



# Constraints faced by tribal women in adoption of organic farming

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## ABSTRACT

The objectives of the present research were to study the constraints faced by tribal women in adoption of organic farming. The study was conducted in four villages selected from 150 villages of Jadol, Gogunda and Kotra Panchayat Samities of Udaipur district. The sample consisted of randomly selected 100 respondents from the selected villages namely Kantharia, Jambua, Dhoya and Bansaria. Interview method was used for collecting data from the respondents. Mean per cent score was used for the analysis of data. Findings of the study reveal that, main constraints was personal constraints with the mean weighted score 2.46. Economic constraints were ranked second with MWS 2.30. Technical constraints with overall MWS were found to be 1.88. General constraints were found to be less severe constraints among all other constraints and overall MWS was found to be 1.21. Findings of the study reveal, that majority of the respondents were from 18-30 years of age, all respondents belonged to scheduled caste (tribe) and had farming as their main occupation. Majority of respondents were from nuclear family.

## INTRODUCTION

Organic agriculture is not new to Indian agriculture community. Several forms of organic agriculture are being successfully practiced in diverse climate, particularly in rain fed, tribal, mountains and hill areas of the country. Among all agriculture systems, organic agriculture is gaining wide attention among farmers, entrepreneurs, policy makers and agricultural scientists for varied reasons such as it minimizes the dependence on chemical inputs (fertilizers pesticides, herbicides and other agro- chemicals). Thus, safeguards/improve quality of resources and it is labour intensive and provides an opportunity to increase rural employment and achieve long term improvements in quality of resource base. But the need of the hour is the chalking out of a definite nationwide strategy on this issue and the linking of the sources of production to the market for the same. Organic agriculture is becoming more popular because consumers are demanding

healthful and environmentally-friendly food. Organic agriculture is a production system that sustains the health of soils, eco-systems and people if relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. On the contrast non-availability of good quality culture at the time of sowing was a major problem faced by 75 per cent farmers, While, non-availability of Vermicompost in adequate quantity was also a problem expressed by 44 per cent farmers in use of organic farming techniques as observed by (Saxena and Singh, 2000).

Kaur (2002) revealed that lack of technical guidance, scarcity of water, too much care and maintenance as some of the common problems faced by the respondents in adoption of vermicompost technology. Requirement of extra land holding, lack of knowledge, lack of technical guidance and scarcity of water were the main problems reported by 21-34 per cent respondents in adoption of green manure (Kalawati, 2003).

**Status of organic farming :**

India has converted over 2.5 million hectares including 1.1 million hectares of cultivable lands into organic. There has been consistent increase in the number of farmers adopting organic practices in country every year.

**Tribal women :**

In tribal communities the role of women is substantial and crucial. They work harder and the family economy and management depends on them. Tribal women have adjusted themselves to live a traditional life style in the local environment and follow occupation based on natural resources.

**Significance of the study :**

There are three categories of opinion about the relevance of organic farming for India. The first one is simply dismisses it as fad or craze. The second category, which includes many farmers and scientists, opines that are merits in the organic farming, but we should proceed cautiously considering the national needs and conditions in which Indian agriculture functions. They are fully aware of the environmental problems created by the conventional farming. The third one is all for organic farming and advocates its adoption wholeheartedly. There are organizations workings for adoption of organic farming by people but it is still observed that the people who are benefited by some or other way from the organization are only adopting organic farming and that too not on complete land and the other villagers are not adopting the organic farming even by seeing them. This also tells us the story that whether after discontinuance of agency/ organization, the farmers will continue the adopted technology of organic farming or will discontinue as happens in all the developmental schemes. This means whether really farmers have adopted organic farming or are going to discontinue. Singh (2004) in the study indicated that lack of technical guidance and scarcity of water was most important constraints faced by the farmers. Further, it was noticed that vermicompost preparation is complicated, costly, labour consuming technology and transporting earthworms from one place to another were realized as the priority constraints by the respondents in adoption of vermiculture technology. Lack of technical knowledge on complex practices; cost involvement and insufficient time were the major reasons. This compelled more number of small farmers belonging to medium level to adopt organic farming practices revealed by Soni and Bhimawat (2002). Thimareddy and Palkar (2002) revealed that the constraints regarding technological guidance reported by the respondents were “poor encouragement and “support from the sugar factory management to produce sugarcane by organic method” (10%) “Lack of authentic” published literature on organic farming (20%) was the another constraints. “Non-

