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POTENTIALITY OF RABBIT PRODUCTION AND ACTIVITY OF RURAL WOMEN IN BANGLADESH

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ABSTRACT

A survey was conducted to identify available rabbits and their contribution to farm economy at Dhaka, Jessore and Khulna district of Bangladesh. There were about eight breeds identified such as Fox, Dutch, New Zealand Red, New Zealand White, New Zealand Black, Belgian White, Chinchilla and Indigenous Dark Grey rabbit. A doe produced about 20 kits in a year, generally sold out at 3-4 month of age. Mainly women (65%) and children (26%) were found actively involved to perform all activities of rabbit raising. Most of the 30 interviewed breeders reared 2 males and 2 does. Almost all interviewers reported that rabbit was an additional income sources by utilizing family labor without hampering existing activities of the homestead.

INTRODUCTION

Rabbits were kept in farm premises as hobby as well as game animal. Sometimes it is used as laboratory animal. Many researchers (SHELDON et al 1985; SANDFORD, 1986; Anonymous 1991; ALI, 1993) reported that rabbit meat is delicious and containing high protein level. Rabbit is one of the most economic animal. A female rabbit produced about 2-8 kits every month. Rabbits converted mostly roughage into protein within short time. There are so many potential parameters such as short generation, highly prolific and best waste user to become rabbit popular in the world. Effectively rabbits are used as human food in a lot countries around the world (COLIN and LEBAS, 1996). Recently, some rabbitries has been established at Khulna, Bagerhut, Jessore and Dhaka, Bangladesh. Different breeds and varieties of rabbits are found in the country. But almost no study was carried out to identify the available rabbits in Bangladesh subsequently there was no study conducted on production performance of rabbit. So the present attempt was initiated to identify the available rabbits in Bangladesh and their importance in farm economy.

MATERIALS AND METHOD

A preliminary survey was conduced to identify the available rabbit at Dhaka, Jessore and Khulna district during 1997-98. A total number of 30 farmers, 10 farmers from each of Dhaka, Jessore and Khulna districts were interviewed with pre-tested questionnaire. Confused answer were verified to the other members of the family. Morphological characteristics were considered for each rabbit to identify them. Some of the basic information of the rabbits were collected from the farmers. The report was prepared on morphological characteristics and some basic information of rabbits available in Bangladesh.

RESULT AND DISCUSSION:

Recently rabbits become popular in all over the country. Still now very few people took it as food. Most of the people kept rabbit as their game or fancy animal. There were about eight breeds such as Fox, Dutch, New Zealand Red, New Zealand White, New Zealand Black, Belgian White, Chinchilla and Indigenous Dark Grey rabbit (table 1).

Table 1: Available rabbits in Bangladesh

Breed name	available at	color	
Fox	Dhaka, Jessore	Black and Tan	
Dutch	Dhaka	White and Grey	
New Zealand Red	Dhaka, Jessore	Radish white	
New Zealand White	Dhaka, Khulna, Jessore Bagherhut	White	
New Zealand Black	Dhaka, Khulna, Jessore	Black	
Belgian White	Dhaka	White	
Chinchilla	Dhaka, Jessore	Grey	
Dark Grey (Native)	Dhaka, Jessore	Dark Grey	

Some of the basic informations were collected from the farmers (table 2). Farmers reported that rabbit is very economic small animal compared to other domestic animal. A doe produced minimum 20 kits in a year. Average litter size variation was 2-8 kits reported by the farmers.

Table 2: Standard Biological Data of Rabbit in Bangladesh

Criteria	value		
Gestation period	31-32 days		
Birth weight	30-70 g		
Weaning weight	800-1200 g		
Weaning age	6-8 weeks		
Adult weight Male	1.5 - 2.5 kg		
Adult weight Female	2.0 - 3.0 kg		
Weight at sexual maturity Male	1.2 - 2.0 kg		
Weight at sexual maturity Female	1.5 - 2.2 kg		
Age at sexual maturity	20-24 weeks		

About 65% works related to rabbit production were performed by house wife (table-3) followed by son (13.6%), daughter (12.00%), husband (7.4%) and others (2.4%), respectively. Feeding, housing, house cleaning, selling/buying and special care of new born kits are the major and important works related to rabbit production. Women are the key person in the family to rear rabbits.

