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# PRINCIPLES OF ORGANIC AGRICULTURE AND ITS SOCIAL IMPLICATION IN REFERENCE TO THE NEPALESE PRACTICES

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**ABSTRACT:** *The conventional practice of agriculture system of Nepal was very similar to the Organic agriculture; only difference was there was no rule in conventional farming whereas there is standard rule in organic agriculture. The study aims to analyze the principles of organic agriculture and its social implication in reference to the Nepalese practices. The study was based on the mixed design. Data was collected from the 586 organic farmers and 28 key persons related to the organic agriculture. Purposive sampling technique was adopted to select the respondent from four districts; Kathmandu, Lalitpur, Bhaktpur and Dhading. The result found that all farmers had working knowledge on importance and benefit of organic agriculture. They were aware on the principles of organic agriculture and found the significant implication of four principles of organic agriculture. Mostly, people were conscious about the caring of health and ecology from the practice of organic agriculture. Principle of ecology, farmers were conscious on the effect of OA to make the environment clean; clean air and water. As a principle of fairness, people reported that OA had supported to reduce the youth migration and could create the job opportunity. For the care of all human being and ecology, the study recommended to sustain the OA from the active contribution of all stakeholders in the initiation of Government.*

**KEYWORDS**: Organic agriculture, Practices, Principles, Social implication,

## INTRODUCTION

Organic Agriculture (OA) is a production system based on an agro-ecosystem management approach that utilizes both traditional and scientific knowledge.

Organic farming is defined as a form of agriculture, which does 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 is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved (EuropeAid, June 2012, p. 2).

Agriculture and farming has changed significantly during the past 30 years, from farmers being a social group enjoying political, economic and societal support to the current situation where farmers struggle to find legitimacy for a continued production (Bjørkhaug, 2012, p. 284). Modern product of agriculture is questioned because of its hygiene quality. Modern agricultural farming has used the fertilizers to increase production, used pesticides to protect from insects which are harmful to public health.

Anjana Malla Pradhan, Chandra Bista, Dr. S. Manivannan (2015, p. 924) also stated in their study that the excessive use of chemical pesticides for the management of insect pests has



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become a matter of public concern in Nepal. According to these researchers, the problem arising from overuse and misuse of pesticides in vegetable include development of pest resistant pesticides, environmental contamination, increased health hazards to applicator and consumers, and rising production costs (2015, p. 924).

**Principles of Organic Agriculture**

Scientifically, there are a number of principles of organic agriculture which are helpful to explain the benefit of organic production in health and ecology. Organic production not only save the human health but it is also beneficial for the safety of environment also. Key principles defined by European Commission reviewed as below:

**1. Principle of health:** Organic Agriculture should sustain and enhance the health of soil, plant, animal, human and planet as one and indivisible.

**2. Principle of ecology:** Organic Agriculture should be based on living ecological systems and cycles, work with them, emulate them and help sustain them.

**3. Principle of fairness:** Organic Agriculture should build on relationships that ensure fairness with regard to common environment and life opportunities.

**4. Principle of care:** Organic Agriculture should be managed in precautionary and responsible manner to protect the health and well-being of current and future generations and the environment (EuropeAid, June 2012, pp. 2-3).

Principle of health is the major concern of organic agriculture because health becomes first priority of every people. A number of studies showed that the health improvements for farmers under organic systems. For example, farmers in India said that symptoms associated with pesticide poisoning disappeared after conversion to organics (IFAD, 2005), and a Latin American study showed that farmers perceived themselves to be healthier after conversion to organics (IFAD, 2003). A further study showed a 10-80% decrease in health-related expenditure after joining an organics group (Parrott & Wright, 2007). Indirect health benefits may include better waste disposal because animal and human manure is used for compost, thereby lowering prevalence of diseases such as malaria (Setboonsarng, 2006). A reduced malaria incidence has also been observed where fish could be reintroduced to organic rice systems (FAO, 2002). Organic farmers may also experience health benefits due to reduced costs and premium prices, if they are able to increase spending on nutritious food, medicine and health services (Setboonsarng, 2006). In a Cambodian GTZ study, better health was a major benefit, and 60% of farmers said that access to healthier foods was the most important benefit they received from the initiative (Schmerler, 2006, p. 18).

