

Knowledge Attitude and Practices on Organic Farming Among Beneficiaries of Kudumbam Kolunji Farm, Pudukkottai District

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Abstract: Agriculture is the backbone of India. Any changes in agriculture will result in the life of people and nature and vice-versa. There has been rapid change in the way we farm in past few decades. It is characterized mainly by the dominance of machinery and chemical technology in agriculture, replacing the traditional wisdom. The changes in agriculture have taken a quantum jump during green revolution. Such change have resulted in environmental pollution, degradation of soil health, loss of bio-diversity and others. As the days went by, the farmers across. The nation have switched to modern agriculture without realizing the consequences the effects of modern agriculture has resulted in deterioration in soil quality, drastic impacts on availability of agriculture producer; besides impacting health and lifestyle of the people. Organic farming, which has been traditionally followed, has come as an alternative, yet the farmers who have been modern agriculture hesitate to practice the Organic Farming. Hence, the Knowledge, Attitude and Practice on organic farming greatly influence their willingness to switch over to organic farming. Thus, the present study focuses on the knowledge, attitude and practice on organic farming among the beneficiaries of Kolunji Farm. As the present study aims at analyzing the Knowledge, Attitude and Practices on of, the researcher has adopted Descriptive Research Design. The Researcher used the Multistage Random Sampling to collect the data from 60 farmers. In order to measure the Knowledge, Attitude and Practices on Organic Farming, He used developed by Assis, K. and Mohammed Ismail, H.A in the year 2011 which contained the following numbers of question in each dimension. Salient findings and suggestions pertaining to the study will be discussed in the full paper.

Keywords: Organic Farming, Knowledge, Attitude and Practice, Traditional Agriculture

I. Introduction

India is the world's second or third largest producer of several dry fruits, agriculture based textile raw materials, roots and tuber crops, pulses, farmed fish, eggs, coconut, sugarcane and numerous vegetables. India ranked in the world's five largest producers of over 80% of agricultural produce items, including many cash crops such as coffee and cotton, in 2010. India is one of the world's five largest producers of livestock and poultry meat, with one of the fastest growth rates, as of 2011. India is an agriculture based country. Agriculture is the single most important contributor of Indian economy. More than half of country's total workforce are working in agriculture and it's supporting sectors like fisheries, forestry, etc. Agriculture plays a significant role in the overall economic development and its contributions to the Indian GDP were at around 16.6% in the year 2009. That's reason India secured 2nd position worldwide in terms of farm output. India's agriculture includes rice, wheat, pulses, tea, coffee, fresh vegetable, fresh fruits, dry fruits, coconuts, major spices, milk, millets, cotton, Jute, castor oil seed, etc. India ranks among the top five producers of many agricultural items like coffee, cotton, etc. India ranks 2nd largest producer of wheat and rice in the world. Items like milk, many fresh fruits, spices, jute, millets, etc. where India is the largest producer.

Major Problems of Indian Agriculture

1. One of the major problems of Indian agriculture is that a large number of people depend solely on agriculture. It is obvious the, that not much can be realized unless this continuing pressure of population on land is reduced.
2. Agricultural conditions and practices vary from State to State in various rural areas of India. Differences in soil conditions, climatic factors and systems of cropping produce etc., from State to State; farm productivity has not adequately been improving. Indian agriculture has been almost continuously experiencing problem arising out of differences in agricultural conditions and practices.
3. Comparing Indian agriculture with that of other countries of the world, we find that both productivity of crops are very low in India.

4. Most of the Indian farmers are illiterate, ignorant, superstitious, and conservative and bound by outmoded customs, etc. create an atmosphere which is not proving helpful for going ahead with farm productivity. One needs, however, certain helpful conditions for one's success, but Indian rural economy in many cases exhibits a poor state of conditions that appear to stand as a stumbling block to the growth of the Indian agriculture.
5. Indian agriculture has been facing problems because of the inadequacy of such non-farm services, such as inadequate provision of finance, marketing etc.
6. Institution like Co-operatives, Rural Banks, Panchayats, Community Development Projects, etc., are not rising adequately to the occasion to deliver the goods to the Indian farmers in their efforts for going ahead with farm income and productivity.
7. Adequate attention is not given to increased the non-farm income opportunities so that during slack seasons. The farmers can be absorbed gainfully.
8. Absence of adequate knowledge of inter-cultural practices, multiple cropping, crop-rotation, crop insurance, irrigational facilities, etc. is standing in the way of Indian agriculture.
9. Lack of effective and meaningful agriculture enterprise in many parts of our vast countryside is also a great problem in Indian agriculture.
10. There is lack of co-ordination between different institutions.

