Awareness Of Farmers Towards Organic Farming: A Study Among The Farmers Of Karola Village.

Rahul (Research Scholar, Department of Communication Management & Technology, Guru Jambheshwar University of Science and Technology, Hisar)

Abstract:

As you know, organic farming is gaining attention all over the world. It can diversify the method of agricultural production to increase sustainability, farm income, and food safety. The key aim of this preliminary research was to determine the awareness of farmers about organic farming. Simple random sampling was employed to select the research area. A structured questionnaire was circulated to the 234 farmers of Karola. Close-ended questions were used to gather the data from the respondents. Respondents were selected conveniently for the study. In the questionnaire, the researcher asked questions to verify the level of awareness among farmers. The demographic data, the experience of organic farming, and the practice of organic farming were key aspects of that questionnaire. The finding suggested that all respondents learned agriculture from their communities. The respondents concluded that they are starting to practice agriculture because there is no other profession that they can practice. Even all accept that there is a need to raise knowledge of organic farming. They still believe in traditional methods, particularly for the control of diseases and the growth of seeds. Farmers' knowledge of organic farming needs to be enhanced. Respondents are conscious of rotating plants, using animal manure, plant and kitchen waste, composting and minimizing the usage of fertilizer, manually green manure, and weed control as part of organic growing.

Keywords: Organic farming, knowledge, attitude, farmers.

Introduction

According to the UN report, India will be the most populous country in the world by 2022. The total population of India is estimated at 1.37 billion. Agriculture plays a key role in the process of economic growth in less developed countries such as India. Agriculture is the main source of livelihood for the majority of the population of India. Over 58% of Indians are engaged in agriculture and its related industries. After the fight for independence, numerous initiatives were initiated by the central and state governments. There has been a significant rise in agricultural production. As a result of upgrading and improvement in agriculture. India has made a great deal of progress in agriculture. During the fifties and sixties, expansion of the region and increased productivity have been the key source of growth. The new strategy was introduced with the goal of self-sufficiency (Tripathi, Amarnath and Prasad, A. R. 2009). Owing to a shortage of food grains, policymakers understood the need to bring about a green

revolution. These efforts contribute to the adaptation of high-yielding varieties of wheat seeds. It also necessitated improvements to farming techniques. The secret to this strategy was to increase production per hectare through the use of science and technology. This was the sole slogan of the Green Revolution, at that time more emphasis was on heavy fertilizer doses, multiple crop yields, a new irrigation concept, and integrated dryl and growth. The government addressed the farmers and urged them to adopt this strategy. The Government of India has taken a variety of measures to develop agricultural practices. To ensure remunerative prices to the producer government, the Agricultural Price Commission will be inaugurated. The Government implemented the New Agricultural Plan for Land Reform, Expansion of Services. Investment is also being made in science. Some work has been done to improve rural infrastructure and to provide credit facilities. "All of these advances in Indian agriculture are contributed by a series of measures initiated by the Government of India. Land reforms, the inauguration of the Agricultural Price Commission to ensure producer remuneration, the latest agricultural policy, investment in research and extension services, the provision of credit facilities and the improvement of rural infrastructure are some of these measures" (Tripathi, A., & Prasad, A. R. 2010). Increased use of irrigation and the addition of fertilizers and pesticides adversely affect the agriculture sector. To address this situation, numerous programs have been initiated by the Government, but the scope of these programs is not open to farmers. (Shailaja A and Reddy MN. 2003) Another explanation for policy failure was the contact distance between the government and farmers. Many researchers concluded that the asymmetry of knowledge at the farm level was one of the key reasons why agricultural practices were incorrect (SHARMA, A., & SINGH, A. K. 2016). The key cause of the failure of all agricultural policy was no position for any separate growth strategy. The lack of the requisite data is becoming a problem monger for agriculture. All steps taken by the central government have concentrated on the issue of food grain shortages and there is no space for future aspects. Williams (1978) argued that the lack of a definite mission and indirect and poor extension-farmer ties was the cause. In the present situation, India is closer to self-sufficiency. According to the most recent results, Indian agriculture, forestry, and fisheries have added an estimated Rs. 19.48 lakh crore (USD 276.37 billion) in the financial year 20 The Indian food industry is also growing, and its contribution to the world food trade is rising every year (a). One can easily conclude that these revolutions are increasing the development of Indian agriculture, but that they have an effect on soil and water health. The practice of farms has also been modified. Until now, farmers are used heavy doses of fertilizers and pesticides. They still practice the wrong method of farming.

