

IMPLICATION OF DIFFUSION MODEL IN THE PROCESS OF ADOPTION & PRACTICES OF ORGANIC FARMING IN NEPAL

Raj Kumar Banjara

PhD Scholar, Mewar University, Rajasthan, India

ABSTRACT: *The theory of diffusion of innovation is very popular and widely tested theory in the process of diffusion of information among the wider society. Information system effects on the decision making process. Right information in right time can make the right decision. The aim of this study was to examine the implication of diffusion model in the process of adoption and practices of organic farming in Nepalese context. The study was conducted among the 578 farmers of four districts by selecting purposively. Structured questionnaires survey was done to collect their experiences. As a theoretical process of diffusion model: initially farmers collected the information from neighbors, radio & TV and other sources and thought about its cost and benefit and decide to adoption. After its practice, more than 95% felt satisfaction and suggested to other people also to involve in the organic farming. Finally, more than 98% confirmed its necessity of continuation in future also. No any farmer decided to discontinue of organic farming in near future. There is significant improvement in the socio-economic status of farmers after involvement in organic farming so that farmers are eager to continue it. Some of the farmers have reported its challenges also which needs to be addressed by the government authorities and other concerned organization to increase the numbers of organic farmers.*

KEYWORDS: Diffusion Model, Implication, Organic farming, Nepal, Process & Practices

