

CHALLENGES OF ORGANIC FARMING FACED BY NEPALESE FARMERS

Raj Kumar Banjara

PhD Scholar, Mewar University, Rajasthan, India

ABSTRACT: *Organic farming can directly contribute in the better health and environment. It may be the better alternative for the problem of climate change and environmental degradation. Promotion of organic farming is necessary so the study is going to explore the challenges of organic farming faced by the Nepalese farmers. . The study was conducted in four districts: Kathmandu, Lalitpur, Bhaktapur and Dhading. Altogether, 578 organic farmers were selected purposively. Mixed method was used to collect the data. Statistical analysis was done for quantitative data and logical interpretation was done for qualitative data. The study explored the various challenges of organic farming: high investment and price of goods, low production, less selling because of the lack of knowledge among the consumers, limited market, no provision of compensation if production damaged, and lack of certification. Farmers requested to address all these problems of organic farmers to encourage the involvement for coming generation. Nepal government can study on the possible way of solution with the close interaction of organic farmers.*

KEYWORDS: Certification, Challenges, Farmers, Organic farming, Nepal

INTRODUCTION

“Organic farming is defined as a form of agriculture, which do not use chemical inputs in its production process, and enhancing the biological and ecological processes to promote soil fertility and good health of animals and plants (Gafsi, Le, & Mouchet, 2010, p. 4)”. Organic agriculture was first appeared as one of the importance sectors in Nepalese agriculture since 2059/060-2063/064, 10th Five Year plan. However, in present days many institutions, individuals and farmers are rigorously engaging in this field (Bhatta, Doppler, & KC, 2009, June). There are various local organic farming practices; some were practiced for last many years and some innovating new practices by farmers themselves in the form of learning by doing. At present, some organic products such as coffee, tea, honey, large cardamom, ginger etc are exported to international market (Bhatta, Doppler, & KC, 2009, June). The traditional system of agriculture in Nepal was organic but by passing of time, the practices changed more towards inorganic which is a direct threat to agriculture productivity, environmental quality and human health (Krishna P. Paudyal, 2010).

Tamang et al. (2011, 3 June) opine that numerous institutes and individuals think that organic movement in the context of Nepal is quite slow in motion just to lack of clear vision of the government and one-sided information flow from the different developmental projects. Bhatta et al. (2009, June) reviewed that the government past policy and programs, agriculture production particularly organic productions are never grasped in the perspective of the food. “The national agriculture policy 2061 clearly stated that the promotion of organic agriculture is only for export. The policy and program guided it from the promotion of business and emphasized has been given for earning more money but never seen from the own food and health” (Tamang, Dhital, & Acharya, 2011, 3 June). Hence, the literatures show that organic

farming is limited to export oriented products such as coffee, tea, large cardamom, ginger etc and in a certain group of farmers.

Among the individuals and institutions workings in organic agriculture and even in the farmers who are involving in the organic practices (few returning back to organic from the chemical agriculture) do not have its clear definitions. Organizations, individuals and farmers themselves seem to be not clear on what they are doing in this sector. So the exact measurement to measure the quality and standard of the organic products is also not clear. They cannot give proper and prompt answer why it is important and how much is organic and what are the technologies suitable in Nepalese condition. According to the study published in the *Organic Agriculture* journal - Quality traits are highly focused upon in the marketing of organic food products. There is a need to define and measure quality as consumers seem to have preconceived notions about the superior health value and taste of organic compared to non-organic products. A commonly held opinion among many consumer groups is that organic farming guarantees optimum quality, despite the fact that this remains unproven. (Randi, et al., 2016)