Organic agriculture is one scientific and systematic process of cultivation. It is the mixing of scientific and indigenous knowledge. It has certain standard principle which needs to be compiled during the adaptation of organic agriculture. The study was interested to analyze the principles of OA and to explore the implication of principles of OA in the social life of Nepalese farmers. The study tried to see the linkage between the theoretical knowledge and practical implication.



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## METHOD

The study was based on the mixed design; using the both quantitative and qualitative data. Besides that, the study was descriptive as well as exploratory. Primary and secondary sources were used to collect the data. Secondary sources were used to analyze the principles of Organic Agriculture and primary sources were used to identify the social implication of established principles of organic agriculture among the Nepalese societies. Total respondents for questionnaires survey (quantitative) was 586 and 28 key persons were selected for the in-depth interview (qualitative data). Purposive sampling technique was adopted to select the respondents. Self-reported structured questionnaires were developed to collect the opinion of larger size of farmers whereas checklist was developed to collect the opinion of key person through the in-depth interview. Reliability and validity of instruments was tested by organizing the pilot study. The findings of both tools were merged in the conclusion. Chi-square test and frequency table was used to analyze the quantitative data. Thematic analysis was done for the qualitative data.

## RESULT & DISCUSSION

The study was conducted in four districts; Kathmandu, Lalitpur, Bhaktpur and Dhading. 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 Bhaktpur and 44% from the Dhading district participate in the study.

### Relationship between the Principles of Health of OA and social life

### 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.



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**Table 1: Knowledge of organic agriculture**

| | | | Name of Districts | | | | Total |
|---|---|---|---|---|---|---|---|
| | | | Kathmandu | Lalitpur | Bhaktpur | Dhading | |
| Knowledge of organic agriculture | Very good | Count | 5 | 19 | 7 | 21 | 52 |
| | | % within knowledge of OA | 9.6% | 36.5% | 13.5% | 40.4% | 100.0 % |
| | | % within Name of districts | 10.0% | 11.4% | 6.2% | 8.1% | 8.9% |
| | Good | Count | 13 | 66 | 35 | 66 | 180 |
| | | % within knowledge of OA | 7.2% | 36.7% | 19.4% | 36.7% | 100.0 % |
| | | % within Name of districts | 26.0% | 39.8% | 31.2% | 25.6% | 30.7% |
| | Normal | Count | 32 | 81 | 70 | 171 | 354 |
| | | % within knowledge of OA | 9.0% | 22.9% | 19.8% | 48.3% | 100.0 % |
| | | % within Name of districts | 64.0% | 48.8% | 62.5% | 66.3% | 60.4% |
| Total | | Count | 50 | 166 | 112 | 258 | 586 |
| | | % within knowledge of OA | 8.5% | 28.3% | 19.1% | 44.0% | 100.0 % |
| | | % within Name of 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 fours districts regarding their knowledge of organic agriculture in P = .023 at 95% confidence interval.

**Use of income of organic farming**

When asked the use of income of organic farming to farmers, the farmers had given the multiple responses; land purchase and house building, investment in education and health of children, managing the daily expenses, purchasing the vehicles, doing any new business or saving in bank … etc. The farmers had replied that in total 10.8% said that they build house followed by 5.4% purchased the land, 74% said that they invested in the education for their children, 2.6% said that they had done the bank deposit, 22.7% said that they had started the business other than the organic agriculture, 0.5% also reported that they had purchased the car also and 22% said that they used in other work like daily expenses, health expenditure and day to day travel cost.



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**Table 2: Use of income of organic farming**

| | | Responses | |
|---|---|---|---|
| | | N | Percent |
| Use of income of organic farming | House | 62 | 10.8% |
| | Land purchase | 31 | 5.4% |
| | Education for children | 425 | 74.3% |
| | Bank deposit | 15 | 2.6% |
| | Starting business | 130 | 22.7% |
| | Purchase car | 3 | 0.5% |
| | Others | 126 | 22.0% |

**Source:** Field Survey, 2015

From the above data, it was found that the level of awareness of education increased among the organic farmers because around 75% farmers reported that they were investing their income in educational activities of their children. It is well understanding that education is the backbone of nation building and children are the future leader of Nation so from the sociological perspective, it was good indicator of social changes and development through the support of organic agriculture.