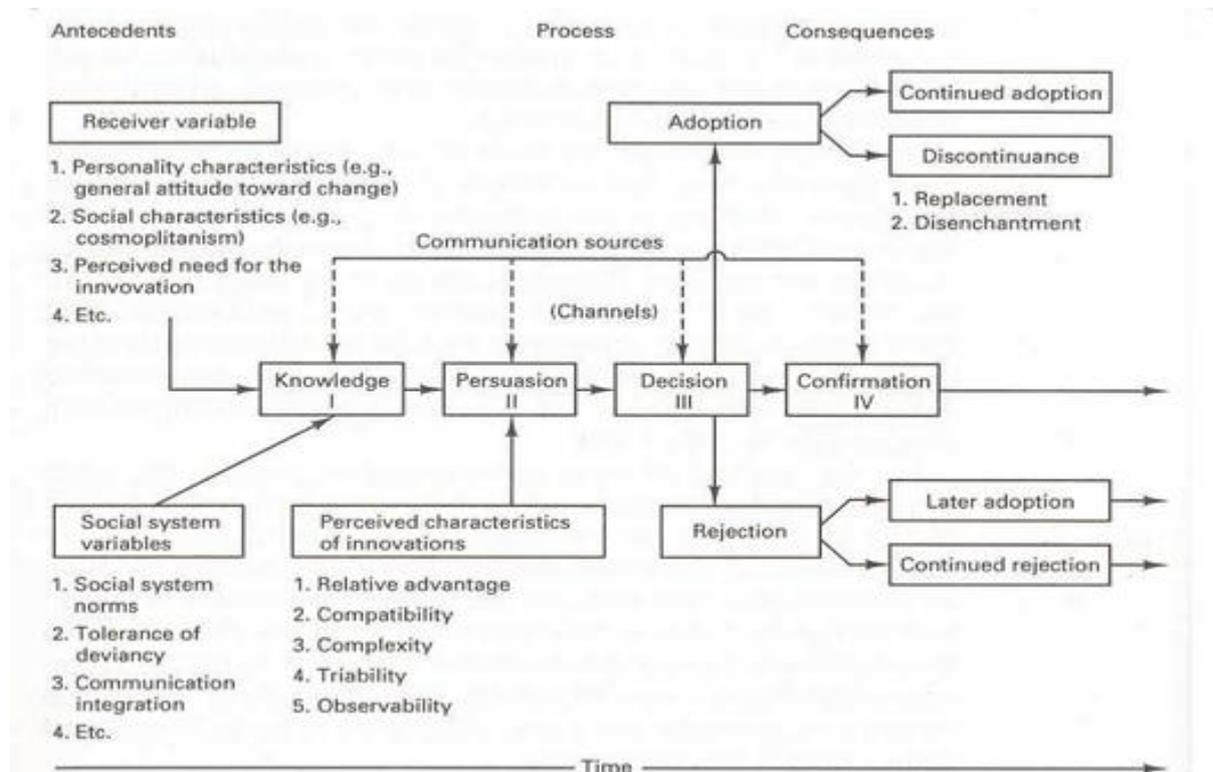
INTRODUCTION

Everett M. Rogers is widely known as the inventor of the "Diffusion of Innovation" theory from his research on how farmers adopt agricultural innovations. Diffusion is defined as the communication process by which a new idea or new product is accepted by the market, while the rate of diffusion is defined as the speed that new idea spreads from one consumer to the next. Adoption, similar to diffusion, also deals with the psychological decision making processes of the individual, rather than those of an aggregate market (Rogers, 2003).

Diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system. Diffusion is a special type of communication concerned with the spread of messages that are perceived as new ideas. An innovation, simply put, is "an idea perceived as new by the individual." An innovation is an idea, practice, or object that is perceived as new by an individual or other unit of adoption. The characteristics of an innovation, as perceived by the members of a social system, determine its rate of adoption (Rogers, Diffusion of innovations (4th edition), 1995). As expressed the definition of diffusion model, innovation, communication channels, time, and social system are the four key components of the diffusion of innovations (SAHIN, 2006, p. 14). Rogers has defined the four key elements of diffusion of innovation. Rogers described an innovation: "An *innovation* is an idea, practice, or object that is perceived as new by an individual or other unit of adoption" (Rogers, 2003, p. 12). The second element of the diffusion of innovations process is communication channels. For Rogers, communication is "a process in which participants create

and share information with one another in order to reach a mutual understanding” (2003, p. 5). Use of *mass media* and *interpersonal communication* are the main sources of dissemination of information. According to Rogers, the time aspect is ignored in most behavioural research. He argues that including the time dimension in diffusion research illustrates one of its strengths. The innovation-diffusion process, adopter categorization, and rate of adoptions all include a time dimension. The social system is the last element in the diffusion process. Rogers defined the social system as “a set of interrelated units engaged in joint problem solving to accomplish a common goal” (2003, p. 23). Since diffusion of innovations takes place in the social system, it is influenced by the social structure of the social system. For Rogers (2003), structure is “the patterned arrangements of the units in a system” (p. 24). He further claimed that the nature of the social system affects individuals’ innovativeness, which is the main criterion for categorizing adopters (SAHIN, 2006, pp. 14-15).

The following conceptual Model of diffusion of Innovation was designed and explained by the Rogers, E.M. in his book. It explains about the process of diffusion of innovation and its acceptance or rejection by individual.



Sources: (Rogers, *Diffusion of innovations (4th edition)*, 1995)

In the process of diffusion of innovation, before confirmation of acceptance or rejection of innovation, individual collects the relevant knowledge of new innovation. The knowledge can be affected by the receiver characteristics (attitude, needs, experiences, age, education, location) as well as social system (norms, practices, communication, and marketing). On the basis of knowledge and information, receiver develops their perception towards the innovation when they analyze the relative advantage, compatibility complexity...etc. the perceived characteristics of innovation determine the positive or negative decision of receiver. In this phase, either they accept or reject then finally they confirm the status of new innovation in their

practice. The study is basically linked with the point of 'adoption' that the farmers who had already accepted the new technology of organic agriculture and adopted the farming practices. Rogers (2003) has also discussed about the cumulative numbers of adopters in the phase of adoption process through the S-curve in 'Diffusion Model'. He has explained about the five types of adopters in the adoption process: Innovators, Early Adopters, Early Majority, Late Majority and Laggards. Rogers has distinguished five groups of adopters as ideal types:

Innovators

The first 2.5% of adopters are called "Innovators". Innovators are venturesome and educated, have multiple sources of information and show greater propensity to take risks. They appreciate technology for its own sake and are motivated by the idea of being a change agent in their reference group. They are willing to tolerate initial problems that may accompany new products or services and are willing to make shift solutions to such problems.

