareness to contact women farmers, agricultural extension services are generally geared toward male farmers. Like in many other countries, agricultural extension services programs in Turkey is also focused on male farmers leaving the women outside the mainstream of information even when they are engaged in the activity covered. To avoid an economic invisibility of women, clearly reflects the supremacy of men in agricultural extension (World Bank, 1992).

However, in some countries, female extension agents' that make contact with male farmers tends to be restricted (FAO, 1984). Gender relations in agriculture have increased in recent years particularly, in international organizations like UN, World Bank and FAO. In this scenario of Pakistan, paid work of women and participation is very little to register in the papers of government in spite of their importance in both farm and non-farm activities which are much more limited by rural customs, beliefs, traditions and values (Haq, 2003). Agricultural extension services are responsible for enhancing the process of agricultural development to meet the food needs of the rapidly growing population. Accordingly, the government has launched different developmental programmes at the national level namely: Integrated Rural Development Programme (IRDP), Training and Visit system (T and V) and Devolution Plan for the uplift of local people's economic status through pooling of all the national resources (World Bank, 2003).

Information need of women in agriculture

Poultry is the sub sector of Agriculture. Female farmers require appropriate and timely information to improve their crop production technologies, management, and marketing of the poultry production as well as, increase of their income. Many constraints on poultry production are common to men and women; in other words, are gender unbiased. However, in many countries, women in poultry production operate under greater constraints than men (Saito and Weidemann, 1990). Since any extension system must target particular categories of clients to meet their needs, gender specific problems with specific solutions: women in poultry production need special help (Saito and Spurling, 1992), (World Bank, 1992, 1993).

However, worldwide extension service systems reach

more men than women farmers. The reason given explains why extension services do not reach women farmers. Ethiopian women (JICA, 1999) have longer working hours than men in addition to the extra burden regarding house management and productive activities. Further, they are generally dependent on men along with their children for taking care of livestock products and their by-products. They also engage in non-farm income activities such as petty trading, beer brewing and leather work. Rural women contribute significantly in almost all activities related to poultry, livestock production and the agricultural sector. The trained women in these sectors will definitely help to improve the production ultimately overcoming the animal protein shortage and house hold income (Younus et al., 2007). The task of the Extension education service is to introduce modernization and guide farmers on various aspects of poultry production. Pakistan has tried several extension education concept including the Village Agricultural and Industrial Development Programme (Village-AID Programme), Basic Democracies System (BDS) and Integrated Rural Development Programme (IRDP) etc. At present, Extension education is a training and visit system to disperse technical information to surrounding farmers (Ahmad et al., 2004).

Constraints faced by women in poultry sector

To design and provide extension programs of effective services for women, it is essential to understand the roles of men and women in production practice, their information desires, the nature of the special constraints faced by females, and the implications of these constraints for extension. The common constraints that women in poultry sector faces are the following:

- Time, lack of education, limited access to credit and inputs, land availability and tenure, lack of suitable farm and household technology, training centers, job availability etc.

Another current agricultural extension system appraises the governmental department of agriculture in the Punjab province involves extension work through Extension Field School (EFS) but gender biasness is also here. This system has four main components: technology development, training of trainers, training of farmers, monitoring and feedback. The EFSs are the farmer training sessions conducted by Agricultural extension workers called trainers in the villager's house or the farm of a selected contact farmer. The EFSs were initially used for integrated pest management projects in countries like Philippines and Indonesia. But extension system still remains inefficient; top down bureaucratic big farmer oriented ignoring the gender equality issue, and ignoring youth as partners (Ali, 2004). For rural women education