Various interactions and discussions among relevant academicians/researches shows that many farmers engaged in organic agriculture are not confident because some pests and diseases are very hard to control without chemical pesticides. Due to lack of standard guidelines from the government, there are not proper definitions and methods to make the farming practices organic. Local farmers knowingly or unknowingly practicing organic agriculture and have invented various organic techniques but we have not acknowledged them for their contribution. Nepalese organic products reach the standard for the Nepalese market but competing with the international market is too hard. Because of the complicated certification process, marketing of organic product within our own country is more effective than competing with the international market. Due to the lack of accredited laboratory facility, several cases of return of the certified organic products (honey) had been seen in the recent past. Great possibility of organic farming exists because many places are still in organic in nature and yet to be not reached the modern technologies and chemical fertilizers. For example- *Jumla* (one of the seventy-five districts of Nepal) is already announced organic district by the government, as chemical fertilizer and pesticides are yet to be not reachable. This is the traditional practices of the farming which is very close to the organic practices. Such declaration of the organic area are only romanticized which cannot reach the standard of organic certification process. Many of the farmers in Nepal face problems that their organic products don't looks good in shape, size and colour in comparison with inorganic products. So they are in fear about consumer preference as they (consumer) prefer by evaluating with their eyes and feel but not with quality. The consumers are less concern about the way of production and nutrient content of the product. They think that organic products are expensive and hard to afford.

Consumers' lack of awareness and low domestic demand have resulted in an immature national organic market. (Asli, Yonggong, & Feng, 2016). At village level the local seeds are completely replaced by hybrid and imported varieties especially in cereals and vegetables.

It is believed that Nepalese farmers are more committed for the organic farming compared to other south Asian countries. But now a day's particularly youth are distracting from the agriculture field. They think once they have some academic degree, it's not good to work in agriculture field and playing with mud, plough etc. is not better choice as their career and move out from the village in search of employment in cities. Only few farmers are convinced that organic agriculture is possible and the organic pesticides and fertilizers can also contribute in better production as compared to the chemical inputs. Research organizations like Nepal

Agricultural Research Council (NARC), National Agricultural Research and Development Fund (NARDF) give least priority on organic farming. There are limited and scattered researches on organic farming, which are not properly documented and thus repeated on the limited issues.

The previous studies, organic farmers and experts has given their opinion regarding the challenges faced by the organic farmers in Nepal so the study is interested to explore the problem faced by organic farmers.

METHOD

The study was based on the descriptive design focusing on the analysis of farmers' opinion and experiences of challenges of organic agriculture. The study was conducted in four districts: Kathmandu, Lalitpur, Bhaktapur and Dhading. Altogether, 578 organic farmers were selected from the 4 districts. Purposive sampling techniques was applied to select the respondents because the practice of organic farming was found very less so study should explore the proper respondents very purposively. The household head that regularly involved in farming and took decision about its farming/production, marketing and selling were asked the question. A series of social survey methods was used. By applying participatory methods, opinion of local people regarding the challenges of organic farming was collected. Both the primary and secondary data was used for the study. The data of this study was both qualitative and quantitative because the study designed was based on mixed method. Quantitative sample had given the numerical figure and qualitative sample had provided the logic and reason. The quantitative data obtained from the field was edited, tabulated and finally analyzed through applied statistics and using an appropriate computer package, namely "Statistical Package for Social Sciences (SPSS)", which facilitates the process of data analysis in a more precise and appropriate way. Statistical tools like Frequency table from Crosstab and Chi-square test were used to meet the research objective.

RESULT AND DISCUSSION

Challenges of Organic farming faced by farmers

The farmers were said about the challenges of organic farmers. The data presented in the table no.24 showed that in total 42.7% had said that the 'high cost of production', 40.1% farmers said that 'lack of market', 46.9% said the 'low production', 11.2% said the 'less selling', 23.2% said the 'lack of labour for farming', 47.9% said the 'transportation and storage problem' and 10% said that organic certification and networking with international market.

Table 1: Challenges of Organic farming faced by farmers

		Responses	
		N	Percent
Problem of organic farming faced	High cost	247	42.7%
	Lack of market	232	40.1%
	Low production	271	46.9%
	Less selling	65	11.2%
	Lack of labour for farming	134	23.2%
	Transportation and storage problem	277	47.9%
	Others (certification, international market)	58	10.0%

Source: Field Survey, 2015

The study done by Sujata Tamang, Madhav Dhital and Umesh Acharya reported that “Nepalese organic products reach the standard for the Nepalese market but competing with the international market is too hard. Because of the complicated certification process, marketing of organic product within our own country is more effective than competing with the international market. Due to the lack of accredited laboratory facility, several cases of return of the certified organic products (honey) had been seen in the recent past” (Tamang, Dhital, & Acharya, 2011, 3 June, p. 4).