Early Adopters

The next 13.5% of adopters are "Early Adopters". They are the social leaders, popular and educated. They are the visionaries in their market and are looking to adopt and use new technology to achieve a revolutionary breakthrough that will achieve dramatic competitive advantage in their industries. They are attracted by high-risk, high-reward projects and are not very price sensitive because they envision great gains in competitive advantage from adopting a new technology. They typically demand personalized solutions and quick-response, highly qualified sales and support.

Early Majority

The next 34% of adopters are formed by the "Early Majority". They are deliberate and have many informal social contacts. Rather than looking for revolutionary changes to gain productivity enhancements in their firms, they are motivated by evolutionary changes. They have three principles in the adoption of new technology:

1. "When it is time to move, let's move all together". This principle defines why adoption increases so rapidly in the diffusion process and causes a landslide in demand.
2. "When we pick a vendor to lead us to the new paradigm, let us all pick the same one". This principle explains which firm will become the market leader.
3. "Once the transition starts, the sooner we get it over with, the better". This principle shows why the transition stage occurs rapidly.

Late Majority

The next 34% of adopters are the "Late Majority". They are skeptical, traditional and of lower socio-economic status. They are very price sensitive and require completely preassembled, Bullet proof solutions. They are motivated to buy technology just to stay even with the competition and often rely on a single, trusted adviser to help them make sense of technology.

Laggards

The last 16% of the adopters consists of "Laggards". Laggards are technology skeptics who want only to maintain the status quo. They tend not to believe that technology can enhance

productivity and are likely to block new technology purchases. Roger's model has found wide appeal and application in such disciplines as marketing and management science.

It is found from the study of European Society for Rural Sociology conducted by Susanne Padel that the theory of Diffusion of Innovation was tested in several countries over a period of approximately 20 years and critically assessed the relevancy of the framework of adoption model in the context of conversion to organic farming. The findings of study concluded that the diffusion model is effective to explain the process of conversion to organic farming in general, but subject to the conversion decision of the individual farmer cannot be explained on the basis of traditional personal characteristics of the adopters alone; other factors need to be considered, such as policy support and the development of the markets as well as the attitude towards organic farming in the agricultural community and the institutional development (Padel, 2001).

Considering the wider theoretical application of theory of diffusion of innovation, the study examines the implication of diffusion model in the process of adoption and practice of organic farming in Nepalese context.

METHOD

The study is based on the analytical design. Existing theoretical idea of theory of innovation of diffusion was reviewed and described in the context of Nepalese organic farming adoption process. Qualitative & quantitative both methods were adopted to generate the primary as well as secondary data. The study was conducted in the four districts: Kathmandu, Lalitpur, Bhaktapur and Dhading of Nepal. Purposive sampling technique was used to select the respondents. One person was taken from the one household. Semi-structured interview checklist was done to collect the opinion of farmers in relation to their process of information collection and decision making to adopt the organic farming, as well as their current status and future decision; whether they were thinking about the continuation of organic farming or thought to quit. Narrative approach was used to analyze the qualitative data and statistical analysis was done for the quantitative data.

RESULT AND DISCUSSION

There was 66.9% male followed by 33.1% female participated in the study. The district wise data showed that in total 8.5% organic farmers from Kathmandu, 28.3% from Lalitpur, 19.1% from Bhaktapur and 44% from the Dhading district participate in the study. Minimum 15 to maximum 85 years old people were involved in the organic agriculture. There was 25.9% farmers were illiterate followed by 30.5% had primary level education, 9.7% had lower secondary level, 14.5% had secondary level, 10.9% had intermediate level, 6.3% had Bachelor level and 2% had master and above level education. In total, 27.3% said that they were doing the Coffee, 1% was doing Tea, 80.3% was doing Vegetable, 17.1% was doing Fruits, 18.2% was doing Spices, 2.6% was doing meat items (meat/fish/poultry), 28.7% were doing the livestock, 16.1% were doing milk and dairy products and 7.1% were doing others.