Organic Farming:

Around 80 years ago, the concept of organic farming was initiated by two pioneers, Sir Howard and Steiner. Sir Howard has developed a scientific approach to composting as

an alternative solution to chemical fertilization. In his book entitled "The Testament of Agriculture," Steiner initiated a holistic, biodynamic farming process (Paull, J. 2006). Roland Chevriot took another major move. He imagined the need for a movement that would encourage scientific and experimental approaches to understanding and communicating across borders on an organic basis. Initiated a conference in Versailles France in 1972 for the humble beginning of the Joint Platform of the International Federation of Organic Farming (IFOAM). In the current period, more than 181 countries are engaged in organic farming. According to the new study entitled "The World of Organic Agriculture" by the Research Institute of Organic Agriculture (FiBL) and IFOAM - Organics International, 2017 was another record-breaking year for global organic farming. Organic farmland has risen dramatically, and organic farmers and organic retail sales are also growing gradually. Now it's getting an all-time high. The global demand for organic products continues to expand globally and has reached US\$97 billion. India continues to lead with the largest number of producers (835,200), followed by Uganda (210,352), and Mexico (210,000). The growth rate of organic farming in the world is 20%. It's much easier to talk about what organic farming is not, compared to what it is. The definitions of organic farming are a basic question, since farmers have not fully understood what organic farming entails, and the definitions are complicated and lengthy. Farmers recognize it only as a non-fertilizing farm. Organic cultivation is much more than just a way of resisting the adverse effects of fertilizing, naturally handling plants and soil. It's a way to support life on Earth. In other words, organic farming is a crop production that complies with the laws of nature. It aims at a holistic model of the farming system that protects the climate and the earth for centuries to come. According to Badgley et al. (2007), organic farming can be described as the "use of farming practices that can be sustainable, agro-ecological, using natural nutrients by cycling, excluding pesticide use and regenerating soil quality." Organic agriculture has evolved empowering people with the aid of a workable effort to create the best possible relationship between the earth and men. The organic farming method varies from traditional methods in a variety of respects, such as no use of fertilizers, typically has wider areas of non-crop habitat and a broader crop rotation scheme. (Seyed et al. in 2010). Organic farming is gaining popularity today in India. It can increase production, farm income, and food protection. Even people who know that organic farming will protect the biodiversity, the atmosphere, and the wellbeing of the planet. This is the only alternative to chemical-based farming systems (Stockdale et al., 2001; Biao et al., 2003). A great deal of public interest is currently being paid to organic farming in the agricultural sector. Farmers now need to learn new skills and increase awareness. Their expertise must be sound and their awareness must be deeper, as they play a vital role in steering the venture towards success. A change in mindsets and thoughts is necessary if the organic farm is to work successfully as businessmen, scientists and many others do. Khair, H, man. (2004) (2004). In his research,

"nutritional value was an important factor that influences consumer preferences in the purchase of chemical-free vegetables, followed by desire, freshness, health, and taste."

Review of Literature

Various types of organic farming studies have been performed by different organizations related to agriculture, but no media studies have been conducted by the Agency. The researcher reviewed some of the studies that are closer to the overall study context. Knowledge-Attitude-Practical Research by Assis, K. et al. (2011) of 31 respondents suggested that the degree of expertise of respondents is not adequate, they still believe in chemical methods to increase efficiency. Even, there is a need to improve people's attitude towards organic farming. In this analysis, the researcher tests the degree of awareness by asking questions about the practice of organic farming. The same has applied for an attitude and practice that demonstrates that the government should also implement plans and policies to increase people's awareness and interest in organic farming, which is both sustainable and environmentally friendly. Badgley et al. (2007) state his study awareness and Practice of Organic Farming among Agricultural Science Graduated Students in Rivers State, Nigeria, that the government should make efforts to enhance certified and organized farming. Workshops and workshops should be arranged to raise the level of understanding among young people. Only then will the dream of organic farming be fulfilled. More work and expertise are still required, but they can be done with proper guidance and encouragement.