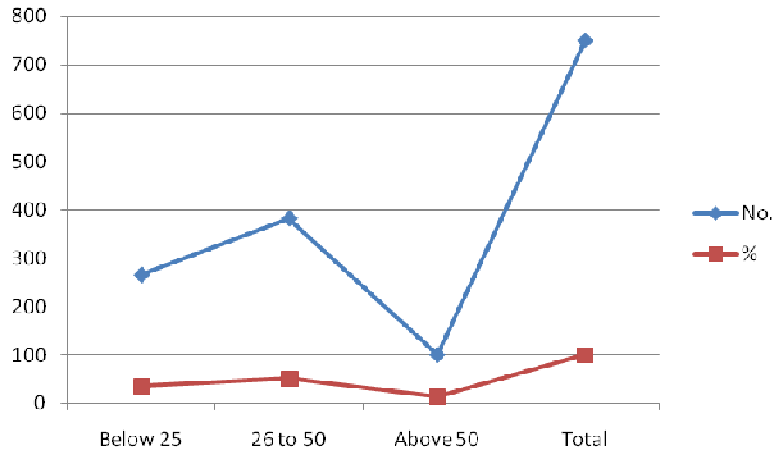


Figure 1. Assessment of the respondents according to the age, mean = 33.84, S.D = 14.03.

especially, in the sector of poultry is scarce due to genderbiasness. Rural woman's work in Pakistan is more visible in livestock sector than the crop sector. They undertake various activities of livestock or poultry management like watering and feeding of animals, animal shed cleaning and milking (Arshad et al., 2010).

RESEARCH METHODOLOGY

Okara district of the Punjab province was selected as universe of the study area. District Okara comprises of three subdivisions namely: Depalpur, Renala Khurd and Okara. A multistage sampling procedure was adopted by Erbaugh et al. (2003). Through lottery technique, ten villages were selected from each subdivision through simple random techniques. From each selected villages, 25 farm families were selected at random and from each selected farm family, one woman who was actively involved in farming was selected, thus, the total number of sampling was 750 respondents.

Data collection and data analysis

Data collection

This experiential study is based on both primary and secondary data sources which were collected from August, 2010 to February, 2011. The data was collected with the help of pre-test and validated interview schedule.

- Primary data: through different methods used were individual face to face meetings, group discussions and field observation.
- Secondary data: Poultry production, food security, resource management, women's roles in development process and for legal documents uses the statistic yearbook and websites was selectively collected from government and non-government agencies.

Data analysis

The collected data were analyzed and tabulated on SPSS (Computer software) to draw results, conclusions and making of pertinent recommendations.

RESULTS AND DISCUSSION

The importance of the characters like age, education, farm experiences, farm tenure and sense of ownership of the land play a vital role in the agricultural field (Hassan et al., 2002). Figure 1 shows that 51.07% of the respondents fall under the category of 26 to 50 years, followed by 35.47% of below 25 years and only 13.47% of them were above 50 years of age. The mean age of the respondents was 33.84 with a standard deviation of 14.03. The aforementioned research findings are partially in line with those of Butt et al. (2010) who found out that 81.6% of the respondents fall under the age category of 20 to 40 years, followed by 12% of 41 to 60 years and 6.4% of them were above 60 years of age. In the case of education, a large majority 59.90% of the respondents were illiterate, followed by 15.70 and 9.70% of the respondents that attained primary and middle education, respectively (Figure 2). While only 5.30% had highly passed and 9.00% of the respondents were above matric. The mean education of the respondents was 0.87 with standard deviation of 1.31. In rural areas of Pakistan, many problems and constraints were experienced by women due to their low educational level. According to Khan (2005), education is a solution to all the society problems. Education is the process of developing knowledge, perception and other required behavior of the mind, character and general competency (Evenson and Mwabu, 1998). Education leads to many social benefits like lowering the child mortality rate, high quality food, higher economic returns, technology and sources of information (Desai, 1998; Mammen and Paxson, 2000; Haq, 2003). As shown in Figure 3, in the case of farm experiences, 42.93 and 42.53% of the respondents were below 10 and 11 to 25 years respectively, whereas only 14.53% of the respondents were above 25 years of age. The mean of the respondents' farm experiences was 15.28 with a standard deviation of 10.73. The effect of