Table 3: Works related to rabbit production performed by the family members

Works	% respondent						
	Husband	Wife	Daughter	Son	Others	Total	
Feeding	1	81	15	3	-	100	
Housing	15	60	5	17	3	100	
House cleaning	1	75	20	1	4	100	
Selling/buying	20	20	10	45	5	100	
Care of kits	-	88	10	2	-	100	
Average	7.4	64.8	12.00	13.6	2.4	100	

Reproduction and Breeding:

Farmers reported that after successful kindling of a doe, she allowed to buck for mating but farmer normally delayed about one month for better health of doe. Small breeds may be mated at around 5 months, but large breeds should be mated after 7 months. Does mature earlier than bucks. Generally, the doe is taken to the buck's cage for breeding. The pregnant doe should be housed individually in a quite area. Weaning is done at 6-7 weeks and depends largely upon the litter size and weight attained by the young ones.

Housing and husbandry:

Generally farmers kept their rabbit in net house and wooden house. Rabbits should be housed in areas commensurate with the animal size and weight. Steel cages are better and consideration should be given that no sharp edges are there, Cleaning of rabbit cages is particularly important before parturition, at weaning, before installing new stock and after removal of a sick animal. Rabbits should be protected from rapid temperature changes, excessive drafts, and insect and rodent vermin. At temperatures of over 29°C males may suffer infertility. Males and females should be kept in separate quarters and at the time of late pregnancy does should be given adequate nesting material. The doe nurses the young one once a day and cross fostering can be done with promising results.

Economic Analysis:

Farmers opined that they normally reared 2 male and 2 female rabbit. They earned about 300-500 Taka (Tk) per month. Most of the rabbits were sold out at 3-4 month of age, at the price of 50 Tk/rabbit in Khulna and Jesore and up to 75-100 Tk/rabbit in Dhaka.

Comments of rabbit farmers

Almost all of 30 farmers told that rabbit is obviously profitable business in Bangladesh. But the farmers of remote area of Khulna and Jessore stated that sometimes selling is problematic. They did not get sufficient money. On the other hand in and around Dhaka city it has excessive demand. People purchase rabbit as hobby and consumption.

The main characteristic points of rabbit husbandry are:

- profitable business
- easy rearing system
- 2-8 kits produced/parturition
- every month it can produce kits
- green leaves and kitchen waste can be used as food for rabbits
- only small amount of concentrate is need
- colored rabbit are more demanded
- young up to 10 days should take more care

CONCLUSION

Rabbit is profitable enterprise in rural area. It is possible to raise 5 rabbits in homestead without disturbance of any other works. Rabbit is such enterprise which can enhance to earn about 300-500 Tk per month by proper utilization idle family labor. It has very good prospect in Bangladesh.

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REFERENCES

- ALI, S.M.K.,1993 Rabbit. *Institute of Nutrition and Food Science, University of Dhaka*. Anonymous 1991, News Letter, *National Laboratory Animal Center, Central drug Research Institute, Lucknow No-9*.
- COLIN M., LEBAS F. 1996. Rabbit meat production in the world. A proposal for every country. *Proc. 6th World Rabbit Congress, Toulouse, France, 09-12/07/1996*, vol. **3**:323-330
- SANDFORD, J.C.1986, The Domestic Rabbit. 4th edition Collins, 8 Grafton Street, London WIX 3LA UK.
- SHELDON B, MURRAY, K., OLSEN, G. H. 1985. A publication of Christian Veterinary Missions *Division of world Concern, Box 3300 Seattle, Washington 98133, USA*.