

Animal Husbandry Practices of Organic Farmers: An Appraisal

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Abstract

In Uttarakhand organic farming is being promoted through a special institution i.e. Uttarakhand Organic Commodity Board (UOCB) through registering the farmers and orienting them towards organic farming. Organic farmers currently practicing and marketing only organic crop products. However, their livestock production practices are also similar to recommended organic standards. Hence, to document their livestock production practices, a total of 180 registered organic farmers selected through multistage sampling technique studied during 2006-07. Cent percent of registered organic farmers were involved in mixed farming enterprises and most of them were with more than one livestock species (farm diversity). The breeds maintained by these farmers were of indigenous and they were raising livestock on the inputs met on farm and from the farms of similar agro-ecological regions. In view of the raising demand for organic livestock products locally as well as internationally, the organic promoting agencies have to focus on orienting these farmers towards stringent organic livestock standards so as to enable them to meet the organic livestock products demand locally as well as internationally.

Key words: organic farmer, animal husbandry, practices.

Introduction

Uttarakhand is the first state declared as organic in India, where most of the farming is organic by default. Uttarakhand Organic Commodity Board (UOCB) in the state is promoting organic farming through registering and orienting the farmers in the crop sector. As a result, the registered farmers could able to produce and market organic crop products for premium prices locally as well as internationally. These farmers are maintaining some livestock and this paper deals with the various animal husbandry practices of organic farmers as such.

Materials and Methods

Multi-stage sampling technique was used to select 180 registered organic farmers from 18 villages of 9 blocks selected out of 3 districts of Uttarakhand state. Data collected through semi-structured interview schedule was analyzed through frequency and per centage.

Results and Discussion

Organic livestock farming differs from conventional farming in many aspects, including pasture management, animal nutrition, housing, animal health maintenance and animal disease management (Rahmann, 2001).

Small scale holdings, where livestock essentially integrated with crop farming under subsistence farming operations with low input low output production systems, are making the prospects for organic livestock farming bright, alongside organic crop production in India (Chander *et al.*, 2007). Hence, the existing animal husbandry practices of organic farmers have been documented to know the status of livestock farming.

Diversity of livestock maintained by farmers:

Registered organic farmers were with mixed farming enterprise and nearly 85 per cent of farmers maintaining more than one livestock species in the combination of either cattle and goat or buffalo and goat alongwith few poultry. Integration of more than one livestock species and livestock with cropping can be the basis of a balanced and sustainable farming system, allowing nutrient recycling and effective resource use, wherein, the farmers of the study area were practicing.

Table: 1 Farm profile of organic farmers

S.No	No. of species	Number	(%) of organic farmers
1.	One species	23	(12.78)
2.	Two species	72	(40.00)
3.	Three species	53	(29.44)
4.	More than 3 species	32	(17.78)

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Livestock species wise			i.e. feed produced from same agro-ecological regions. Livestock being indigenous and local which usually thrive well on locally available feed resources and moreover, less feed requirements might be the reasons for less dependence on external sources. Grazing alongwith the stall feeding was the major pattern of feeding cattle by majority (more than 70%) of the farmers. Grazing satisfies the animal natural behavior of grazing and balances the feeding. Moreover, the primary reason hill farmers keep cattle is to provide manure for the fields (Ashish, 1982), thus recycling the nutrients an important aim of organic farming. However, it was observed that though most of the farmers were feeding animals adequately, they were not much aware of balanced feeding whereas, proper nutrition does a lot in improving on the animal's immune system, production as well as reproduction. Hence, farmers should be trained and educated so as to make them knowledgeable to improve the production as well as to meet health and welfare requirements.
S.No	Species	(%) of organic farmers	
1.	Cattle	149 (82.78)	Livestock being indigenous and local which usually thrive well on locally available feed resources and moreover, less feed requirements might be the reasons for less dependence on external sources. Grazing alongwith the stall feeding was the major pattern of feeding cattle by majority (more than 70%) of the farmers. Grazing satisfies the animal natural behavior of grazing and balances the feeding. Moreover, the primary reason hill farmers keep cattle is to provide manure for the fields (Ashish, 1982), thus recycling the nutrients an important aim of organic farming. However, it was observed that though most of the farmers were feeding animals adequately, they were not much aware of balanced feeding whereas, proper nutrition does a lot in improving on the animal's immune system, production as well as reproduction. Hence, farmers should be trained and educated so as to make them knowledgeable to improve the production as well as to meet health and welfare requirements.
2.	Buffalo	132 (73.00)	
Goat	88 (49.00)	4. Poultry	
74	(41.00)	5. Rabbits	
02	(01.10)	6. Horses	
		01 (0.50)	
Farming system			
Mixed / integrated	180	(100.00)	
Animal husbandry practices of organic farmers			
<p>Breeds and breeding : The use of well-adapted breeds and safeguarding the indigenous animal genetic resources alongwith maintenance of diversity is one of the major characteristics, given much emphasis in organic production systems. About 83 per cent of registered farmers had cattle, 73 per cent with buffalo and 49 and 41 per cent farmers with goat and poultry species, respectively. Over 80 per cent of cattle and buffalos belong to <i>desi</i> breeds, whereas, in case of goat and poultry, desi variety constituted 100 per cent. 87.92 per cent and 68.18 per cent of farmers were using natural service method for cattle and buffaloes, respectively.</p> <p>Organic farmers were feeding the livestock with homemade concentrates to the extent of 77.50 per cent, whereas, roughages were met 42.50 per cent from own farm and 47.50 per cent from forest sources,</p>			
Table 2: Animal husbandry practices of organic farmers			
Breeds and Breeding			Number (%) of organic farmers
S.No	Species	Desi (nos.)	Breeding technique - Natural service
1.	Cattle	669 (86.99)	131 (87.92)
2.	Buffalo	283 (80.62)	90 (68.18)
3.	Goat	609 (100.00)	88 (100.00)
4.	Poultry	733 (100.00)	74 (100.00)
Feed and Feeding			Source
1.	Concentrate	Home made	% met
2.	Roughage	Own farm	77.50 %
		Forest	42.50 %
3.	Grazing	Provided	47.50 %
4.	Feeding	Adequately	75 % of farmers
			137 (76.12)
Health care			Number (%) of organic farmers
1.	Preventive management		141 (78.33)
2.	Traditional practices		110 (61.11)
Management			Number (%) of organic farmers
Housing	Tethering with sufficient free movement		113 (62.78)
Calf management	Colostrum feeding		155 (86.00)
	Weaning		34 (18.80)
Mutilation practices	Vaccination		13 (07.22)
	Castration		125 (69.54)
	Branding		40 (22.22)