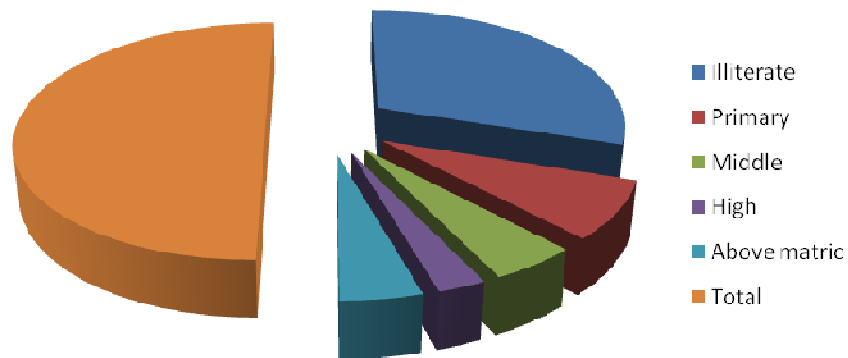


Figure 2. Assessment of the respondents according to the education, mean = 0.87, S.D = 1.31.

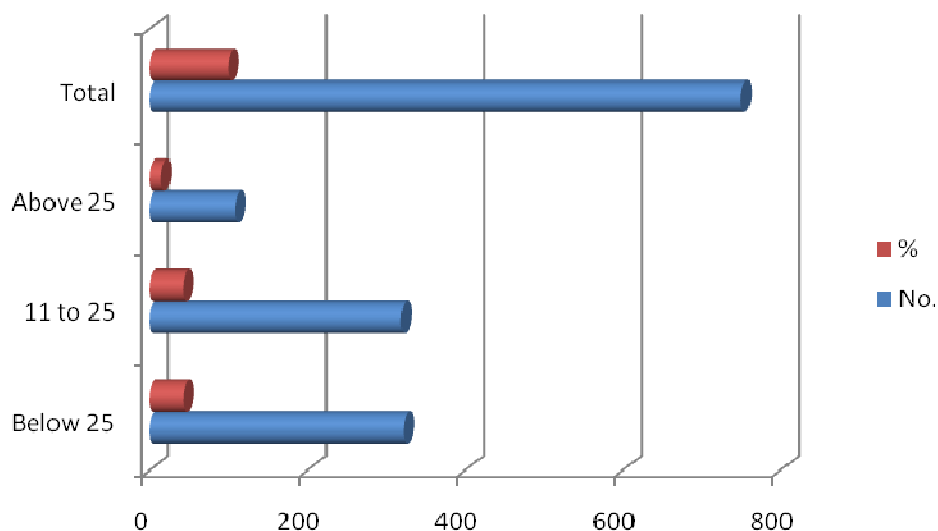


Figure 3. Assessment of the respondents according to the farm experiences, mean = 15.28, S.D = 10.73.

farm experiences was confirmed by Cole and Johnson (2002) and Kurkalova et al. (2003). In case of farm tenure (Figure 4) it was depicted that majority 51.50% of the respondents were having their own land holdings, whereas the other 46.70% of the respondents working were under the category of land obtained on lease. While only 1.30% of the respondents were both. The farm tenure mean of the respondent was 1.49 with a standard deviation of 0.77. Cole and Johnson (2002) and Kurkalova et al. (2003) reported that the effect of land tenure was confirmed. The results indicated (Table 1) that 51.10% of the total respondents agreed for poultry extension education services was followed by 26.00 and 16.60% of the respondents who were those that strongly agreed and somewhat agreed for the said training, respectively. The need for poultry Extension education services means of the respondents were 3.96 with a standard deviation of 1.15. We can say that majority of the respondents were in favor of the need of poultry

Extension education services for rural women to enhance poultry production and management. According to the Sailaja and Reddy (2003), for reliable growth of poultry production and stabilization of income in agriculture, it was necessary to involve rural women in increased embracing of improved farm practices and poultry management. The assessment showed (Table 2) that 54.30% of the total respondents were aware of the general feeding practices for poultry. The mean awareness regarding feeding practices was 0.55 with a standard deviation of 0.50, whereas, in the case of drinking water practices for poultry management, 67.70% of the respondents were unaware. The mean awareness regarding drinking water was 0.32 with a standard deviation of 0.47. The data presented indicated (Table 3) that the large majority 61.90% of the total respondents were aware of the management of poultry box for eggs. The mean awareness regarding poultry box was 0.38 with a standard deviation of 0.49. A majority of 61.50 and