The conceptual idea is the overall framework of the study which shows the input, process and output of the study. The following conceptual idea was adopted to explain the process of

adopting & practice of organic farming in Nepal on the basis of idea of ‘Diffusion Model’. The following framework shows the change of farming practices from conventional to organic.

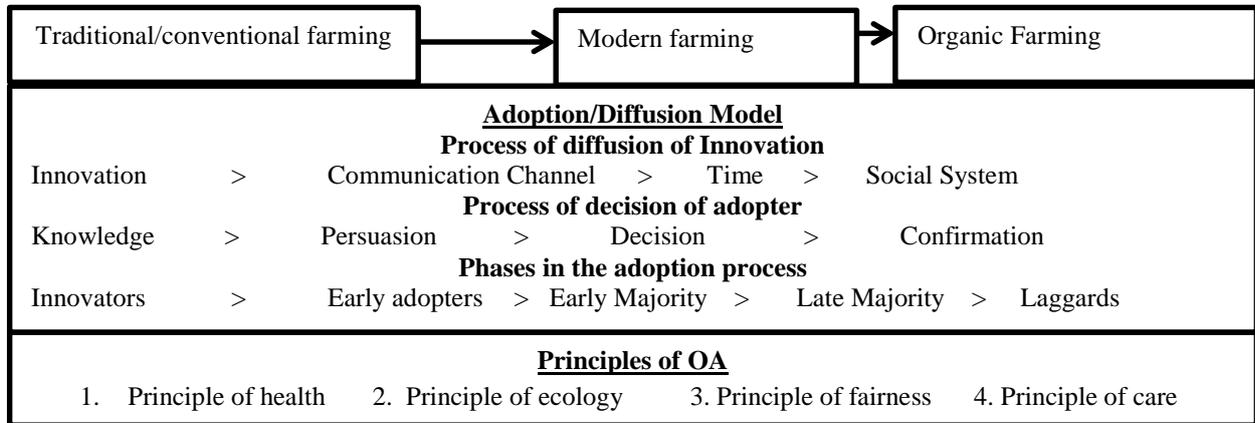


Figure 1: Conceptual Framework on study of organic farming

As the ideas of previous theory, the technological change of society is influenced by the diffusion of innovation. Diffusion is one process of communication through the different channel which spreads the certain message of particular ideas or goods. Diffused messages are perceived as the new ideas for the particular individual, group, society or organization. Similarly, in the process of agricultural changes, society develops their cognitive knowledge from the daily practices and tries to adopt the new knowledge also. Diffusion model talks about the main four key elements of diffusion of innovation; innovation, communication channels, time and social system. Society is dynamic and changing their norms, values and practices in certain time interval. The traditional/conventional practitioners developed their knowledge of agricultural practices as the new innovation and gradually in certain time interval, their innovation diffused to spread their knowledge of new technology and practices of agriculture which gradually adopted the modern technology. Technological changes of agriculture have positive and negative effects in social system. Social system stands as the receiver of new innovation. The above conceptual framework shows the process of changes that traditional agriculture changed into modern agriculture and knowledge of modern agriculture is again diffused into two parts: inorganic highly commercial farming and organic farming. Diffusion is one process of transforming knowledge from one generation to another generation or one social system to another social system. In this connection, in the name of modernization, farmer becomes the users of fertilizers and pesticides to double the production which finally affect the quality of soil, health of individual and environment. Because of the awareness on misuse of pesticides and its effect on human life, people have started the pure organic farming by using the scientific knowledge on the basis of standard of organic production.

By nature, people want to test the new ideas and innovation to make the life comfortable. With the changes of other parts of society, a farmer and expert of agriculture has built the new technology for the better promotion of agricultural product. As the theoretical explanation of 'Diffusion of Innovation Theory', people collect the information of new innovation and think about its use and benefit in their life and finally decide its acceptance or rejection. In the phase of 'decision', farmer decides on the basis of perceived knowledge of innovation. If they felt the relative advantages from the acceptance of new innovation then finally confirm the use of new innovation. In this study, data was collected from those farmers who already accepted the new

innovation of organic farming and discussed about the process of adoption of organic farming, their current experiences and future plan.