The Study:

However, agriculture and related aliens are one of the industries that provide jobs to the majority of Indian people. From time to time, the Government of India is introducing agricultural programs to boost farmers. Indian farmers experienced a green revolution, a blue revolution, a white revolution, and a yellow revolution. During these revolutions, farmers were being bombarded with information on agriculture and related activities. The focus was on the growth of this field. All these revolutions have produced history, and the outcome has been successful. Although these revolutions still adversely impact the culture of farming. Uses of heavy doses of fertilizers, the adaptation of the wrong irrigation method the less emphasis was on soil and water quality awareness. During the Green Revolution, Haryana was in one of the states that were getting grain seed upgrades to increase efficiency. Still, Haryana is a pioneer in the field of agriculture. Natural farming can be a better way to improve agriculture. Farmers in Haryana have less knowledge of organic farming so far. There is a need for a review to find the answers to these questions. How much information do farmers have? Do they have enough knowledge to practice organic farming? What are the sources of knowledge on organic farming? The researcher is a citizen of Haryana. So it's convenient for a researcher to conduct this research.

Theoretical Framework: -

The theoretical framework is used by the researcher as a tool to create a conceptual understanding of the study. It's like an instruction menu. It directs the researcher on hypotheses, the selection of research methods, and the selection of appropriate resources for data collection and generalization of findings. Adom, D. et. al. (2016). In their study, Theoretical and Conceptual Framework: Mandatory Ingredients of Quality Research, concluded that the theoretical and conceptual framework explains the course of study and is strongly grounded in theoretical constructions. The two frameworks aim to make the findings of the analysis more meaningful, more available to theoretical constructs in the field of science, and to ensure generalization. In this analysis, the researcher employed the "Diffusion of Innovation Theory" as a research paradigm. Rogers, E. M. (1995) claimed that the diffusion of innovation is taking place over time. In this process, people learn new concepts, products, or actions, put them into effect. It only happens when people see it as unique or creative. This Theory has been successfully used in a variety of fields including communication. In the present situation, everybody is trying to solve bad agricultural practices. Organic farming may be the road to innovation in the field of agriculture. Here, the researcher was trying to measure momentum andbehavioral improvement. For this study, two statements are significant. Is organic farming gathering momentum? If so, what are the changes in the actions of farmers? What is the degree of awareness they have about organic farming?

Research Objective: -

The study was undertaken by the researcher to find answers to questions by scientific and systemic approaches. The analysis in this study was done to discover secret information about organic farming. The broad aim of this preliminary study was to examine the level of knowledge of farmers about organic farming. The specific objectives are as follows.

To find out the knowledge level of farmers towards organic farming.

To find outsource of information for farmers towards Organic Farming.

Research Methodology: -

This research was conducted in Karola villages of the Gurgaon district of the state of Haryana. The researcher chose the district of Gurugram because it is the most educated district of Haryana, so there is a chance of high level of knowledge among farmers of Gurgaon than in other districts. Convenient sampling was used to select villages. The village of Karola was taken to be the universe of analysis. A sampling framework has been developed using the survey approach. This sampling system comprised 234 farmers. Farm families were chosen easily by a probability sampling of the total population of the village. The interview schedule entitled "Awareness of farmers on various aspects of organic farming" was used in the research. A knowledge scale was

prepared to measure farmers' awareness of organic farming. The researcher documents the response during a face-to-face interview. There were open-ended and closed-ended questions in the questionnaire. The research unit consisted of all farmers in the chosen village