Access of Certification of Organic farming

From the discussion of farmers, it was found that certification of organic products are important to ensure the quality of organic product for consumers. Consumers ask about the logo or trademark which can signify the quality of product. When farmers were asked about the process of organic certification, only 4.9% said that it was easy to get certification whereas 44.5% said that it was difficult followed by 50.5% farmers had no knowledge of process of certification.

Table 2: Access of Certification of Organic farming

Access of Certification of Organic farming							
			Name of Districts				Total
			Kathmandu	Lalitpur	Bhaktpur	Dhading	
Process of certification	Easy	Count	2	12	1	14	29
		% in total	6.9%	41.4%	3.4%	48.3%	100.0%
		% within districts	4.0%	7.2%	0.9%	5.4%	4.9%
	Difficulty	Count	21	118	61	61	261
		% in total	8.0%	45.2%	23.4%	23.4%	100.0%
		% within districts	42.0%	71.1%	54.5%	23.6%	44.5%
	Don't know	Count	27	36	50	183	296
		% in total	9.1%	12.2%	16.9%	61.8%	100.0%
		% within districts	54.0%	21.7%	44.6%	70.9%	50.5%
Total	Count	50	166	112	258	586	
	% in total	8.5%	28.3%	19.1%	44.0%	100.0%	
	% within districts	100.0%	100.0%	100.0%	100.0%	100.0%	
Chi-Square Tests							
		Value	Df	Asymp. Sig. (2-sided)			
Pearson Chi-Square		109.266 ^a	6	.000			

Source: Field Survey, 2015

The data showed that more than 50% farmers were found unknown about the process of organic certification who were doing the organic farming. It is recommended to concerned Government and non-government organizations to disseminate the depth knowledge of organic farming including the process of organic certification and its relative advantage for farmers. The statistical analysis of Pearson Chi-square test found that there was significant association between the farmers of four districts regarding the problem of organic certification. The analysis also showed that 'certification of organic farming is the main challenges of farmers', because in total only around 5% farmers felt the process of certification was easy but rest of farmers replied that either it was difficult or they were unknown about its process.

Information note of organic agriculture prepared by EuropeAid also highlighted the problem of third party certification and its alternative. It stated that third party certification appears to be the most reliable tool for guaranteeing the organic status of a product in the anonymous market, but it has the significant drawback of cost, usually born by the producer. However, this is not the universal tool for organic quality assurance; other systems include participatory guarantee systems – managed at low cost by local groups of producers themselves (EuropeAid, June 2012). Certification is important from the perspective of sustainability and market expansion of organic goods. Organic agriculture Certification policy of Nepal Government has also very clearly guided about the certification of organic product through 'Participatory Guarantee System (PGS) as the alternative of Third Party Certification system. The policy has clearly given the authorities to customize the certification rules to the local growers and stakeholders (GoN:Agribusiness Promotion and Marketing Development Directorate, 2013 (B.S. 2070) , pp. 63-65).

Loss from the organic products

The data presented in the table no. 28 showed that in total 8.4% reported that many time they had faced the loss from the organic products whereas 62.8% said they lost sometimes and 28.8% said that they never faced any loss from the organic agriculture. From the study it was observed that the problem of loss or benefit was also affected from the location. If the farmers are very close to the market areas then they have no problem to sell their products but if they are doing organic agriculture in remote areas then they have to face the problem of transportation and storage during the time of selling.

Comparatively, more farmers (14.3%) of Kathmandu followed by 11.2% of Dhading, 9.8% of Bhaktapur and only 1.2% of Lalitpur faced the problem of loss in many times.