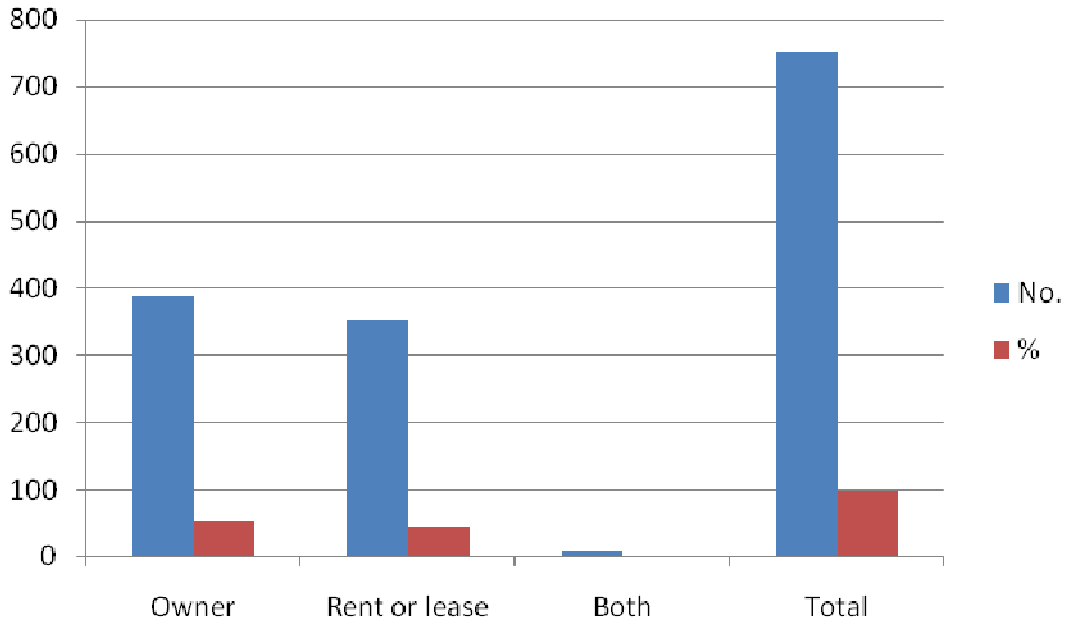


Figure 4. Assessment of the respondents according to the farm tenure, mean = 1.49, S.D = 0.77.

Table 1. Assessment of the respondents according to their perception about the need of agricultural extension services.

Perception	Number	Percentage (%)
Strongly disagree	11	1.50
Disagree	33	4.40
Somewhat agree	125	16.60
Agree	385	51.10
Strongly agree	196	26.00
Total	750	100

Mean = 3.96, S.D = 0.86.

Table 2. Assessment of the respondents according to the awareness of the feeding and watering.

Need of poultry extension services	Aware		Unaware		Mean	S.D
	Yes	Percentage (%)	Number	Percentage (%)		
Feeding	409	54.30	341	45.30	0.55	0.50
Watering	240	31.90	510	67.70	0.32	0.47

Table 3. Assessment of the respondents according to the awareness of management of poultry boxes for eggs.

Management of poultry boxes	Number	Percentage (%)
Yes	284	37.70
No	466	61.90
Total	750	100