Sample Selection: -

Selection of the required sample is perhaps the most challenging job for the researcher. The wrong sample can shift the course of study in a particular way. Choosing the correct sample is a big issue. The sample size refers to the collection of objects that describe the credibility and validity of the researcher. When choosing the sample size, the researcher has to finalize the generalization of the analysis. According to the 2011 census, the total number of houses in Karola is 595. A total of 234 respondents were selected from the village. The sample collection researcher was supported with the aid of the raosoft.com survey website tool. According to this tool, the error margin would be 5%. The researcher also added the formula n = (N/1+Ne2) of Tero Yamane. According to this formula, 234 would be the appropriate respondents to this study. When n is equal to the adjusted sample size, N is equal to the population size, and e is equal to the error margin (MoE) and e is 0.05 depending on the research condition.

Finding and Discussion: -

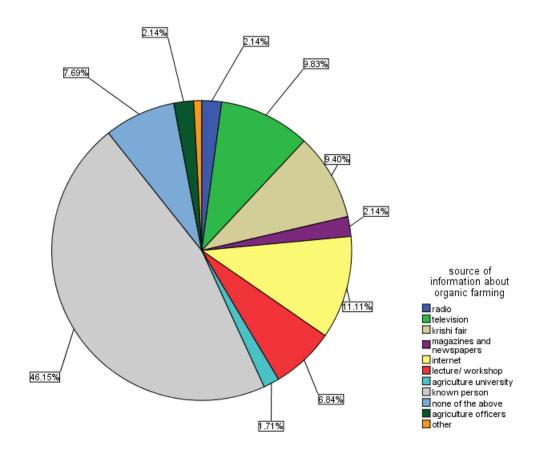
The researcher was asked in the questionnaire to check the level of knowledge among farmers. The first is demographic details, the second is knowledge of organic farming and the third is the practice of organic farming. The gender and age of the respondent are some of the most significant demographic variables that can contribute to farmers' awareness, attitudes, and practices. (Molder et al., 1991; Burton et al., 1999; Ghorbani and Hamraz, 2009; Sarker et al., 2010; Seyed et al., 2010). That's why the researchers used these two demographic variables to minimize sampling and response bias. The results can then be generalized. The researcher's main focus in this study was on the level of information only.

Source of Information for Organic Farming: -

As per Table 1 out of 234 respondents, the age group of 30 to 40 had the lion's share of (27.35 percent), followed by the age group of above 50 (25.21 percent), the age group of below 40 to 50 (23.93 percent) and the age group of below 30 had the least share of (23.50 percent). As found in many previous studies in agricultural universities on organic farming awareness, 108 respondents were recommended: "known person" as the unique source of information, followed by "internet" (26 respondents), "television" (23 respondents), "Krishi fair" (22 respondents) and "lecture/workshop" (16 respondents). While 18 respondents did not know about organic farming. Only 5 respondents chose agriculture officers and 4 farmers choose Agriculture University as a channel for information. The farmers, whose source of information is

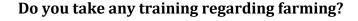
"internet" belonged to the age group of 'below 30' and '30 to 40', Whose source of information for organic farming was "radio" belong to the age group of 'above 50'. The above findings confirm that the information need for rural people was fulfilled by local sources like friends, colleagues, and neighbours persons. (Kempson 1986, Tucker and Napier 2002)

Source of information regarding organic farming												
Age of	Radio	Tele-	Krishi	NP	Inte	Work	Agricult	Known	None	Agric	Other	Total
farmer s		vision	fair	& MG	rnet	-shop	ure varsity	person	of the above	ulture office		
3				Mu			varsity		above	r		
below 30	0	4	4	5	16	2	2	14	6	0	2	55
30 to 40	0	4	3	0	10	6	2	29	10	0	0	64
40 to 50	0	11	9	0	0	5	0	29	2	0	0	56
Above 50	5	4	6	0	0	3	0	36	0	5	0	59
total	5	23	22	5	26	16	4	108	18	5	2	234



Training regarding agriculture

Table number 2 describes the training taken by farmers to practice agriculture. The majority of farmers yet didn't take the training in organic farming. Only 24 (10.25 percent) respondents out of 234 had taken training regarding organic farming. In an age-wise analysis, it emerged that the age group "30-40" respondents taken most training, accounting for 10 out of 63 farmers (15.87per cent), followed by the age group 40-50, accounting for 6 out of 56 farmers, whilst the age group "above 50" and "below 30" taken least training, accounting 4 for each. When farmers were asked to describe the status of the soil test, 17 respondents out of 234 had done. Only 18 respondents are practicing organic farming. Even these farmers are not fully aware of organic farming. That's why only 4 out of 234 farmers know about certified organic farming.