The primary data collected from the organic farmers show those experiences of organic farmers about the process of adoption, current experiences and future plan.

Knowledge of organic agriculture

Knowledge is power. Knowledge is a familiarity, awareness or understanding of someone or something, such as facts, information, descriptions, or skills, which is acquired through experience or education by perceiving, discovering, or learning. Knowledge can refer to a theoretical or practical understanding of a subject. Correct knowledge support people to do the decision. Background information of organic agriculture is important to decide to start it. There are certain principles of organic agriculture and it has relative advantage and disadvantage also so farmers should be aware it before starting it. The study had asked the farmers about the knowledge of organic agriculture. The data presented in the table no. 1 showed that in total 8.9% had said that they had very good knowledge followed by 30.7% had said that they had good and majority (60.4%) said that they had normal or basic level knowledge of organic agriculture.

From the data it was found that majority of the farmers had started the organic farming from the practical learning from the neighbor. They learned about the organic farming through the informal education so they have basis level knowledge.

Table 1: Knowledge of organic agriculture

			Name of Districts				Total
			Kathmandu	Lalitpur	Bhaktapur	Dhading	
Knowledge of organic agriculture	Very good	Count	5	19	7	21	52
		% within OA knowledge	9.6%	36.5%	13.5%	40.4%	100.0%
		% within districts	10.0%	11.4%	6.2%	8.1%	8.9%
	Good	Count	13	66	35	66	180
		% within OA knowledge	7.2%	36.7%	19.4%	36.7%	100.0%
		% within districts	26.0%	39.8%	31.2%	25.6%	30.7%
	Normal	Count	32	81	70	171	354
		% within OA knowledge	9.0%	22.9%	19.8%	48.3%	100.0%
		% within districts	64.0%	48.8%	62.5%	66.3%	60.4%
Total	Count	50	166	112	258	586	
	% within OA knowledge	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			14.707 ^a	6	.023		

Source: Field Survey, 2015

The statistical analysis found that there was significant association between the farmers of all four districts regarding the knowledge of organic agriculture in $P = .023$ at 95% confidence interval.

As a source of knowledge of organic farming; 52.2% farmers reported that they got the first time information from neighbor, followed by 20.6% got information from Agricultural office, 14.7% got from Radio & TV and rest reported the other media; books, trainings, exposures...etc. It is observed that the experience sharing by neighbor is most effective way of transforming the knowledge; farmers believe very easily on the information of their neighbor and it also influences their decision.

Motivational factors of doing organic agriculture

There must be certain motivational factors to do the organic agriculture so that youth to old generation are involved in this sector. In this connection, the study had asked the farmers about their motivation. The data presented in the table no. 11 showed that in total 56% said that they involved in organic agriculture because income could be high from organic agriculture. Similarly, 5.2% reported that they started by learning from other followed by 34.7% said that human health could be good from organic products, 2.2% said that it could help to make good environment, 0.3% said that it could build the social prestige and 1.6% reported the other motivational factors of organic agriculture.

When we observed the district wise data, 70.3% of Lalitpur followed by 70% Bhaktpur, 54% of Kathmandu and 40.9% of Dhading reported that they involved in organic agriculture because of the hope of high income. Similarly, 30% of Kathmandu, 22.4% of Lalitpur, 15.5% of Bhaktpur and 51% of Dhading reported that they involved in organic agriculture hoped that human health could be good. From the environmental perspective, 2% of Kathmandu, 2.4% of Lalitpur, 1.8% of Bhaktpur and 2.4% of Dhading said that they were motivated because the environment would be good from the organic agriculture.