Review of Earlier Studies

Assis, and Mohd Ismail, (2011) in his study on Knowledge, Attitude and Practices of Farmers towards Organic Farming Organic farming is gaining popularity all over the world as it can diversify agricultural production system toward attaining improved productivity, farm income as well as food safety. The rise of organic farming was driven partly by consumers' concern with food quality and safety, as well as the protection of the environment. Organic Farming produces safe and nutritious food as it helps prevent soil pollution by stopping risky chemical reactions in the soil and avoiding produce contamination, as well as soil erosion, by wind and rain. One of the important parties that can enable the country to produce more organic products through organic farming is the growers or farmers. The final decision of farmers to use a new practice like organic farming system is usually the result of their knowledge of the practices as well as their perception. Therefore, the main purpose of this preliminary study was to investigate the knowledge, perception or attitude, and practices of vegetable growers towards organic farming. A survey method through face-to-face interview by using structured questionnaire was used to collect data from a total of 31 vegetable growers in Kundasang, Sabah which was selected by using simple random sampling method. The findings of the study show that the knowledge of the respondents on organic farming especially pertaining to the use of chemical insecticides, herbicides and fertilizers is still need to be improved, their attitude is also still negative, and they are still dependent on conventional practices (i.e. chemical) especially to control pests and diseases.

Jaganathan et al (2012) his studies Knowledge Level of Farmers on Organic Farming in Tamil Nadu Organic farming is a production system in which the environment is preserved, farmers and workers have fair access to the means of food production while receiving a fair return for their labour and consumers have their food at fair prices. The area under organic farming in India has been increasing steadily since 2000 after launching National Programme for Organic Production. The study was conducted to find out the knowledge level of organic and inorganic farmers on organic farming in Tamil Nadu. A total of 240 farmers comprising 120 organic farmers and 120 inorganic farmers drawn randomly from four districts in Tamil Nadu constituted the sample for the study. A test was developed for assessing the knowledge of farmers. Organic farmers had better knowledge than inorganic farmers with the mean score difference of 3.73. The variables namely, innovativeness, market orientation, extension orientation and mass media exposure had significant relationship with knowledge level of organic farmers.

Yadav et al (2013) in his study the post-independence period, the most important challenge in India has been to produce enough food for the growing population. Hence, high-yielding varieties are being used with infusion of irrigation water, fertilizers, or pesticides. This combination of high-yielding production technology has helped the country develop a food surplus as well as contributing to concerns of soil health, environmental pollution, pesticide toxicity, and sustainability of agricultural production. Scientists and policy planners are, therefore, reassessing agricultural practices which relied more on biological inputs rather than heavy usage of chemical fertilizers and pesticides. Organic farming can provide quality food without adversely affecting the soil's health and the environment; however, a concern is whether large-scale organic farming will produce enough food for India's large population. Certified organic products including all varieties of food products including basmati rice, pulses, honey, tea, spices, coffee, oilseeds, fruits, cereals, herbal medicines, and their value-added products are produced in India. Non edible organic products include cotton, garments, cosmetics, functional food products, body care products, and similar products. The production of these organic crops and products is reviewed with regard to sustainable agriculture in northern India.

As the study focuses on the Knowledge, Attitude and Practices on Organic Farming, it will be useful to the NGO who have been working for the cause of sustainable Agriculture and its help the NGOs to identifying the challenges and difficulties Faced by the farmers in switching over to Organic Farming. Government can learn the implication of the study and frame appropriate policies to promote Organic Agriculture.

Aim

To analyze the Knowledge Attitude and Practice on Organic Farming among beneficiaries of Kudumbam (Kolunji farm) NGO, Odugampatti, Pudukottai District.