Age of farmers	Yes	No	Total	
Below 30	4	51	55	
30 to 40	10	54	64	
40 to 50	6	50	56	
Above 50	4	55	59	
Total	24	210	234	



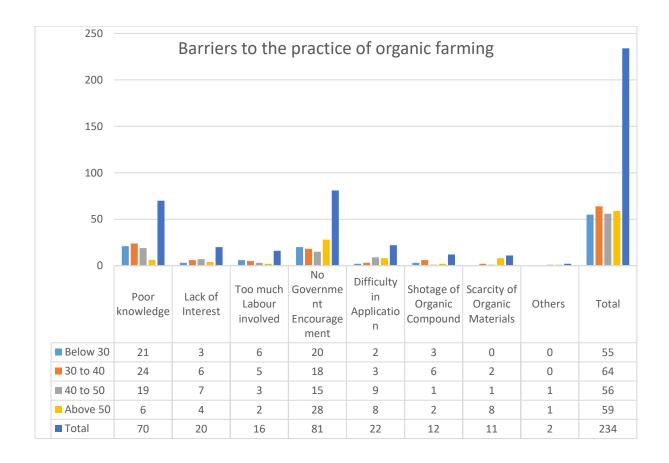
Knowledge

For knowledge, perspective statements were asked to farmers on organic farming. Farmers have to give their responses to each statement. The choices were true and false. The majority of the respondents recognize crops rotating, animal, plant, and kitchen wastes, pruning, composting, limiting the use of chemicals, manually green manuring, and controlling weed, as part of organic farming practices. They also understood that chemical fertilizers, chemical insecticides, and chemical herbicides are not allowed in organic farming. But the majority of the farmers did not know that using biological control agents for mulching, pests controlling, mixed cropping is also part of organic farming practices. It can easily be concluded that the farmers are still not knowledgeable enough. One major finding is that farmers are aware of the basic concept of organic farming. But they are not aware of advanced and technical organic farming.

Barriers to the Practice of Organic Farming

An interesting finding was that 81 respondents (34.61percent) confirmed the need for government encouragement for the adaptation of organic farming. While 70Farmers (29.91percent) believed poor knowledge of the method as another big reason and 22 farmers (09.40 percent) perceive difficulty in the application as one of the major barriers for not practicing organic farming. Even previous studies also have revealed technical, lack of encouragement, and possible economic barriers that influenced attitudes of farmers (Hattam 2006).

28 out of 59 respondents whose age group was "Above 50" choose "no government encourages" as a barrier for not practicing organic farming. While 8 accepted "Difficulty in application" as another reason. On another side,55farmers whose age group was the "Below 30" blame "Poor knowledge of the methods" and "no government encourages" as the greatest reason for not the practice of farming. 64 farmers whose age group was "30 to 40" also find "Poor Knowledge" as the main barrier for not the practice of organic farming. It concludes that "No government encouragement" and "Poor knowledge of the methods" are the biggest barriers to not practicing organic farming. So government should have focused on these barriers to motivate farmers.