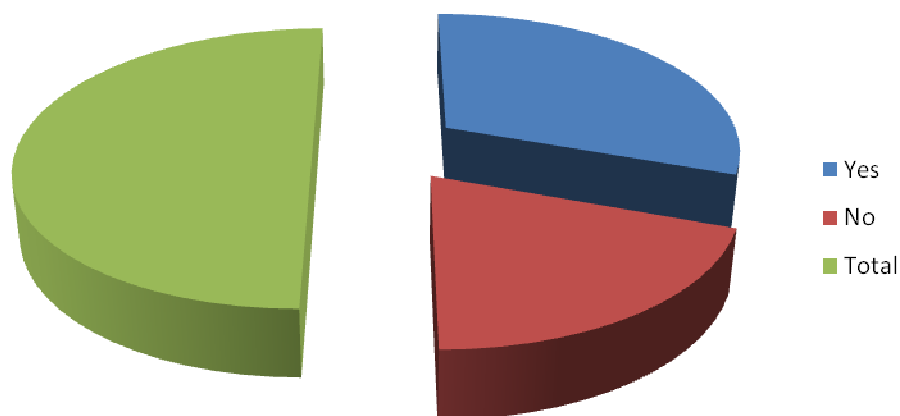
Mean = 0.38, S.D = 0.4.

Table 4. Assessment of the respondents according to the awareness of hatching and brooding.

Need of poultry extension service	Aware		Unaware		Mean	S.D
	Yes	Percentage (%)	Number	Percentage (%)		
Hatching	287	38.1	463	61.50	0.38	0.49
Brooding	298	39.60	452	60.00	0.40	0.49

Table 5. Assessment of the respondents according to the awareness of egg collection, storage and marketing.

Need of extension services	Aware		Unaware		Mean	S.D
	Yes	Percentage (%)	Number	Percentage (%)		
Egg collection and storage	279	37.10	471	62.50	0.37	0.48
Marketing	276	36.70	474	62.90	0.37	0.49

**Figure 5.** Assessment of the respondents according to the need of female poultry extension officer, mean = 0.39, S.D = 0.49.

60.00% of the total respondents were unaware of hatching and brooding, respectively (Table 4). The mean unawareness regarding hatching and brooding was 0.38 and 0.40 with a standard deviation of 0.49 respectively. Majority of the total respondents, 62.50 and 60.90% were unaware of egg collection, storages and marketing (Table 5). The mean of the respondent was 0.37 with a standard deviation of 0.48. According to the present study, Javed et al. (2006) reported that among diverse livestock production and management activities, rural women in Pakistan were actively involved in the cleaning of animal sheds having ranked 1st and minimum in marketing of animals and animals' produce. To some extent, similar results were also pointed out by Hassan et al. (2007). According to Mashkooor (1995) in case of livestock raising activities, male dominated operations were grazing of animals (87.00%), watering (55.40%), care of birthing animals (52.40%) and care of sick animals (75.50%). On the other hand, female dominated operations were cleaning sheds (90.70%), cleaning animals (50.00%),

milking (67.40%), egg collection (87.00%). The aforementioned study is moderately in line with the findings of Mollé et al. (2000) who initiated in Morogoro that both men and women were equally involved in livestock raising activities. On the other hand, men actively participated in the selling and expending of livestock. Whereas, women were actively involved in fodder cutting, serving of fodder poultry raising and mixing of fodder, feeding and watering of animals, management of poultry boxes, raising of goats and sheep, milking, dung removing and milk products. It was important because most of the respondents were told that their birds did not survive due to many unknown diseases. Further hatching and watering were the areas where large majority required assistance from extension agencies. The priority categories were needed for poultry extension education services in management of poultry boxes, making poultry boxes, and egg collection and storage. Figure 5 reveals that large majority 60 to 80% of the respondents indicated the need of a female poultry extension officer in

