



CONVERSION FROM NON-ORGANIC TO ORGANIC DAIRY FARMING – FARMERS' CONSTRAINTS AND REDRESSAL

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ABSTRACT

Organic farming is a production system which avoids or largely excludes the use of synthetic compounded fertilizers, pesticide, growth regulators and livestock feed additives. Though organic farming has many advantages like food safety, environmental and health issues and quality, conversion to organic dairy farming is meager and negligible, so it is important to identify drivers and the barriers affecting the decision in favour of organic dairy farming. This paper focuses on listing the constraints faced by the farmers in conversion to organic dairy farming as; 'non-existence of an adequate extension support to dairy farmers in converting to ODF' (94.17%), 'lack of knowledge about conversion plan details (90.83%)', 'lack of knowledge about the maintenance of records (90.00%)' and 'stakeholders are not aware of certification norms (83.33%)' were ranked as I, II, III and IV respectively. Suggestions to overcome constraints faced by the respondents were ranked according to their response and highest rank was allotted to 'providing incentives in the form of natural inputs like fodder, proper guidance and regular monitoring (91.67%)', II and III ranks were given to 'complete integrated farming system's package of practices should be developed and promoted (81.67%)' and 'promoting ODF with integrated farming system to reduce cost of cultivation (79.17%)' respectively.

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INTRODUCTION

The country has vast potential for adoption of organic farming as it is endowed with a wide variety of organic sources of nutrients, wide diversity of climate, topography, traditional farming systems, existence of large rain-fed area, tribal/nomadic populations, illiterate farmers with poor purchasing power and vast dry lands which have not provided enough opportunities to the farming communities for intensive use of chemicals in many parts of the country. Organic production is progressively coming from consumer's choice and farmer's movement, which cannot be ignored.

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Consumers concern about the production systems that ensure safety and quality, preserve the environment, as well as promote good welfare of animals and humans in the production chain.

The demand for organically grown produce is increasing worldwide, with consumers concern about minimal chemical inputs and high welfare standards. But poor extension support, lack of knowledge about conversion plan details, unawareness about the maintenance of records and certification norms were some of the issues of concern for moving towards organic dairy farming. This paper discuss the constraints faced by the farmers and suggestions to overcome the constraints on organic production systems.

Table 1. Distribution of respondents according to perceived constraints faced in converting non-organic to organic dairy farming n=120

S.No	Statements	Frequency	Percentage (%)	Ranking
I.	Technological			
1.	Stakeholders are not aware of certification norms	100	83.33	IV
2.	Little knowledge on the requirements for the processing of products	62	51.67	IX
3.	Lack of knowledge about the maintenance of records	108	90.00	III
4.	Lack of knowledge about conversion plan details	109	90.83	II
5.	Lack of availability of organically allowable inputs	42	35.00	X
6.	Stringent nature of the organic dairy production standards	36	30.00	XI
7.	Lack of knowledge about market intelligence and market networks	33	27.50	XII
II.	Economical			
8.	ODF is financially not worthwhile	65	54.17	VIII
9.	Increased cost of organic dairy farming	68	56.67	VII
III.	Research and extension			
10.	Non-existence of an adequate extension support to dairy farmers in converting to ODF	113	94.17	I
11.	Lack of knowledge on quarantine, prevention and stringently following them	82	68.33	VI
12.	Lack of trainings in different areas of organic dairy farming	98	81.67	V

MATERIALS AND METHODS

In the course of pilot study, the investigator took the opportunity of collecting the first hand information with regard to the constraints faced in conversion to organic dairying through informal discussion with the dairy farmers, animal husbandry field functionaries and with consultation of available literature. Accordingly, 16 constraints were identified and sub-divided into technological, economic and research and development for eliciting the responses from the farmers. The constraints perceived by the respondents in the study area were analyzed based on farmers' responses viz, 'yes' and 'no' with scoring 2 and 1 respectively. Based on farmers responses, frequency and percentages were calculated and ranking was given accordingly.