Table 3: Loss from the organic products

Crosstab							
			Name of districts				Total
			Kathmandu	Lalitpur	Bhaktapur	Dhading	
Loss from the organic products	Many times	Count	7	2	11	29	49
		% within total	14.3%	4.1%	22.4%	59.2%	100.0%
		% within districts	14.3%	1.2%	9.8%	11.2%	8.4%
	Sometimes	Count	35	100	78	154	367
		% within total	9.5%	27.2%	21.3%	42.0%	100.0%
		% within districts	71.4%	60.6%	69.6%	59.7%	62.8%
	Never	Count	7	63	23	75	168
		% within total	4.2%	37.5%	13.7%	44.6%	100.0%
		% within districts	14.3%	38.2%	20.5%	29.1%	28.8%
Total		Count	49	165	112	258	584

	% within total	8.4%	28.3%	19.2%	44.2%	100.0%
	% within districts	100.0%	100.0%	100.0%	100.0%	100.0%
Chi-Square Tests						
		Value	Df	Asymp. Sig. (2-sided)		
	Pearson Chi-Square	28.174 ^a	6	.000		

Source: Field Survey, 2015

The statistical analysis of Chi-square test found that there was significant association between the respondents of four districts regarding the problem of facing loss from the organic product in $P = .000$ significant level which rejected the null hypothesis.

Possibility to get compensation if organic agriculture is destroyed or lost

In connection with the data reported in loss from organic products, the farmers were asked about the compensation of organic agriculture if it was lost or destroyed. The response found that in total only 3.9% said that they had got the compensation of destruction or loss of organic products whereas 96.1% said that they never received such compensation.

District wise, 12% farmers of Kathmandu, 3% of Lalitpur, 3.6% of Bhaktapur and 3.1% of Dhading said they got the compensation. Regarding the facing the loss of organic agriculture was also high reported from the farmers of Kathmandu district than the other.

Table 4: Possibility to get compensation if organic agriculture is destroyed or lost

Name of districts Cross tabulation			Name of Districts				Total
			Kathmandu	Lalitpur	Bhaktapur	Dhading	
Compensation	Yes	Count	6	5	4	8	23
		% within total	26.1%	21.7%	17.4%	34.8%	100.0%
		% within districts	12.0%	3.0%	3.6%	3.1%	3.9%
	No	Count	44	161	108	249	562
		% within total	7.8%	28.6%	19.2%	44.3%	100.0%
		% within districts	88.0%	97.0%	96.4%	96.9%	96.1%
Total	Count	50	166	112	257	585	
	% within total	8.5%	28.4%	19.1%	43.9%	100.0%	
	% within districts	100.0%	100.0%	100.0%	100.0%	100.0%	

Source: Field Survey, 2015

CONCLUSION

Organic farming is good for the health and environment. It is guided by some standard rules and regulation also. Most of the concerned organization even in Nepal is also working in the field of organic promotion. Theoretically farmers are aware on the organic farming but it is difficult to do in practice. From the study, it was found that most of organic farmers shared that initial cost of organic farming is high and benefit is low. It takes 3 to 4 years at least to cover the investment so farmers should wait for benefit but it will give the long term benefit. Farmers also shared that organic market is very limit in the Nepal because still consumers are not aware on the use and benefit of organic products. Comparatively, prize of organic products are high so consumers do not prefer it very easily till they will not know the value of organic products.

Main challenge is the certification of organic products. There is 3rd party certification system in Nepal which is very costly and also lengthy paper work which is not possible for the economically poor and illiterate farmers. Farmers reported that there is no provision to get the compensation if their products will be lost by any nature disaster or man-made disaster. Organic farming needs the facilities of easy transportation and reasonable market value in time so that they can sell the fresh product. It was said that product could be damaged very soon because of the lack of proper storage facility.

The study had explored the many challenges of organic farmers which need to address very soon by Nepal Governments and concerned authorities so that organic farming can be sustain in long run. Organic farming can change the socio-economic status of farmers as well as can contribute in the rural development also. Healthy environment can develop the healthy society so it is recommended to find out the comprehensive way to address the challenges of organic farming to encourage the coming generation for their active involvement in organic farming.

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