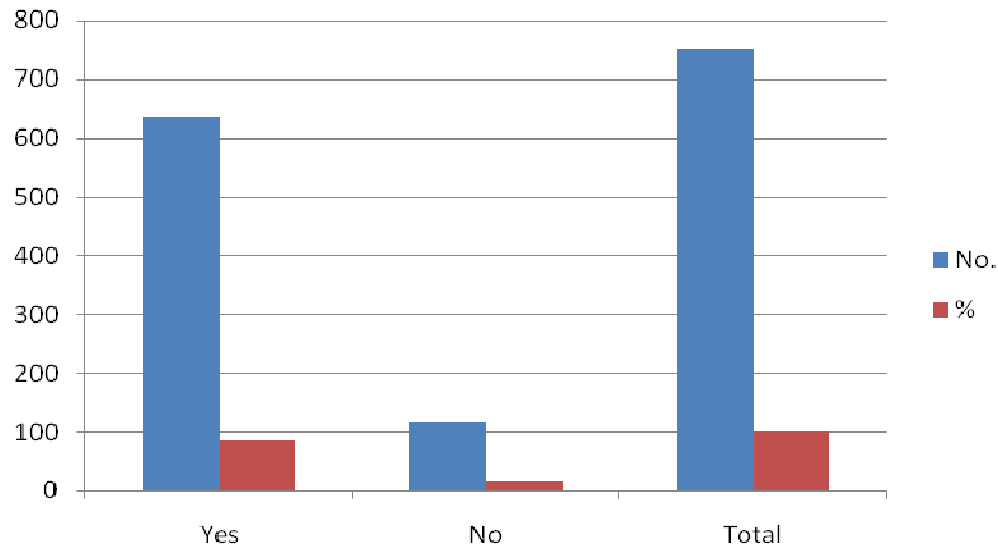


Figure 6. Assessment of the respondents according to the need of training of farmer extension education center, mean = 0.15, S.D = 0.36.

approaching poultry extension education services. The mean of the respondents were 0.39 with a standard deviation of 0.49. The present research findings was similar with the findings of Butt et al. (2010) who found that necessary suggestions given by the respondents were that maximum female subject matter specialists should be produced in the agricultural field (64.0%), training program for females for example (agricultural development and livestock) was 40.0%. Government and private organizations should focus more on problems of rural women (52.0%) and extension field staffs should be trained to educate the women engaged in farming (12.0%). Similar suggestions were also presented by Sadaf et al. (2005), Majaka (2001) and Raju et al. (2001). The rural women also play a pivotal role in poultry and livestock production activities. Their participation is well dispersed and less perceived. They are actively involved in livestock care and supervision, and rural poultry farming. Here, participation of female force in livestock and poultry production was determined and the responses were presented in the data. A majority (55.0%) of the total respondents strongly agreed and was followed by 29.0% who agree and 16.0% agree to some extent (Sailaja and Reddy, 2003). So it can be said that majority of the total respondents were in favor of the female poultry extension services for rural women. Figure 6 stated that large majority (84.30%) of the respondents indicated the need for training in poultry extension services. The mean of the respondents were 0.15 with a standard deviation of 0.36. So we can say that a large majority of the females were in need of training for poultry production. Iftikhar et al. (2009) reported that safeguard management to care for animals from diseases and precautionary measures of diseases has a mean of 0.74, while the standard deviation of the respondent was 0.44.

Among training needed in poultry production, chicken meat production has a mean of 0.83 and a standard deviation of 0.38. Similar outcome were also presented by Hassaan (2010) while determining the obstacles to gender mainstreaming in agricultural extension in the Punjab, Pakistan. Similarly, Sadaf et al. (2005) depicted that caring for diseased animals was at the top with the highest weighed score of getting training and assistance from veterinary extension staffs. Sailaja and Reddy (2003) also reported that this could be attained through effective training and extension programmes specially designed and based on technological felt needs of the rural farm women to enhance poultry productivity.

Conclusions

It was concluded that socio-economic aspects like education, land rights, social rights and status to women were major social constraints. Rural women were in favour of the female poultry extension services and training of poultry production. Need of poultry extension services in management of poultry boxes, diseases, watering and hatching etc.

RECOMMENDATIONS

It is recommended that literacy rate among rural women should be improved through formal and non-formal extension education services that ultimately would raise their prevailing socio-economic conditions. The government should establish specific rural women training center at sub-division (tehsil) level in the country to enhance their level of knowledge in the poultry sector.

Therefore, government should promote the female extension officers, so that women farmers can easily get training and advisory services related to poultry production technologies especially, in Pakistan. In agricultural universities, special seats should be allocated to females in extension education departments. As early as possible, training should be started for females in poultry and dairy enterprises. The government should also provide credit facilities for rural women and introduce the Cyber extension as videoconference regarding poultry production.

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