Table 2: Motivational factors of doing organic agriculture

			Name of districts				Total
			Kathmandu	Lalitpur	Bhaktpur	Dhading	
Motivational factors	Income can be high	Count	27	116	77	104	324
		% within total	8.3%	35.8%	23.8%	32.1%	100.0%
		% within districts	54.0%	70.3%	70.0%	40.9%	56.0%
	Learning by others	Count	5	6	9	10	30
		% within total	16.7%	20.0%	30.0%	33.3%	100.0%
		% within districts	10.0%	3.6%	8.2%	3.9%	5.2%
	Human health will be good	Count	15	37	17	132	201
		% within total	7.5%	18.4%	8.5%	65.7%	100.0%
		% within districts	30.0%	22.4%	15.5%	52.0%	34.7%
	Environment will be sound	Count	1	4	2	6	13
		% within total	7.7%	30.8%	15.4%	46.2%	100.0%
		% within districts	2.0%	2.4%	1.8%	2.4%	2.2%
	for social prestige	Count	0	1	0	1	2
		% within total	0.0%	50.0%	0.0%	50.0%	100.0%
		% within districts	0.0%	0.6%	0.0%	0.4%	0.3%
Others	Count	2	1	5	1	9	
	% within total	22.2%	11.1%	55.6%	11.1%	100.0%	
	% within districts	4.0%	0.6%	4.5%	0.4%	1.6%	
Total		Count	50	165	110	254	579

	% within total	8.6%	28.5%	19.0%	43.9%	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	79.362 ^a	15	.000			

Source: Field Survey, 2015

The statistical analysis of Chi-square test showed that there was significant association between the farmers of all four districts regarding their motivation of doing the organic agriculture in $P = .000$ at 95% confidence interval.

Satisfaction from the income of organic agriculture

The study had measured the level of satisfaction of farmers from the income of organic agriculture. The data presented in the table no. 3 showed that in total 25.8% reported that they were highly satisfied followed by 71% farmers were satisfied whereas 3.2% farmers reported they were dissatisfied from income of organic farming. From the data it was found that in spite of all the problem of organic certification, marketing, transportation ... more than 95% farmers were satisfied. This data very strongly indicated the sustainability of organic agriculture in long run.

Comparatively, majority (43.4%) farmers of Lalitpur were highly satisfied than Kathmandu (2%), Bhaktpur (6.2%) and Dhading (27.5%). District wise, there were less than 4% farmers reported dissatisfied from each four districts. If government will do some effort to address the concerned of farmers then the level of satisfaction can be reached more than 99% in future.

Table 3: Satisfaction from the income of organic agriculture

Satisfaction from the income of organic agriculture							
			Name of districts				Total
			Kathmandu	Lalitpur	Bhaktpur	Dhading	
Level of satisfaction	Highly satisfied	Count	1	72	7	71	151
		% within total	0.7%	47.7%	4.6%	47.0%	100.0%
		% within districts	2.0%	43.4%	6.2%	27.5%	25.8%
	Satisfied	Count	48	90	101	177	416
		% within total	11.5%	21.6%	24.3%	42.5%	100.0%
		% within districts	96.0%	54.2%	90.2%	68.6%	71.0%
	Dissatisfied	Count	1	4	4	10	19
		% within total	5.3%	21.1%	21.1%	52.6%	100.0%
		% within districts	2.0%	2.4%	3.6%	3.9%	3.2%
Total	Count	50	166	112	258	586	
	% within 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	65.744 ^a	6	.000				

Source: Field Survey, 2015

The statistical analysis showed that there was significant association between the farmers of all four districts in their level of satisfaction of income of organic agriculture in $P = .000$ at 95% confidence interval.

Suggestion from community people to new interested people

It was important for the study to know the perception of organic farmers whether they wanted to continue or discontinue the organic agriculture. From the Diffusion of Innovation Theory, people decide to accept the new when they are convinced from the relative advantage of new technology.

The data showed that in total 96.6% said that they had suggested to new interested people to involve in organic agriculture whereas very few (2.7%) suggested not involving in organic agriculture. The data sensitized that around 3% farmers were not satisfied from the organic agriculture that had chance to discontinue it. So, it is recommended to understand the problem of those farmers who do not suggest involving in organic agriculture so that organic agriculture can be extended and can sustain it in long term. Similarly, farmers of Bhaktapur had also the similar condition to the Kathmandu. Regarding the perception of farmers of Dhading gave some different reasons that because of the problem of easy market and transportation, and occasional political strike affected their business so sometimes they felt from the organic agriculture so they did not want to make involvement of other new people. The reason of not suggesting to involve in organic agriculture was found similar between Lalitpur and Dhading districts.