availability of separate market for originally grown produce to harvest good returns” (70%) and “lack of remunerative price for organic produces” (10%) were the problems in marketing. Eyhorn *et al.* (2009) observed that the obstacle in converting to organic cotton farming seems to be the initial drop in yields, resulting in lower incomes during the first 1-3 years of conversion. To reduce yield declines it is important to ensure sufficient application of organic manure. Efforts to improve production methods and extension services should be expanded to the rotation crops.

**MATERIAL AND METHODS**

A non-government organization- GMKS has popularized organic farming, in 150 villages of Jadol, Gogunda and Kotra Panchayat Samities. Out of these, 4 villages namely Kantharia, Jambua, Dhoya and Basaria were selected purposively. A sample of 100 women (25 women from each village) was selected randomly.

Personal interview technique was used to collect the data from the respondents with interview schedule developed by the investigator. Data were analyzed using frequency, percentage, MWS.

**OBSERVATIONS AND ANALYSIS**

The findings of the present study as well as relevant discussion have been presented under following heads :

**Background information of the respondents :**

This section presents the information related to the respondent's personal characteristics such as age, marital status, occupation and education, socio economic characteristics like caste, family structure, landholding housing, livestock ownership and dwelling for livestock.

**Age :**

Data presented in Table reveal that majority of respondents (58%) belonged to the age group of 18-30 years and only 4 per cent respondents were from 46-60 years age group.

**Marital status :**

Data in the table depicts that 97 per cent of the respondents were married and only 3 per cent were widow.

**Occupation :**

Table 1 further shows that the main occupation of majority of the respondents (97%) was farming, only 3 per cent respondents were engaged in service such as midwives in PHC, Supervisor in GMKS and instructor of SHG and Local self body.

**Education :**

Majority of the respondents (90%) was illiterate and 3 per cent were just literate.

**Table 1 : Distribution of the respondents by their personal characteristics (n=100)**

Sr. No.	Categories	f/%
1.	<b>Age</b>	
	18- 30 years	58
	31-45 years	38
	46-60 years	4
2.	<b>Marital status</b>	
	Married	97
	Widow	3
3.	<b>Occupation</b>	
	Farming	97
	Service sector	3
4.	<b>Education</b>	
	Illiterate	90
	Read and write	3
	Primary	5
	Middle	1
	High School	1

**Caste :**

Regarding caste all the respondents belonged to the schedule tribe only.

**Family size :**

Table 2 further shows that 48 per cent respondents had medium size family (5-8 members) followed by 45 per cent respondents belonged to small family (up to 4 members) and only 9 per cent respondents were from large family (8 and above members).

**Table 2 : Distribution of the respondents by their social characteristics (n=100)**

Sr. No.	Categories	f/%
1.	<b>Family size</b>	45
	Small	48
	Medium	9
	Large	

**Land holding :**

Table 3 shows that majority of the respondents (91%) were having land up to 4.5 bighas and 8 per cent possessed the ownership of land to the extent of 5 – 9.5 bighas and only 1 per cent was having land from 10-13 bighas.

**Housing :**

Majority of the respondents (98%) were residing in kutcha house and only 2 per cent lived in pucca house.