Objectives

- To understand the socio demographic characteristic of the Organic Farmers.
- To assess the Knowledge, Attitude and Practices on Organic Farming among the Farmers.
- To document the challenges faced and explore the problems experienced by the organic farmers.

II. Research Hypotheses

- There is a significant difference between male and female organic farmers with regards to their Knowledge Attitude and Practice on Organic Farming.
- There is a significant difference between the seed purchased from outside and its own Organic Farming with regard to their knowledge Attitude and Practices on Organic Farming
- There is a significant difference between farmers who have attended the practical session and not attended practical session on Organic Farming with regard to their Knowledge Attitude and Practices on Organic Farming
- There is a significant difference between different farming practices adopted by the respondents with regard to their Knowledge Attitude and Practices on Organic Farming.
- There is a significant relationship between respondents' Age and Knowledge Attitude and Practices on Organic Farming.
- There is a significant relationship between respondent's income and Knowledge, Attitude and Practices on Organic Farming.

Research Design:

As the present study aims at analyzing the Knowledge, Attitude and Practices on of, the researcher has adopted Descriptive Research Design.

According to C.R. Kothari, descriptive research design are those which are concerned with the characteristics of the study whereas diagnostic research design studies the association between the variable.

Study of population:

The universe for the present study consists of 1500 farmers who have undergone the training on organic farming over the 26 years who are living in Puthukottai and Tiruchirappalli, District.

Sampling Method:

The Researcher used the Multistage Random Sampling to collect the data.

At the **First Stage** the researcher selected Kunandarkovil Blocks among 13 Block in Pudukkottai, using Lottery Method.

During **Second Stage**, the researcher selected 6 villages from Kunandarkovil Block using Lottery Method.

During the **Third Stage**, the researcher has selected 10 farmers (who have undergone Training on Organic Farming and has own lands) from each of the six villages, using Lottery method.

Sample Size

Thus, the total sample size is 60 organic farmers.

Pilot Study:

The Researcher visited the Kudumbam NGO to get the permission for the research study and also interacted with the field officers about the feasibility of their study and finalized the methodology.

Pre testing:

In order to find out the suitability the questions framed, the researcher collected the data from 10 farmers. As many questions had to be reframed, the 10 pretest respondents were not included in the final sample.

Tools of Data Collection:

The researcher used Interview Schedule Formed by himself to collect socio-demographic details, Farming Practices, Challenges faced in Organic Farming and opinion about various Farmers etc.

In order to measure the Knowledge, Attitude and Practices on Organic Farming, He used developed by Assis, K. and Mohammed Ismail, H.A in the year 2011 which contained the following numbers of question in each dimension.

- ❖ Self-prepared question -1-to 35
- ❖ Knowledge 17 questions
- ❖ Attitude 9 question
- ❖ Practices 11 question

The researcher used the following test by using SPSS statistical design in order to find out the relationship between variable.

- ❖ Percentage Analysis
- ❖ Student 'T' Test
- ❖ Karl Pearson's Co efficient of Correlation
- ❖ One Way ANOVA

Socio-Demographic Characteristics

- An equal proportions (20.1% & 21.5%) of the respondents belong to 41 to 45 years.
- A vast majority (81.7%) of the respondents are males and rest.
- An equal proportion (16.7% each) of the respondents belong to Odugampatti, Palathupatti, Pulivallam, Kudanarkovil, Kovilverakudi, Kuguthurainpatti Villages.
- All (100%) the respondents belong to Kudanarkovil Block.
- A vast majority (91.7%) of the respondents are married.
- Majority (98.3%) of the respondents are Hindus.
- Less than half (41.7%) of the respondents had studied upto high school.
- An absolute majority (95.0%) of the respondents are from nuclear family.
- Slightly more than half (51.7%) of the respondents' have more than two children.
- Less than half (41.7%) of the respondents have 3 persons in their family.
- More than one third (38.3%) of the respondents have two males in their family.
- Less than half (40.0%) of the respondents are having only one female member in the family.
- More than half (61.7) of the respondents earn Rs.50001 to 75000
- Equal proportions (28.3%) have two dependents.