Table 4: Suggestion from community people to new interested people

Suggestion from community people							
			Name of Districts				Total
			Kathmandu	Lalitpur	Bhaktapur	Dhading	
Suggestion from community people	Involve in organic farming	Count	46	164	108	248	566
		% within total	8.1%	29.0%	19.1%	43.8%	100.0%
		% within districts	92.0%	98.8%	96.4%	96.1%	96.6%
	Not involve in organic farming	Count	2	2	2	10	16
		% within total	12.5%	12.5%	12.5%	62.5%	100.0%
		% within districts	4.0%	1.2%	1.8%	3.9%	2.7%
	Others	Count	2	0	2	0	4
		% within total	50.0%	0.0%	50.0%	0.0%	100.0%
		% within districts	4.0%	0.0%	1.8%	0.0%	0.7%
Total	Count	50	166	112	258	586	
	% within total	8.5%	28.3%	19.1%	44.0%	100.0%	
	% within districts	100.0%	100.0%	100.0%	100.0%	100.0%	

Source: Field Survey, 2015

District wise, it was seen that farmers (4%) of Kathmandu followed by 3.9% of Dhading, 1.8% of Bhaktapur and 1.2% of Lalitpur district said that they did not want to suggest involving in organic farming for the new interested people. It can be assumed from this data that the farmers of Kathmandu may have frustration because of the lack of adequate training and exposure visit. The assumption can be claimed from the above data of training and exposure which showed that there was 0% of farmers received the chances of exposure visit.

In these days, consumer demand for organics has risen gradually. Recent increases in demand can be directly attributed to lowered search costs and increased selection and variety from organics proliferation into mainstream retailers (Li, Zepeda, & Gould, 2007). Organic products appear to be a normal good, with purchasing increasing with higher incomes. But, scholars have had difficulty recognizing a demographic for organic consumers. It is clear, however, that consumers buy organics primarily for health and safety reasons.

A review conducted by the United States Department of Agriculture (USDA) Economic Research Service clinched that the only reliable predictor of organic purchasing is education level (Dimitri & Oberholtzer, 2009). The report mentions several studies that found consumers with higher education levels were more likely to purchase organic products (Dettmann & Dimitri, 2010), and recent studies yield the same conclusion (Hughner, McDonagh, Prothero, Shultz, Clifford, & Stanton, 2007).

Necessity of continuation of organic agriculture

The farmers were asked about the possibility of extension of organic agriculture when more than 96% replied that there was a good possibility to extend the organic agriculture in Nepal. So, in relation to this question, the study also asked about the necessity of continuation of organic farming. The response of farmers showed that in total 85.8% said that there was most necessary to continue the organic agriculture followed by 13.7% said that there was normal need of necessity whereas 0.5% said that there was no need of continuation of organic agriculture.

Table 5: Necessity of continuation of organic agriculture

Necessity of continuation of organic agriculture							
			Name of districts				Total
			Kathmandu	Lalitpur	Bhaktpur	Dhading	
Continuation of organic agriculture	Most needed	Count	41	158	73	231	503
		% within total	8.2%	31.4%	14.5%	45.9%	100.0%
		% within districts	82.0%	95.2%	65.2%	89.5%	85.8%
	Normal	Count	8	8	39	25	80
		% within total	10.0%	10.0%	48.8%	31.2%	100.0%
		% within districts	16.0%	4.8%	34.8%	9.7%	13.7%
	No so need	Count	1	0	0	2	3
		% within total	33.3%	0.0%	0.0%	66.7%	100.0%
		% within districts	2.0%	0.0%	0.0%	0.8%	0.5%
Total	Count	50	166	112	258	586	
	% within total	8.5%	28.3%	19.1%	44.0%	100.0%	
	% within districts	100.0%	100.0%	100.0%	100.0%	100.0%	