**Organic agriculture improve the quality of soil – principle of health**

The perceptual data of quality of soil was replied on the real practical experiences of farmers because they had experiences of doing the agriculture by using the fertilizers and pesticides and organic both.

The data showed that in total 78.3% strongly agreed followed by 19.1% agreed that organic agriculture can improve the quality of soil. In total, 97% farmers had experienced of improving the quality of soil after doing the organic agriculture. District wise, 97% of Kathmandu, 98% of Lalitpur, 96% of Bhaktpur and 97% of Dhading agreed that Organic agriculture improve the quality of soil.

**Table 3: Organic agriculture improve the quality of soil**

| Organic agriculture improve the quality of soil | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Response | | | | | Total |
| | | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | |
| **Name of districts** | Kathmandu | Count | 30 | 18 | 1 | 0 | 0 | 49 |
| | | % within districts | 61.2% | 36.7% | 2.0% | 0.0% | 0.0% | 100.0% |
| | Lalitpur | Count | 141 | 22 | 0 | 3 | 0 | 166 |
| | | % within districts | 84.9% | 13.3% | 0.0% | 1.8% | 0.0% | 100.0% |
| | Bhaktpur | Count | 55 | 53 | 4 | 0 | 0 | 112 |
| | | % within districts | 49.1% | 47.3% | 3.6% | 0.0% | 0.0% | 100.0% |
| | Dhading | Count | 232 | 19 | 3 | 3 | 1 | 258 |
| | | % within districts | 89.9% | 7.4% | 1.2% | 1.2% | 0.4% | 100.0% |
| Total | | Count | 458 | 112 | 8 | 6 | 1 | 585 |
| | | % within districts | 78.3% | 19.1% | 1.4% | 1.0% | 0.2% | 100.0% |

**Source:** Field Survey, 2015



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Mr. Ranbir, age 45 years, resident of Dhading district shared his experience that initially he used chemical and fertilizer in agriculture to increase the quantity of productions but day by day quantity of production was decreasing because the decreasing quality of soil. He said that without use of fertilizer; there was no chance to do any cultivation. So, he was thinking to change cultivation strategy but he had no any knowledge of change. One day he visited the District Agriculture Office, Dhading and discussed with the agriculture expert. Expert suggested him to do the organic agriculture so that he could maintain the quality of soil and can earn good amount for long run. Mr. Ranbir came back home and started to do the organic farming. He said that initial 2 – 3 years; he could not get good return from the farming but gradually quantity of production increased. Now, he is earning good amount from the organic farming. He is happy in his profession and suggesting other person also to do the organic agriculture to manage the quality of soil, environment and human life as well.

The previous study also reported that organic farming increases the quality of soil, water, air and biodiversity. Soil building practices such as crop rotations, inter-cropping, symbiotic associations, cover crops, organic fertilizers and minimum tillage are central to organic practices. These encourage soil fauna and flora, improving soil formation and structure and creating more stable systems. In turn, nutrient and energy cycling is increased and the retentive abilities of the soil for nutrients and water are enhanced, compensating for the non-use of mineral fertilizers. Similarly, it is also supporting to increase the quality of water. In many agriculture areas, pollution of groundwater courses with synthetic fertilizers and pesticides is a major problem. As the use of these is prohibited in organic agriculture, they are replaced by organic fertilizers (e.g. compost, animal manure, green manure). Organic agriculture reduces non-renewable energy use by decreasing agrochemical needs. Organic agriculture contributes to mitigating the greenhouse effect and global warming through its ability to sequester carbon in the soil which finally makes the clean air (IFOAM, 2015).

**Relationship between the Principles of Ecology of OA and social life**

**Organic agriculture supported to make environment clean - principle of ecology**

Surrounding environment should be good for the sound health. Generally, people think that the environment of rural area is better than the urban areas because of the low density of people, less use of electricity, petrol, diesels, less numbers of vehicles … etc. But in some cases because of the increasing trend of use of new technologies; rural people are also using the luxurious goods and taking the easy services of technology. Its effect can be observed in the agriculture sectors also. People are using the tractor instead of traditional cultivation by the use of Ox or buffalo. As well as, they use the fertilizer and pesticides to increase the quantity of crops. The use of such fertilizer and pesticides finally effects the environment also.