Findings Related To Agriculturer Practice

- The two third (68.3) of the respondent have type of above Agriculture both.
- An Absolute Majority (91.7%) of the respondents' doing Agriculture two times in a year.
- More than the half (60.0) of the respondent opinion is that they can profit from Both.
- More than the half (58.3) of the respondents land have both Rain fed and Irrigation.
- The majority (98.3%) of the respondents have not availed any Government Schemes.
- More than half (60.0%) of the respondents had bought their seeds from Outside.
- An absolute Majority (96.7%) of the respondents are following traditional Agriculture.
- Less than three fourth (71.7%) of the respondent's children are interested in Agriculture.
- An Absolute Majority (98.3%) of the respondents are not Practicing Integrated Farming.
- An Absolute Majority (96.7%) of the respondents were not processing their Agriculture Products.
- All (100%) the respondents reported that they are not selling their Paddy to the Government.
- All (100.0%) the respondents were not satisfied with purchasing price fixed by the Government in buying Paddy.
- A vast majority (83.3%) of the respondents started their Agriculture work from the Age below 20years.
- All (100.0%) the respondents have Own Lands.
- More than one third (35.0%) of the respondents have 3 acres of Land.
- All (100.0%) the respondents have not insured their Crops.
- More than half (58.3%) of the respondents do not get involved in work other than Agriculture.
- An absolute Majority (93.3%) of the respondents take food while going for their Agriculture Work.
- An absolute Majority (96.7%) of the respondents attend the training from NGO.
- More than three fourth (78.3%) the respondents have not attended any demonstration sessions on Organic Farming by NGO.

Findings Related To Organic Agriculture Practice

- Majority (63.3%) of the respondents get good Quality of Seeds.
- A Vast Majority (80.0%) of the respondents feel that the soil is not good for Agriculture.
- A Vast Majority (88.3%) of the respondents do have enough livestock for the Agriculture work.
- A Vast Majority (78.3%) of the respondents sell their products easily in the Market.
- An Absolute Majority (93.3%) of the respondents not getting enough Laborers.

Findings Related To Testing Of Hypothesis

A) Research Hypothesis 1

There is a significant difference between male and female organic farmers with regards to their Knowledge Attitude and Practice on Organic Farming.

Null Hypothesis

There is no significant difference between male and female organic farmers with regard to their Knowledge, Attitude and Practice on Organic Farming.

Testing Of Hypothesis

To test the above hypotheses, the researcher used student 't' test and the result reveals that there is no significant difference between male and female organic farmers with regard to their Knowledge, Attitude and Practice on Organic Farming. (Ref.:Table 40)

Inference

Hence, null hypothesis is accepted

B) Research Hypothesis 2

There is a significant difference between the seed purchased from outside and its own Organic Farming with regard to their knowledge Attitude and Practice on Organic Farming

Null Hypothesis

There is no significant difference between the Respondent who are getting seeds from outside and not getting outside with regard to their Knowledge, Attitude and Practice on Organic Farming.

Testing Of Hypothesis

To test the above hypotheses, the researcher used student 't' test and the result reveals that there is no significant difference between the Respondent who are getting seeds from outside and not getting outside with regard to their Knowledge, Attitude and Practice on Organic Farming. (Ref.:Table 41)

Inference

Hence, null hypothesis is accepted

C) Research Hypothesis 3

There is a significant difference between farmers who have attended the practical session and not attended practical session on Organic Farming with regard to their Knowledge Attitude and Practice on Organic Farming

Null Hypothesis

There is no significant difference between farmers who have attended and those who have not attended the practical sessions on Organic Farming with regard to their attitude on Organic Farming, whereas there is no significant difference between them with regard to their Knowledge and Practice on Organic Farming.

Testing Of Hypothesis

To test the above hypotheses, the researcher used student 't' test and the result reveals that there is a significant difference between farmers who have attended and those who have not attended the practical sessions on Organic Farming with regard to their attitude on Organic Farming, whereas there is no significant difference between them with regard to their Knowledge and Practice on Organic Farming. (Ref.: Table 42)

Inference

Hence, null hypothesis is rejected in Attitude and null hypothesis is accepted on Knowledge and Practices dimension.