RESULTS AND DISCUSSION

Constraints faced by dairy farmers in converting non-organic to organic dairy farming

Technological: From Table 1, it was indicated that technological constraints were ranked in the following order 'lack of knowledge about conversion plan details (90.83%)', 'lack of knowledge about the maintenance of records (90.00%)', 'stakeholders are not aware of certification norms (83.33%)', 'little knowledge on the requirements for the processing of products (51.67%)', 'lack of availability of organically allowable inputs (35.00%) then stringent nature of the organic dairy production standards (30.00%)' and 'lack of knowledge about market intelligence and market networks' (27.50%). Farmers were practicing closely organic dairy related practices but due to lack of knowledge about the process of conversion to organic dairy farming might be the reason for the above trend. These results are in line with the findings of Odhong *et al.* (2014), Lokhande *et al.* (2012), Oruganti (2011), Nemes (2009) and Subrahmanyeswari & Chander (2008a).

Economical: From Table 1, it was evident that among the economic constraints 'increased cost of organic dairy farming (56.67%)' and 'ODF is financially not worthwhile (54.17%)'. As according to the views of the farmers, maintaining animals naturally is difficult as organic inputs are costly and sustainability of the farm, Savitha (2009).

Research and Extension: The findings from Table 1 indicated that research and extension were given in ranking order as 'non-existence of an adequate extension support to dairy

farmers in converting to ODF (94.17%)', 'lack of trainings in different areas of organic dairy farming (81.67%)', 'lack of knowledge on quarantine, prevention and stringently following them (68.33%)'. The farmers in the study area did not find research and extension support from government agencies might be the reason for above result. These are in line with the findings of Nemes (2009) and Savitha (2009).

Suggestions given by the dairy farmers in converting non-organic to organic dairy farming: Technological: The results from the Table 2, it was evident that the technological suggestions gave by the respondents in ranking order were 'training on basic standards, organic production methods, documentation, inspection and certification to the promoting agencies (77.50%)' 'increase awareness on processing of organic dairy products by trader, NGOs and GO's' (60.83%), 'Stakeholder training programmes on certification norms (68.33%)'. The reason for the above results might be that the farmers of the study area required training to improve their knowledge and skill in organic dairy farming. The results drew the support from the findings of Pereira *et al.* (2013) and Patil (2008).

Economical: The findings from the Table 2, it was clear that the suggestions on economical issues in ranking order were presented as follows 'incentives may be provided in the form of natural inputs like fodder, proper guidance and regular monitoring (91.67%)', 'farmers who want to do organic dairying may be supported by the Government who are already raising organic crops (60.83%)', then by 'encouragement and support through SHGs, dairy cooperatives, village level associations to take up ODF (58.33%)'. The above trend might be due to fact that farmers of the study area were not motivated through incentives or inputs to convert non-organic dairy farming to organic dairy farming. These are in line with the findings of Singh and George (2012), Rezvanfar (2011), Subrahmanyeswari & Chander (2008a).

RESEARCH AND EXTENSION

The results from the Table 2, brought out that ranking order of suggestions opined by the farmers in research and extension were, 'complete integrated farming system's package of practices should be developed and promoted (81.67%)', followed by 'promoting ODF with integrated farming system to reduce cost of cultivation (79.17%)', followed by 'increase investment for research in organic sector and scale up projects to generate scientific information on organic dairy farming (45.83%)', followed by 'establishment of a monthly

Table 2. Distribution of respondents according to perceived suggestions in converting non-organic to organic dairy farming n=120

S.No	Statement	Frequency	Percentage (%)	Ranking
I.	Technological			
1.	Stakeholder training programmes on certification norms	82	68.33	V
2.	Increase awareness on processing of organic dairy products by trader, NGOs and GO's	93	60.83	VI
3.	Training on basic standards, organic production methods, documentation, inspection and certification to the promoting agencies	73	77.50	IV
II.	Economical			
4.	The farmers who want to do organic dairying may be supported by the Government who are already raising organic crops	73	60.83	VI
5.	Incentives may be provided in the form of natural inputs like fodder, proper guidance and regular monitoring	110	91.67	I
6.	Encouragement and support through SHGs, Dairy cooperatives, village level associations to take up ODF	70	58.33	VII
III.	Research and Extension			
7.	Complete integrated farming system's package of practices should be developed and promoted	98	81.67	II
8.	Promoting ODF with integrated farming system to reduce cost of cultivation	95	79.17	III
9.	Increase investment for research in organic sector and scale up projects to generate scientific information on organic dairy farming	55	45.83	VIII
10.	Strengthening of linkages and cooperation between Government, private sector and NGOs on the National level	39	32.50	X
11.	Establishment of a monthly information bulletin for organic farming, local and national prices and technical information	53	44.17	IX

