# CONSTRAINTS IN ADOPTIONS OF SUSTAINABLE ORGANIC FARMING PRACTICES

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## Abstract

Organic farming is very much native to this country as whoever tries to write a history of organic farming will have to refer to India and China. The basic point is that we need natural farming because, it is farming based on natural principles which alone is sustainable. Organic farming is not more non-chemicalism in agriculture. To be able to sustain other factors which are inseparably connected herein lies the essence of organism. This study aims to find out the constraints of the farmers in adoption of sustainable organic farming practices as the members of NGOs in paddy crop cultivation. Among the several NGOs in Pudukottai district, a few of them were found to have taken strenuous efforts towards sustainable organic farming practices under the low external input for sustainable agriculture network, namely KUDUMBAM, VENTURE and RECO. A sample size of 100 farmers were selected from the above NGOs, they are members of NGOs. A total of 33 sustainable organic farming practices in paddy cultivation were identified for this study. Constraints faced in adoption of sustainable organic farming practices were classified under four dimensions. They are: bio-physical constraints, communication constraints, economic constraints and socio–personal constraints. Simple percentage analysis was employed to make percentage ranking for easy inference. As the result of the study, among the four dimensions of constraints, majority of the respondents expressed that 'inadequacy of irrigation water' as the major constraint under bio-physical constraints, 'lack of adequate information' under communication constraints, 'high cost of labour' under economic constraints and 'non-availability of adequate labours' under socio-personal constraints.

**Key words:** Organic farming, sustainable agriculture, NGOs.

## 1. Introduction

The farmers of India are known as "farmers of forty centuries" and it is organic farming that sustained them. Therefore, it is not that some idea about organic farming originated in the west and we are borrowing them. It is our own product, our contribution to the world. It is farming based on natural principles which alone is sustainable. Organic farming is not mere non-chemicalism in agriculture. To be able to sustain others which are inseparably connected herein lays the essence of organicism. A growing number of NGOs in Tamilnadu are involved in the sustainable organic farming agricultural activities. Among the several NGOs, a few of them were found to have taken strenuous efforts towards organic farming practices. In 1990, the Tamilnadu LEISA (Low External Input for Sustainable Agriculture) Network was formed. The network has a number of active farmer members who worked out their experience with low external input and sustainable agriculture as an input in addition to the knowledge gain through a series of training courses organized by an NGO named KUDUMBAM in Pudukottai district began to take up intensive efforts towards training the farmers in the adoption of

organic farming practices. The findings of the study will be of immense help for the extension workers, government agencies, non-governmental organizations, planners and policy makers, besides the farmer themselves in organic farming development and to overcome the problems of the farmers.

## 2. Research methodology

The study was conducted in Pudukottai district of Tamilnadu. Pudukottai district was selected for the study considering the following reasons. 1. Paddy is the main food crop of this district. 2. More number of NGOs assisted the farmers towards organic farming both technically and economically. 3. Familiarity of the student researcher with the local language and culture of the people. Three villages from Kundrandarkoil Block and four villages from Annavasal block were selected for the study. The selection of respondents was based on the participation of farmers in the NGOs as members. The villages selected were Pallathupatti, Veerapatti and Nadupatti of Kundrandarkoil Block. The respondents from these villages were the members of the NGO "KUDUMBAM". Iruntheraipatti and Kambagapatti villages were selected from Annavasal Block. The respondents from the above villages were the members of the NGO "VENTURE". The villages Vadakadu and Valangaiman were also selected from the same block. The respondents of these villages were the members of the NGO "RECO".

The sample size was fixed as 100. All the members of the above NGOs were selected for the study. 50 respondents were the members of the NGO "KUDUMBAM". 25 respondents were the members of the NGO "VENTURE" and remaining 25 respondents were the members of the NGO "RECO". The data were collected with the help of a well structured and pre-tested interview schedule. The respondents were asked to indicate the constraints experienced by them in the adoption of organic farming practices. The percentage of respondents indicating each of the constraints was worked out separately and the percentage ranked to facilitate easy inference. Constraints were listed out and classified under four dimensions. They are: Bio-physical constraints, communication constraints, economic constraints and socio-personal constraints.

## 3. Findings and discussion

The constraints experienced by the respondents in the adoption of organic farming practices are presented under four categories viz., Bio-physical constraints, communication constraints, economic constraints and socio-personal constraints. The results are presented in Table 1.