**Livestock ownership :**

Regarding livestock ownership Table 3 also reveals that

**Table 3 : Distribution of the respondents by their economic characteristics (n=100)**

Sr. No.	Categories	f/%
1.	<b>Land holding</b>	
	up to 4.5 bighas	91
	5-9.5 bighas	8
	10-13 bighas	1
2.	<b>Housing</b>	
	Kutcha house	98
	Pucca house	2
3.	<b>Livestock ownership</b>	
	Small herd size	70
	Medium herd size	8
	Large herd size	22
4.	<b>Dwelling for livestock</b>	
	Open/nil	98
	Thatched/kutcha	2

70 per cent respondents had small herd size and 22 per cent respondents had large herd size and only 8 per cent had medium herd size.

**Dwelling for livestock :**

Majority of the respondents (98%) had used open/nil dwelling for livestock while only 2 per cent respondents had thatched/kutcha dwelling for livestock.

**Constraints faced by respondents in adoption of organic farming :**

The part deals with the constraints faced by the respondents in adoption of organic farming practices. The constraints were categorized into personal, technical, economic and general. The results are presented in table:

*Personal constraints :*

The perusal of Table 4 revealed that lack of risk bearing capacity about organic farming was realized as most important personal constraint by the respondents with 2.98 MWS. This was followed by the constraint lack of initiative with 2.92 MWS. Table 4 further shows that lack of decision making capabilities,

**Table 4: Distribution of respondents by personal constraints faced in adoption of organic farming practices**

Sr. No.	Constraints	MWS
1.	Lack of risk bearing capacity	2.98
2.	Lack of initiative	2.92
3.	Lack of decision making capabilities	2.56
4.	Lack of enthusiasm to adopt new government programme	2.04
5.	Lack of scientific orientation	1.77

lack of enthusiasm to adopt a new government programme and lack of scientific orientation were perceived as other personal constraint by the respondents to the extent of 2.56, 2.04 and 1.77 MWS, respectively.

#### *Economic constraints :*

The critical look of table reveals that non-availability of credit facility for vermi compost production was realized as most important constraints faced by the respondent with 2.99 MWS. The next important constraints perceived by the respondents was additional land required for green manuring and MWS was found to be 2.52 which shows that there is very severity in this constraints lack of provision on subsidy on loan was ranked third among all other economic constraints and MWS was 2.44 and least constraint was found to be organic farming is less profitable than other farming and MWS was 1.27.

Sr. No.	Constraints	MWS
1.	Non-availability of credit facility for vermicompost production	2.99
2.	Additional land is required for green manuring	2.52
3.	Lack of provision for subsidy on loan	2.44
4.	Organic farming is less profitable than other farming	1.27

The findings are similar to Biswas *et al.* (2011). It can be seen that the socio-economic constraints like high cost of organic inputs (1st), non-availability of organic inputs (2nd), lower yield (3rd), lacking of price advantage (4th) for organic product, lower profitability (5th), small holding size (6th), lower employment potentiality (7th) and lack of experience in organic farming (8th) have played a significant role in decreasing importance in non-adoption of organic farming.

#### *Technical constraints :*

Non-availability of inputs was realized as most important technical constraints by the respondents with the 2.98 MWS. This was followed by low credibility of purchasing with 2.92 MWS. Table 6 further shows that lack of knowledge and skill, insufficient system to deliver technical inputs about organic farming at door step lack of technical guidance, lack of awareness, lack of proper training about organic farming technologies, insufficient demonstration unit for compost making and inadequate field staff for promotion of organic farming were perceived by the respondents to the extent of 2.332, 2.02, 1.55, 1.50, 1.27, 1.26 and 1.10 MWS, respectively.