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CONCLUSION & RECOMMENDATION

The finding indicated that all respondents learned agriculture from their kin. The respondents agreed that they are beginning to practice agriculture because there is no other occupation that they can practice. No one, like experts, practices agriculture and its allied business. All farmers have little knowledge of the art of agriculture. Even the toughest thing was about organic farming. All respondents agree that there is a need to improve awareness of organic farming. They still believe in artificial fertilizers, particularly for the control of diseases and the growth of seeds. Respondents know the rotating seeds, using animal manure, plant and kitchen waste, manually green manure, and weed management as part of organic farming activities. They also recognized that organic farming is free from artificial fertilizers, chemical insecticides, and chemical herbicides. But they did not realize that the use of biological control agents for mulching, pest control, and mixed farming is still an important part of organic farming activities. The level of expertise of respondents (farmers) is not adequate, chemical methods are widely used to improve productivity. There is also a need to develop the awareness of farmers on organic farming principles. The study of knowledge and awareness can play a very important role in improving development. Farmers are mindful of the use of plant compost, animal manure, and kitchen waste as fertilizer, but do not initiate organic cultivation. Their approach to organic farming is derogatory. Most farmers did not know about certified organic practices. There is a need for awareness-raising campaigns, particularly among farmers. This can be achieved by extension services, which can include training and marketing events, allowing farmers more knowledgeable of sustainable organic farming. The Government must launch projects to fix this problem. Farmers should have access to a variety of these programs. Some campaigns must be initiated by the government to meet the information need of a marginal farmer. Some instruction should be given to farmers to make them friendlier about soil, plant, and organic compost for better outcomes. Even agriculture-related government agencies can run extension projects and promotional campaigns that can raise consciousness among peasants about landscapes, better crops, advanced agricultural practices, and good governance schemes for organic farming. It is incredibly necessary to make farmers aware of the need for organic farming. Only then can farmers be more and more inspired by organic farming. This research indicates that popular media (Nukkad-Natak, puppetry, sang, banners, etc.) can be used as a contact medium during the public awareness drive. Since the majority of respondents suggested "known person" as an effective contact method for farmers. The above results confirm that the knowledge needs of rural residents have been served by local outlets such as relatives, employers, and neighbors (known persons). Assessment of the roles of government agencies and workers is required. Do they interact with farmers to spread knowledge of organic farming? The recommendations of the study cannot be extended

to other countries. The researcher had taken a single village and a survey of 234 respondents. The peasants, however, shared their wish that they want to do organic farming, but they do not have sufficient expertise to do so. Barriers are the scarcity of organic compounds and the requisite tools, the complexities of implementation, and the complicated and long process. As a result, the researcher indicates a continuing need for police to encourage organic farmers for more sustainable development.

Acknowledgment: -

Thank you for your patience, advice, and support, Dr. Mihir Ranjan Patra. Your vast knowledge and meticulous editing have been extremely beneficial to me. I am grateful that you accepted me as a student and have continued to believe in me over the years.

Reference: -

Assis, K., & Mohd Ismail, H. A. (2011). Knowledge, attitude, and practices of farmers towards organic farming. International journal of economics and research, 2(3), 01-06.

Adom, D., Adu-Gyamfi, S., Agyekum, K., Ayarkwa, J., Dwumah, P., Abass, K., ... & Obeng-Denteh, W. (2016). Theoretical and conceptual framework: Mandatory ingredients of quality research. Journal of Education and Human Development, 5(3), 158-172.

Adom, Dickson & Hussein, Emad & Joe, Adu--Agyem. (2018). THEORETICAL AND CONCEPTUAL FRAMEWORK: MANDATORY INGREDIENTS OF A QUALITY RESEARCH. International Journal of Scientific Research. 2018 7. 438-441.

Burton, M., Rigby, D., & Young, T. (1999). Analysis of the determinants of adoption of organic horticultural techniques in the UK. Journal of Agricultural Economics, 50(1), 47-63.

Biao, X., Xiaorong, W., Zhuhong, D., & Yaping, Y. (2003). Critical impact assessment of organic agriculture. Journal of Agricultural and Environmental Ethics, 16(3), 297-311.

Badgley, C.; Moghtader, J.; Quintero, E.; Zakem, E.; Chappell, J. M.; Aviles-Vazquez, K.; Samulon, A. and Perfecto, I. (2007). Organic agriculture and global food supply. Renewable Agriculture and global food systems. 22(2): 86-108.

Ghorbani, M., & Hamraz, S. (2009). A survey on factors affecting consumers' potential willingness to pay for organic products in Iran (a case study). Trends in Agricultural Economics, 2(1), 10-16.