that they follow traditional methods of treatment i.e. herbal based Ayurvedic medicines (plant products). Farmers' traditional knowledge and maintenance of indigenous breeds which were well adaptable to the local systems with low to average production levels and disease resistance might be the reasons that most of the farmers not depending much on curative measures. However, it seems that farmers were not aware of efficacy of the therapies they were following, which were transmitted over generations; hence, need to be tested for proper scientific validity, as required in certification process.

Most (63.64%) of the farmers were tethering animals with sufficient free movement and Farmers were using more than one method of protective measures according to their convenience and availability of materials. Calf was being given colostrum by majority (86.00%), whereas, practice of weaning and vaccination were followed by few respondents only. Mutilations practices are not allowed in organic livestock production unless recommended by a veterinarian. Whereas, farmers in majority (69.44%) were castrating their draft animals and branding was practiced by 22.22 percent of farmers which might be associated with certain beliefs of the farmers living in mountain areas (Table 2).

Conclusion

Under organic livestock production systems, it is expected that- organic meat, poultry and egg products come from farms that have been inspected to verify that they meet rigorous standards which mandate the use of organic feed, prohibit the use of antibiotics, give animal's access to outdoor, fresh air and sunlight (Chander, 2006), wherein many of the practices of organic farmers were more or less meeting the Indian National Standards for Organic Production (NSOP, 2002) recommended developed by NPOP of India. But farmers as such are not oriented towards organic livestock farming to get their farms certified as required in organic production systems. Hence, in addition to local demand and also keeping in view of the export demand for the livestock products it is necessary to provide in-puts to the organic farmers in the form of technical know-how so as to enable their livestock

systems to modify to be certified which is mandatory in organic production systems.

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References

1. Alroe, H.F.; Vaarst, M. and Kristensen, E.S. (2001): *Journal of Agricultural and Environmental Ethics* (14): 275-299.
2. Ashish, M. (1992): A suggested statement of problems. Working paper presented to the task force for the study of development in the Himalayan region. Planning Commission, Government of India, New Delhi.
3. Chander, M. (2006): Organic Livestock Farming: An Overview. In Kumar Sanjay.; Rathore, R.S.; Mukherjee, R.; and Chander, M. (eds.) Organic Animal Husbandry Concept, Standards and Practices. Division of Extension Education, Indian Veterinary Research Institute, India, 1-15pp.
4. Chander, Mahesh; Sanjay Kumar; R.S. Rathore; Reena Mukherjee; N.Kondaiah and H.N.Pandey. (2007): Organic vis-a-vis Conventional livestock production potential in India. In: Papers submitted to the International Conference on Organic Agriculture and Food Security, FAO, Rome, Italy, 3-5 May 2007, pp.48-49.
5. NSOP (2002): National programme for organic production containing the standards for organic products. Department of Commerce, Ministry of Commerce and Industry, Government of India.
6. Rahmann, G. (2001): The Standards, regulations and legislation required for organic ruminant keeping in the European Union. In: EAAP publication number 106. Organic Meat and milk from ruminants. Proceedings of a joint International conference organized by the Ethnic society of Animal Production and the British Society of Animal Sciences. Athens, Greece, October 4 to 6, 2001. (eds.). Kyriazakis, G. Zervas.pp-15-26.

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