The findings are similar to Vyas (2007) the main constraints reported by nearly all the respondents was marketing followed by production with the mean weighted

**Table 6 : Distribution of respondent by technical constraints faced in adoption of organic farming practices**

Sr. No.	Constraints	MWS
1.	Non-availability of inputs	2.98
2.	Low-credibility of source of purchasing	2.92
3.	Lack of knowledge and skill	2.32
4.	Insufficient system to deliver technical inputs about organic farming at the doorsteps	2.02
5.	Lack of technical guidance	1.55
6.	Lack of awareness	1.50
7.	Lack of proper training about organic farming technology	1.27
8.	Insufficient demonstration units for compost making	1.26
9.	Inadequate field staff for promotion of organic farming	1.10

scores 1.43 and 1.11, respectively. Further, reported that majority of respondents (12.68-57.6%) experienced all the social changes either to great or some extent. Regarding economic changes were experienced to nil extent by 4.39-65.36 per cent respondents in innovation decision behaviour of women with respect to vermiculture technology.

#### *General constraints :*

As shows in Table 7 the most important constraints was found to be unavailability of dung by the respondents and MWS was 1.38. The second important constraints with 1.27 MWS non-availability of literature about organic farming. Inadequate facility of updating knowledge and communication skills of field level workers was realized as third important constraints with MWS 1.26. The next general constraints perceived by the respondents were less interest towards organic farming with 1.11 MWS and important constraints was found to be 1.03 MWS of lack of motivation from external agencies.

**Table 7 : Distribution of respondent by general constraints faced in adoption of organic farming practices**

Sr. No.	Constraints	MWS
1.	Unavailability of dung in adequate quantity	1.38
2.	Non-availability of literature about organic farming.	1.27
3.	Inadequate facility of updating the knowledge and communication skills of field level workers	1.26
4.	Negative attitude towards organic farming	1.11
5.	Lack of motivation from external agencies	1.03

The findings are similar to Rathore (2008) findings indicates that lack of scientific orientation, lack of risk bearing capacity, lack of information about sources for loan and

subsidy, lack of technical guidance for organic manures, low level of communication ability for compost making, inadequate field staff for promotion of organic farming, lack of knowledge of field functionaries about organic certification, high interest rate on loan, lack of awareness about different sources of credit, lack of awareness about policies and programme, lack of proper planning and co-ordination with concerned department were important constraints faced by the farmers in adoption of organic farming technologies.

The data presented in the Table 8 depicts that majority of respondents perceived the personal constraints as one of the major constraints as revealed by over all MWS 2.46 with first rank and was to medium level of constraints. Economic constraints was ranked second among other constraints as respondents have less finance facility and this constraints were regarded as one of most important lacuna they faced while adopting organic farming practices and over all MWS was found to be 2.30 and was to the medium level of constraint. Technical constraints presented in the Table 8 shows that respondents experience problems related to technical aspects of organic farming practices and overall MWS was found to be 1.88. General constraints was found to be less severe constraints among all other constraints and overall MWS was found to be 1.21. Similar work related to the present topic was also done by Bhandari (2007); Broker and Chothe (2000); Nagaranjan (2009); Singh *et al.* (2006); Charyulu and Biswas (2010) and Narayanan (2005).

Table 8 : Ranking of constraints faced in adoption of organic farming practices			
Sr. No.	Constraints	MWS	Rank
1.	Personal constraints	2.46	I
2.	Economic constraints	2.30	II
3.	Technical constraints	1.88	III
4.	General constraints	1.21	IV

### Conclusion :

The main constraints reported by majority of the respondents was personal constraints with the mean weighted score 2.46 and it include lack of risk bearing capacity, lack of initiative and lack of decision making capabilities. Economic constraints were ranked second with MWS 2.30. Economic constraints include following constraints *i.e.* non - availability of credit facility for vermicompost production and additional land required for green manuring. Technical constraints with overall MWS were found to be 1.88. Non-availability of inputs was realized as major technical constraints by the respondents. This was followed by low credibility of purchasing and lack of knowledge and skill. General constraints was found to be less severe constraints among all other constraints and overall MWS was found to be 1.21 unavailability of dung,

literature about organic farming and inadequate facility of updating knowledge,

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