**TABLE 1**

**Constraints Encountered by the Respondents**

| S.No | Constraints | Number of Respondents | Percentage | Rank |
|---|---|---|---|---|
| I | **Bio-Physical Constraints** | | | |
| 1 | Non-availability of organic manure | 50 | 50.00 | VI |
| 2 | Low fertility status of the soil | 88 | 88.00 | II |
| 3 | Inadequacy of irrigation water | 96 | 96.00 | I |
| 4 | Non-availability of good seeds | 45 | 45.00 | VII |
| 5 | Non-availability of inputs | 52 | 52.00 | V |
| 6 | Occurrence of pests and diseases | 75 | 75.00 | III |
| 7 | Difficulty in maintaining light traps | 28 | 28.00 | VIII |
| 8 | Difficulty in storage of seeds and grains | 64 | 64.00 | IV |
| II | **Communication Constraints** | | | |
| 1 | Lack of adequate training | 49 | 49.00 | III |
| 2 | Lack of adequate information on organic farming | 64 | 64.00 | I |
| 3 | Lack of adequate demonstration on organic farming | 43 | 43.00 | IV |
| 4 | Lack of extension agency contact | 58 | 58.00 | II |
| 5 | Lack of technical guidance | 38 | 38.00 | V |
| **III** | **Economic Constraints** | | | |
| 1 | Limited finance | 82 | 82.00 | II |
| 2 | High cost of input | 65 | 65.00 | IV |
| 3 | High cost of labour | 94 | 94.00 | I |
| 4 | High cost of cultivation | 58 | 58.00 | V |
| 5 | Lack of credit facilities | 79 | 79.00 | III |
| **IV** | **Socio-Personal Constraints** | | | |
| 1 | Unawareness about pollution | 76 | 76.00 | II |
| 2 | Lack of interest in organic farming | 42 | 42.00 | IV |
| 3 | Non-availability of adequate labour | 88 | 88.00 | I |
| 4 | Poor education | 68 | 68.00 | III |
| 5 | Lack of preparedness to take risk | 25 | 25.00 | VI |
| 6 | Negative attitude towards organic farming | 38 | 38.00 | V |

**Bio-physical constraints:** It may be seen from Table 1 that eight bio-physical constraints were faced by the paddy farmers in the adoption of organic farming practices. Among eight bio-physical constraints, the serious constraint that was experienced by 96 per cent of the respondents was inadequacy of irrigation water; this may be due to poor water holding capacity of the soil and uneven distribution of rain fall. The low fertility status of soil was encountered by about 88 per cent of the

respondents, which ranked second among the bio-physical problem. The third constraint namely, occurrence of pests and diseases was experienced by 75 per cent of the respondents, followed by difficulty in storage of seeds and grains (64 per cent), non-availability of inputs (52 per cent), non-availability of organic manures (50 per cent), non-availability of good seeds (45 per cent) and difficulty in maintaining light traps (28 per cent). This finding derives support from the findings of Gaurha and Jain (1981) and Vasanthakumar (1987).

**Communication constraints:** Among the five communication constraints, the most serious constraint mentioned by the 64 per cent of the respondents was lack of adequate information on organic farming. In general, it is the tendency of the trained farmers to get more information about the trained subject matter. This may be reason for the above constraint. This finding derives support from the findings of Sechser (1989). The other major constraints expressed by the respondents were lack of extension agency contact (58 per cent). This may be due to the reason that, poor government extension agency contact with the farmers other than the NGOs. The other constraints expressed by the respondents were lack of adequate training (49 per cent), lack of adequate demonstration on organic farming practices (43 per cent) and lack of technical guidance (38 per cent).

**Economic constraints:** Out of five economic constraints, the major constraint experienced by 94 per cent of the respondents was high cost of labour which secured first rank, followed by the second constraint of limited finance 82 per cent, lack of credit facilities (79 per cent), high cost of inputs (65 per cent) and high cost of cultivation (58 per cent). From this we can conclude that, the high cost of labour with limited finance and lack of credit facilities might be the reasons for poor investment in the adoption of organic farming practices. This finding is in line with the findings of Parthasarathi (1997).

**Socio-personal constraints:** Among the six socio-personal constraints, non-availability of adequate labour ranked first, which was expressed by 88 per cent of the respondents due to migration of agricultural labourers from agricultural activities to industrial and business activities. Unawareness about pollution (76 per cent) and poor education status (68 per cent) were observed as the second and third ranked constraints respectively. Non-availability of educational institutes within easy reach may be the reasons for the above constraints. This finding derives support from the findings of Shark Alauddin (1991). The other socio-personal constraints in the descending order of importance were: lack of interest in organic farming (42 per cent), negative attitude towards organic farming (38 per cent) and lack of preparedness to take risk (25 per cent).

## 4. Conclusion

Sustainable organic farming lays an important role in Indian agriculture. Now a day organic farming is a must in order to find the problems like environmental pollution in water, air and land, chemical residual effects on agricultural products and its allied productions indirectly. The findings of the study revealed that several constraints were expressed by the members of NGOs in adoption of

organic farming practices in paddy. The constraints viz., 'inadequacy of irrigation water' and 'low fertility status of soil' occupied the top two ranks under bio-physical constraints. Among communication constraints 'lack of adequate information on organic farming' and 'lack of extension agency contact' were the top two constraints. Among the economic constraints 'high cost of labour' and 'limited finance' were the major constraints expressed by respondents. 'Non-availability of adequate labour' and 'unawareness about pollution' were the important socio-personal constraints encountered by the respondents. The analysis of the above the categories of constraints will be of use to the officials of NGOs and government institutions to plan and modify the training programmes and training methods, so as to eliminate these constraints faced by the organic farmers in order to adopt the sustainable organic farming practices for achieve increased production.

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