Fertilizers and pesticides both have definite pros and cons associated with their use. Both types of chemical tend to increase yields, and thus make a significant difference in food production, particularly in countries that struggle periodically with famines. On the other hand, they both can cause water pollution when erosion carries the chemicals off of farms along with eroded soils after each rainfall. There is also concern by some authorities that pesticides pose a risk, not only to nontarget animal and plant species, but to humans as well. According to the National Institute of Environmental Health Sciences, pesticides have as yet incompletely understood effects on humans. Most people are exposed to a certain level of pesticides. Farmers who experience routine exposure to pesticides have exhibited neurological symptoms such as headache and hand tremors. Children, in particular, may be more susceptible to negative effects



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resulting from pesticide exposure. Pesticide runoff can have devastating effects on nontarget organisms as well. For example, roundup, an extremely common herbicide used in agriculture, is highly toxic to fish and amphibians. The National Coalition for Pesticide-Free Lawns says, "Of 30 commonly used lawn pesticides, 19 are linked with cancer or carcinogenicity, 13 are linked with birth defects, 21 with reproductive effects, 26 with liver or kidney damage, 15 with neurotoxicity, and 11 with disruption of the endocrine system" (Elliott, 2015).

The data presented in the table no. 19 showed that in total 75.9% farmers strongly agreed that organic agriculture had supported to make the surrounding environment clean followed by 20% farmers agreed the same.

**Table 4: Organic agriculture supported to make environment clean**

| Organic agriculture supported to make environment clean | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | Response | | | | Total |
| | | | Strongly Agree | Agree | Neutral | Disagree | |
| Name of districts | Kathmandu | Count | 28 | 18 | 3 | 1 | 50 |
| | | % within districts | 56.0% | 36.0% | 6.0% | 2.0% | 100.0% |
| | Lalitpur | Count | 146 | 19 | 1 | 0 | 166 |
| | | % within districts | 88.0% | 11.4% | 0.6% | 0.0% | 100.0% |
| | Bhaktpur | Count | 45 | 55 | 12 | 0 | 112 |
| | | % within districts | 40.2% | 49.1% | 10.7% | 0.0% | 100.0% |
| | Dhading | Count | 225 | 25 | 4 | 3 | 257 |
| | | % within districts | 87.5% | 9.7% | 1.6% | 1.2% | 100.0% |
| Total | | Count | 444 | 117 | 20 | 4 | 585 |
| | | % within districts | 75.9% | 20.0% | 3.4% | 0.7% | 100.0% |

**Source:** Field Survey, 2015

District wise, 92% farmers of Kathmandu followed by 99% of Lalitpur, 89% of Bhaktpur and 97% of Dhading agreed that environment could be cleaned by doing the organic agriculture. Comparatively, farmers of Lalitpur districts were found highly positive than the other district in the case of contribution of organic agriculture. In the current situation; world is conscious on the safety of environment because of the climate change. In Nepal also, Government and non-governmental organizations are working to raise the knowledge on climate change and its impact of human life. Use of chemical and fertilizer in agricultural farming is also one cause of climate change. The study collected the opinion of expert from the face to face interview also to know the impact of organic agriculture on environment.

According to Krishna Gurung, Chairman, Kevin Rohan Memorial Eco Foundation, Chalnakhel, Kathmandu:

> "Organic agriculture provides the many advantage in human health and surrounding environment. It increases the quality of soil which can increase the quantity of production. Use of chemical in agriculture makes the air pollution so we have to discourage the use of such harmful chemical and need to promote the organic agriculture for the long term benefit in human life."

Mr. Bhim Pandey, Senior Agricultural Journalist, Kathmandu also focused on the contribution of organic agriculture to save the environment. According to Mr Pandey:



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"Organic agriculture can protect the human life from the negative impact of climate change and disease prevalence. We can transform the knowledge to next coming generation also regarding the importance of clean environment in human life. Organic production can be more profitable so that economic status can be increased and social relation can be improved. Healthy diet can develop the sound mind which can contribute in peace building also."

**Relationship between the Principles of Fairness of OA and social life**

**Organic agriculture can support to reduce the size of abroad migration - principle of fairness**

Regarding the opinion of farmers in relation to the contribution of organic farming to reduce the size of abroad migration, the data showed that in total 42% farmers strongly agreed followed by 41.1% agreed that organic agriculture can support to reduce the size of abroad migration.