information bulletin for organic farming, local and national prices and technical information (44.17%)', followed by 'strengthening of linkages and cooperation between Government, private sector and NGOs on the national level (32.5%)'. The respondents in the study area were in need of research and extension support to adopt organic dairy farming which has lot of technicalities and might be the reason for above trend. The results drew the support from the findings of Madelrieux and Mornas (2013), Thippeswamy (2013), Nemes (2009) and Subrahmanyeswari & Chander (2008c).

Conclusion

Even though the business-minded and progressive farmers were planning to convert seem to be less organically oriented. As majority of the farmers in our country are marginal and small farmers they perceived that the higher investments and low output at the initial stages of organic farming, labour intensive, disease prevalence and very limited usage of drugs in organic dairy farming, perishable nature of the dairy products and poor marketing channel of the milk and milk products to the urban places demotivates the producers to go for organic dairy farming. Although we may argue that there is a potential for organic dairy farming but there is still a need for effort and support from the government, feasible policies keeping in view of farmers' constraints and suggestions for promoting organic dairy farming among the majority of the farmers in India.

REFERENCES

- Lokhande, J.P., Jha, S.K. and Vaidya, M.D. 2012. Constraints perceived by the dairy farmers in adoption of scientific dairy farming practices, *Journal of Dairying, Foods and Home Sciences*, 2012 Vol. 31 No. 1 pp. 42-46.
- Madelrieux, S. and Mornas, F.A. 2013. Withdrawal from organic farming in France. *Agronomic Sustainability Development*, (2013) 33:457-468.
- Nemes, N. 2009. Comparative Analysis of Organic and Non-Organic Farming Systems: A Critical Assessment of Farm Profitability, Natural Resources Management and Environment Department, Food and Agriculture Organization of the United Nations, Rome, June 2009.
- Odhong, C., Wahome, R.G., Vaarst, M., Kiggundu, M., Nalubwama, S., Halberg, N. and Githigia, S. 2014. Challenges of conversion to organic dairy production and prospects of future development in integrated smallholder farms in Kenya, *Livestock Research for Rural Development* 26 (7) 2014.
- Oruganti, M. 2011. Organic Dairy Farming – A New Trend in Dairy Sector, *Veterinary World*, 2011, Vol.4 (3):128-130(review).
- Patil, M. 2008. A Study on production and marketing management behaviour of organic vegetable growers in Belgaum District. M.Sc (Agricultural Extension Education) Thesis, University of Agricultural Sciences, Dharwad.
- Pereira, A.B., Brito, A.F., Townson, L.L. and Townson, D.H. (2013). Assessing the research and education needs of the organic dairy industry in the northeastern United States, *American Dairy Science Association*, 2013 Nov;96(11):7340-8.
- Rezvanfar, A. Eraktan, G. and Olhan, E. 2011. Determine of factors associated with the adoption of organic agriculture among small farmers in Iran, *African Journal of Agricultural Research*, Vol. 6(13), pp. 2950-2956, 4 July, 2011.
- Savitha, B. 2009. Organic farming in Andhra Pradesh: Potentials and constraints- A stakeholder analysis. Ph. D Thesis, Acharya N.G. Ranga Agricultural University.
- Singh, S. and George, R. 2012. Organic Farming: Awareness and Beliefs of Farmers in Uttarakhand, India, *Journal of Human Ecology*, 37(2): 139-149 (2012).
- Subrahmanyeswari, B. and Chander, M. 2008a. Livestock Production Practices of Registered Organic Farmers in Uttarakhand State of India. 16th IFOAM Organic World Congress, Modena, Italy, June 16-20, 2008.
- Subrahmanyeswari, B. and Chander, M. 2008c. Animal Husbandry practices of organic farmers: An Appraisal, *Veterinary World*, Vol.1(10) 303-305.
- Thippeswamy, E. 2013. Comparative Analysis of Organic and Inorganic Food, *Journal of Agriculture and Veterinary Science*, Volume 4, Issue 6 (Sep. - Oct. 2013), PP 53-57.