Source: Field Survey, 2015

The world of 2015 faces shortages of land and food. In spite of accelerating urbanization worldwide, farmland is increasing at a rate of 12.4 million acres per year (Owen, 2005). In the case of land utilization for farming, “The Food and Agriculture Organization of the United Nations estimates that 40% of the earth’s land is used for agricultural purposes – 75% of which is used for livestock pasture and feed (Wilairat, 2010, p. 38)”. With global population expected to increase 50% between 2000 and 2050 (FAO, Food and Agriculture Organization of the United Nations, 2007), either agricultural land use will need to increase or current lands will

need to be more productive. The FAO estimates that food production must increase by 70 percent by 2050 to put up population increases in the developing world and changes in diet as people get wealthier (FAO, 2009). Demand for agricultural goods will only be strengthened by biofuels and plant-based renewable energy sources. The above mentioned data show that the demand of food is very high and it is needed to promote organic agriculture to fulfill the global demand of food (Wilairat, 2010).

CONCLUSION

Diffusion is one process of message dissemination. It goes from the different channels in the social system where people use such information for their decision. The study tested the diffusion of innovation in the process of adoption of organic agriculture in Nepal also. Discussion was held with the organic farming regarding their process of decision to adopt the organic farming. The study found that knowledge of organic farming was more effectively transferred from neighbor to neighbor. Every farmer has collected the information of cost and benefit of organic farming before its adoption. More than 95% farmers who have adopted the organic farming and doing practices also reported that they are satisfied from the income of organic farming so that they are suggesting the interested farmers to involve in the organic farming. Result also shows that more than 96% farmers has recommended to new person to practice the organic farming. More than 98% farmers emphasized the continuation of organic farming in future also. As the theoretical process of diffusion model, in Nepal, farmers have taken the decision of adoption of organic farming after knowing its principles, standards, opportunity and challenges. In the current practices, there is significant contribution in the improvement of socio-economic status of farmers so that farmers have confirmed the continuation of organic farming in future also. it is necessary to study about the potential challenges of future and its possible way of solution. So, concerned authorities should be responsible to sustain the organic farming in near future also and save the health and environment.

REFERENCES

- Dettmann, R. L., & Dimitri, C. (2010). Dettmann, R. L., & Dimitri, C. (2010). Who's buying organic vegetables? Demographic characteristics of US consumers. *Journal of Food Products Marketing*, 79-91.
- Dimitri, C., & Oberholtzer, L. (2009, September). Marketing US organic foods: Recent trends from farms to consumers. USDA Economic Research Service.
- FAO. (2009). *How to feed the world in 2050*. Rome: FAO.
- FAO, Food and Agriculture Organization of the United Nations. (2007). *2007 Paying farmers for environmental services*. Rome: FAO.
- Hughner, R. S., McDonagh, P., Prothero, A., Shultz, I. I., Clifford, J., & Stanton, J. (2007). Who are organic food consumers? A compilation and review of why people purchase organic food? *Journal of Consumer Behaviour*, 94-110.
- Li, J., Zepeda, L., & Gould, B. W. (2007). The demand for organic food in the US: An empirical assessment. *Journal of Food Distribution Research*, 35-41.
- Owen. (2005). Owen. (2005). *Farming claims almost half earth's land, new maps show*. *National Geographic*. Retrieved from <http://news.nationalgeographic.com/news>.

- Padel, S. (2001, January). Conversion to Organic Farming: A Typical Example of the Diffusion of an Innovation? *Sociologia Ruralis: European Society for Rural Sociology*, 41(1), 40–61.
- Rogers, E. (1995). *Diffusion of innovations (4th edition)*. New York: The Free Press.
- Rogers, E. (2003). *Diffusion of innovations (5th ed ed.)*. New York: Free Press.
- SAHIN, I. (2006, April). DETAILED REVIEW OF ROGERS' DIFFUSION OF INNOVATIONS THEORY AND EDUCATIONAL TECHNOLOGY-RELATED STUDIES BASED ON ROGERS' THEORY. *The Turkish Online Journal of Educational Technology – TOJET* , 5 (2), 14-23.
- Wilairat, N. (2010). Policies to Improve Organic Agriculture:Prospects to Meet an Agrarian, Ecological, or Resource Vision. Pomona College.