D) Research Hypothesis 4

There is a significant difference between different farming practices adopted by the respondents with regard to their Knowledge Attitude and Practices on Organic Farming.

Null Hypothesis

There is no significant difference between farmers' mode of agriculture practices with regard to their Knowledge on Organic Farming. Whereas there is no significant difference between framers practice in organic, chemical and both, with regard to their Attitude and Practice.

Testing Of Hypothesis

To test the above hypotheses, the researcher used student 't' test and the result reveals that there is no significant difference between farmers' mode of agriculture practices with regard to their Knowledge on Organic Farming. Whereas there is no significant difference between framers practice in organic, chemical and both, with regard to their Attitude and Practice. (Ref.: Table 43)

Inference

Hence, null hypothesis is rejected in Knowledge himself whereas and null hypothesis is accepted in Attitude and Practices on Organic Farming.

E) Research Hypothesis 5

There is a significant relationship between respondents' Age and Knowledge Attitude and Practice on Organic Farming.

Null Hypothesis

There is a significant relationship between respondents' age and their Attitude on Organic Farming whereas there is no significant relationship between respondents' age and Knowledge and Practice on Organic Farming.

Testing Of Hypothesis

To test the above hypotheses, the researcher used One Way ANOVA test and the result reveals that there is a significant relationship between respondents' age and their Attitude on Organic Farming whereas there is no significant relationship between respondents' age and Knowledge and Practice on Organic Farming. (Ref.: Table 44)

Inference

Hence, null hypothesis is rejected on the dimension Knowledge and null hypothesis is accepted on the dimension Attitude and Practices

F) Research Hypothesis 6

There is a significant relationship between respondent's income and Knowledge, Attitude and Practice on Organic Farming.

Null Hypothesis

There is significant relationship between respondents' income and knowledge on organic farmings whereas, and there is no significant relationship between respondents' income and attitude and income and practice on organic farming.

Testing Of Hypothesis

To test the above hypotheses, the researcher used One Way ANOVA test and the result reveals that there is significant relationship between respondents' income and knowledge on organic farmings whereas, and there is no significant relationship between respondents' income and attitude and income and practice on organic farming. (Ref.: Table 45)

Inference

Hence, null hypothesis is rejected on the Knowledge and null hypothesis is accepted on the dimension Attitude and Practices

Suggestions to Government and NGO'S

- ❖ Traditional seeds, organic fertilizer and organic manure can be provided to the interested farmers by the government at subsidized rate.
- ❖ Government can make policies regarding organic farming.
- ❖ Government can give loans to the organic farmers by simplifying the procedures to avail the same.
- ❖ NGO's can give training on organic farming to promote positive
- ❖ Government encourage the farmers to do integrated farming.
- ❖ Government can provide projects to NGOS based on the organic farming.
- ❖ Government can take selected farmers to outside the state or country to orient about new techniques in organic farming.
- ❖ Government can ban the chemical fertilizers that could harm the people.
- ❖ Government can prohibit the sale of Genetically Modified seeds.
- ❖ Government can recognize the enterprising who farmers who have well practice organic farming in a successful manner
- ❖ Academy institution may introduced a subject related to organic farming and its importance

Suggestion to Farmers

- ❖ As many of the farmers here found to have not insured their crops, it is suggested that Organic Farmers to insure their crops.
- ❖ Those who attended training on organic farming have positive attitude towards organic farming, it is suggested for that, organic farmers should enroll themselves training and demonstration session on organic farming.
- ❖ As many of the children of the organic farmers are not interested in agriculture, they should create interest among their children in agriculture, to prevent the agriculture profession from dying.

III. Conclusion

The present study has given an in-depth analyzing on the challenges and difficulties faced by the farmers who have switched over to Organic Farming. It also depicts the Knowledge, Attitude and Practices on Organic Farming among them. It is understood that NGOS play a crucial role in promoting traditional and sustainable agriculture however, the NGOs' interventions should be coupled with government support and social Workers' initiatives. Agriculture, the backbone of our country, has to be upheld; in order to save our humanity from starving.

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