Hattam, C. (2006). Adopting organic agriculture: An investigation using the Theory of Planned Behaviour (No. 1004-2016-78538). 79: 73.

Kempson, E. (1986). Information for self-reliance and self-determination: the role of community information services. IFLA Journal, 12(3), 182-191.

Khair, H. (2004). Consumer's Perceptions Attitudes and Willingness to Pay Towards Chemical-Free Vegetable in North Sumatera (Doctoral dissertation, Universiti Putra Malaysia).

Molder, P. J., Negrave, P. D., & Schoney, R. A. (1991). Descriptive analysis of Saskatchewan organic producers. Canadian Journal of Agricultural Economics/Revue canadienne d'agroeconomie, 39(4), 891-899.

Marsh, L., Zoumenou, V., Cotton, C., & Hashem, F. (2017). Organic farming: knowledge, practices, and views of limited resource farmers and non-farmers on the Delmarva Peninsula. Organic agriculture, 7(2), 125-132.

Paul, J. (2006). Permanent agriculture: a precursor to organic farming. Elementals: Journal of Bio-Dynamics Tasmania, (83), 19-21.

Rogers, E. M. (1995). Diffusion of Innovations: modifications of a model for telecommunications. In Die diffusion von innovationen in der telekommunikation (pp. 25-38). Springer, Berlin, Heidelberg.

Stockdale, E. A., Lampkin, N. H., Hovi, M., Keatinge, R., Lennartsson, E. K. M., Macdonald, D. W., & Watson, C. A. (2001). Agronomic and environmental implications of organic farming systems. 70: 261-325

Shailaja, A., & Reddy, M. N. (2003). Changing Needs of farm women in agriculture. Indian J. Ext. Edu, 3(2), 41-3.

Sarker, M. A., Itohara, Y., & Hoque, M. (2009). Determinants of adoption decisions: The case of organic farming (OF) in Bangladesh. Extension Farming Systems Journal, 5(2), 39.

Sadati, S. A., Fami, H. S., Kalantari, K., Mohamadi, Y., & Asakere, A. (2010). Investigating effective factors on attitude of paddy growers towards organic farming: a case study in Babol County in Iran. Research Journal of Applied Sciences, Engineering, and Technology, 2(4), 362-367.

Singh, S., & George, R. (2012). Organic farming: Awareness and beliefs of farmers in Uttarakhand, India. Journal of Human Ecology, 37(2), 139-149.

SHARMA, A., & SINGH, A. K. (2016). Information Needs of Farm Women for Efficient Farming in Uttarakhand. Journal of Agri Search, 3(2), 122-126.

Tripathi, Amarnath, and Prasad, A. R. (2009) "Agricultural Development in India since Independence: A Study on Progress, Performance, and Determinants," Journal of Emerging Knowledge on Emerging Markets: Vol. 1, Article 8. DOI: https://doi.org/10.7885/1946-651X.1007

Tripathi, A., & Prasad, A. R. (2010). Agricultural development in India since independence: A study on progress, performance, and determinants. Journal of emerging knowledge on emerging markets, 1(1), 8.

Tiwari, N., Kumar, S., & Tiwari, A. B. (2018). Knowledge and Adoption Level in Mushroom Cultivation among Rural Women in Gumla district of Jharkhand. Journal of Krishi Vigyan, 6(2), 150-152.

Williams SKT (1978). Rural Development in Nigeria University of Ife Press, 12: 82-84.

Web sites:

https://www.ifoam.bio/en/news/2019/02/13/world-organic-agriculture-2019

//economictimes.indiatimes.com/articleshow/69830509.cms?from=mdr&utm_source= contentofinterest&utm_medium=text&utm_campaign=cppst

https://www.omicsonline.org/open-access/agriculture-role-on-indian-economy-2151-6219-1

http://www.businessdictionary.com/definition/research-methodology.html

http://www.raosoft.com/samplesize.html

https://www.ibef.org/industry/agriculture

india.aspx#:~:text=Gross%20Value%20Added%20(GVA)%20by,)%20in%20FY20%20 (PE).