To justify their opinion, they shared that the demand of organic agriculture basically green vegetable is high in Kathmandu valley. On the basis of the past experiences of organic farmers, they said that "supply is low in comparison of demand of organic vegetable so if youth generation can involve in organic agriculture then they can earn good amount here. They need not to go in abroad job to manage their basis needs."

District wise data showed that 66% farmers of Kathmandu, 91% of Lalitpur, 64% of Bhaktpur and 88% of Dhading agreed that organic agriculture can support to reduce the size of abroad migration. This can be one good indicator of rural development also.

**Table 5: Organic agriculture can support to reduce the size of abroad migration**

| **organic agriculture can support to reduce the size of abroad migration** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Responses | | | | | Total |
| | | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | |
| **Name of districts** | Kathmandu | Count | 22 | 13 | 13 | 2 | 0 | 50 |
| | | % within districts | 44.0% | 26.0% | 26.0% | 4.0% | 0.0% | 100.0% |
| | Lalitpur | Count | 85 | 66 | 12 | 1 | 1 | 165 |
| | | % within districts | 51.5% | 40.0% | 7.3% | 0.6% | 0.6% | 100.0% |
| | Bhaktpur | Count | 35 | 37 | 39 | 0 | 1 | 112 |
| | | % within districts | 31.2% | 33.0% | 34.8% | 0.0% | 0.9% | 100.0% |
| | Dhading | Count | 103 | 124 | 17 | 9 | 4 | 257 |
| | | % within districts | 40.1% | 48.2% | 6.6% | 3.5% | 1.6% | 100.0% |
| Total | | Count | 245 | 240 | 81 | 12 | 6 | 584 |
| | | % within districts | 42.0% | 41.1% | 13.9% | 2.1% | 1.0% | 100.0% |

**Source:** Field Survey, 2015

Migration became the worldwide phenomenon there is different interest and problem of migrant people. Somebody is seeking the comfort life in global society and somebody is searching the good job for live the life. Finally, it can be said that migration is national problem and can be harmful for the sustainable development. So the study recommends supporting for the sustainable development of organic agriculture to reduce the trend of abroad migration. The



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qualitative data of this study also justify the support of organic agriculture to reduce the youth migration.

The report of Ministry of labour and Foreign Employment of Nepal reported that till the date of July 2012, approximately 24 Lakh youth are gone for foreign employment whereas 773940 youth were in Malaysia only (KC, Bhattrai, Dahal, Subedi, Shrestha, & Tamang, July 19, 2012). The number of Nepali workers leaving home for foreign employment is increasing every year. An official figure shows that a total of 527,814 Nepali men and women (number of women are insignificant, though) left the country in a single year, fiscal year 2013-2014, ending mid-July. This is 16.4 percent upward graph than that of previous fiscal year (Gajurel, 2015).

The study discussed with Bhola Kumar Shrestha, Team Leader , Coffee Promotion Program, Helvitas Swiss Incorporation, Nepal regarding the potential contribution of organic agriculture to minimize the size of aboard youth migration. He said:

"Collective efforts of Nepalese can promote the 'Product of Himalaya' as an organic product in world market. Nepal is high potential country for the organic agriculture. People are very conscious about their health and environment so we can sell the maximum quantity of organic goods also. If we can promote the organic agriculture then it can generate the employment opportunity in local market so that Nepalese youth will not be compelled to do the 3D (Dirty, Dangerous and Dislike) work in abroad market. It will improve the economic status of people and finally can bring change in social life; educational status, health and social networking."

Prem Lama who is also the first organic certified vegetable producer of Nepal and the farmer of Ashapuri Organic Farm also shared his experiences in line with the opinion of Mr. Bhola Kumar Shrestha that the organic agriculture had supported to improve his economic status as well as changed the social life styles increasing the level of awareness of human rights, education, health and sanitation and involvement in social networking. As his opinion, organic agriculture had given opportunity of youth to be self-employ which had reduced the trend of labor migration, as well as, he also said that migrant returning also involved in organic agriculture and earned more than earning of aboard job.

**Organic agriculture created employment opportunity - principle of fairness**

When people talk about the employment the first people think about the government services then others non-governmental services. Most of the people only accept those types of services where they will get the monthly salary from very formal official environment. But, employment opportunity can be in rural setting also where people get the indirect benefit as well as annual gross income from informal environment; like agriculture, livestock.



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**Table 6: Organic agriculture created employment opportunity**

| Organic agriculture created employment opportunity | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Response | | | | | Total |
| | | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | |
| Name of districts | Kathmandu | Count | 20 | 21 | 7 | 2 | 0 | 50 |
| | | % within districts | 40.0% | 42.0% | 14.0% | 4.0% | 0.0% | 100.0% |
| | Lalitpur | Count | 87 | 67 | 9 | 1 | 1 | 165 |
| | | % within districts | 52.7% | 40.6% | 5.5% | 0.6% | 0.6% | 100.0% |
| | Bhaktpur | Count | 30 | 56 | 20 | 6 | 0 | 112 |
| | | % within districts | 26.8% | 50.0% | 17.9% | 5.4% | 0.0% | 100.0% |
| | Dhading | Count | 57 | 165 | 18 | 10 | 7 | 257 |
| | | % within districts | 22.2% | 64.2% | 7.0% | 3.9% | 2.7% | 100.0% |
| Total | | Count | 194 | 309 | 54 | 19 | 8 | 584 |
| | | % within districts | 33.2% | 52.9% | 9.2% | 3.3% | 1.4% | 100.0% |

**Source:** Field Survey, 2015

The data presented in table no. 18 explored that in total 33.2% farmers strongly agreed followed by 52.9% that organic agriculture had created the employment opportunity for the community people. In open discussion, they shared that if government will care it seriously and will manage some funding support in the starting of organic agriculture then it can support to reduce the size of aboard migration of youth also. Additionally farmers shared that there must be easy provision to provide the training to the interested farmers from the District Agriculture Development Office so that farmers can be more aware about its relative benefits.

**Relationship between the Principles of care of OA and social life**

**Strategies for sustainability of Organic agriculture - principle of care**

The farmers were asked about the strategies for sustainability of organic agriculture. There were multiple options to choose the strategies of sustainability of organic agriculture. The response of farmers showed that there was 78.8% farmers said that trained human resources who can have deep knowledge of organic agriculture is one prime requirement, whereas 71.8% said that involvement of youth by discouraging of going abroad for job, 71% said that improvement of market to sell the organic products, 72% said that Government should manage the easy loan for farmers, 77.2% said that awareness of organic agriculture was required for all, 56.3% said that easiness of certification process, 46.8% said that easy information of organic agriculture, 73.6% said that irrigation and seed facilities, 26.6% said that making involvement of commercial business person can jointly contribute in sustainability of organic agriculture.



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**Table 7: Strategies for sustainability of Organic agriculture**

| **Frequencies** | | | |
|---|---|---|---|
| | | Responses | |
| | | N | Percent |
| **Strategies for sustainability of Organic agriculture** | Trained human resources | 456 | 78.8% |
| | Discourage aboard job for youth | 416 | 71.8% |
| | Improvement of market | 411 | 71.0% |
| | Easy loan from Government | 417 | 72.0% |
| | Awareness of organic farming | 447 | 77.2% |
| | Easiness of certification process | 326 | 56.3% |
| | Easy information system | 271 | 46.8% |
| | Irrigation and seed facilities | 426 | 73.6% |
| | Attract high commercial business person | 154 | 26.6% |

**Source:** Field Survey, 2015

## CONCLUSION

The study found that principally, organic farmers of Nepal were aware on the impact of organic agriculture in social change. Farmers had good knowledge on importance of organic agriculture and they were spending the more than 70% of their income of organic agriculture in promotion of their children's education. So, practical use of income was also found very productive; supporting for the nation building. As a principle of health, farmers believed that organic agriculture protect the soil quality by reducing the use of pesticides and chemical fertilizers. Similarly, principles of ecology said that the organic agriculture make environment clean; no contamination in water, no air pollution. Farmers agreed on the principles of fairness that promotion of organic agriculture can create the employment opportunities which can support to reduce the size of aboard migration. Trend of Youth migration is the global challenges from the development perspective. As a principle of care, the study promoted the strategies of sustainable development of organic agriculture for the care of human beings and nature. Climate changes and global warming is the burning issue of global societies which is harmful for the human life, species and environment so organic agriculture can be one supporting part to minimize the effect of climate change in future if organic agriculture can be continued and sustained.

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