

# Organic Consumption in Rajasthan

## Challenges and Possibilities





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*Published by*



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## *Preface*

Agriculture in India, the pre-eminent sector of the economy, is the source of livelihood of almost two-third of the workforce of the country. The contribution of agriculture and allied activities to India's economic growth in recent years has been of no less significance than that of industry and services. The importance of agriculture to the country is best summed up by this statement: 'If agriculture survives, India survives'.

In the early years of independence, the growth in food production was inadequate to meet the consumption needs of the growing population, which necessitated food imports. The 'Green Revolution' enhanced agricultural capability of the country, resulting in a record food grain production reaching up to 265.4mn tonne in 2013-14. At the same time, 'Green Revolution' has created several problems like causing an adverse impact on the environment

The increasing use of agrochemical-based pest and weed control in some crops has affected the surrounding environment as well as human health. Although high yielding varieties (HYV) have many advantages but simultaneously has led to genetic erosion. The agricultural products, mainly the vegetables and fruits grown using high-level of pesticides and insecticides than the permissible limit (Maximum Residue Limit) is seriously affecting human health and resulting in various diseases.

Increasing awareness about the safety of the food that is consumed and realisation of the fact that the way to reduce harmful impacts of the chemical-based agriculture is making the farmers turn towards organic farming and food. This has resulted in organic farming gradually gaining momentum in India, out of the conscious efforts by the people inspired to create the best possible relationship between the earth and mankind. Organic farming has thrived in India since ancient times.

Since its beginning, the domain of organic agriculture has become considerably more complicated. The National Project on Organic Farming (NPOF) even after completing a decade in October 2014 only 0.03 percent of India's 140mn hectare of cropped land is under organic

farming, as per the World of Organic Agriculture Report 2014. Though technically, the land under organic farming in India stands at 5.2mn hectare, 90 percent of this comprises forest land. This data shows that organic farming in India still has a long way to go.

India holds 33<sup>rd</sup> rank in terms of total land under organic cultivation and 88<sup>th</sup> position for agricultural land under organic crops to total farming area. In 2014, the size of the organic food market, which is highly unorganised was US\$0.36bn and it is projected that by 2020 it will touch US\$1.36bn mark. However, fear about loss of productivity during the transition period and lack of support from the government to compensate the same, lack of availability of organic seeds and inputs and problems related to accreditation are the major hindrances for the farmers' inclination towards organic farming.

Rajasthan, which is the largest State in the country and around 65 percent of its population (56.5mn) is dependent on agriculture. The total cultivated area is around 220 lakh hectare. The State enjoys 1<sup>st</sup> position in the country in the production of rapeseed and mustard, coriander, cumin, fenugreek, guar and moth bean, all being unique to the State. Scanty rainfall, scarcity of water, and inefficient water management practices constitute the major challenges for the State.

The Agricultural Policy of Rajasthan adopted in 2013 in Section 4.1 clearly states that its vision shall be to ensure food and nutritional security and economic empowerment of the people through accelerated yet sustainable growth in agriculture. Even though, not having a separate organic farming policy, Rajasthan can look at Sikkim, which has become 100 percent organic, as a model State. Sikkim has banned the use of all chemical fertilisers and pest control and focussed on using organic farming for better economic prospects of the farmers and to encourage organic tourism.

CUTS conceptualised and launched a unique pilot Project 'To promote organic consumption in the State of Rajasthan, India (ProOrganic)' in partnership with Swedish Society for Nature Conservation (SSNC) in November 2013. The Project covers the districts of Jaipur, Dausa, Udaipur, Chittorgarh, Pratapgarh and Kota, aiming at generating awareness among the consumers about organic products, their benefits and availability etc., to build the capacity of farmers to adopt organic farming and to sensitise the concerned stakeholders including government agencies to promote organic products in State of Rajasthan.

This document is an attempt to capture briefly the interventions taken during the Project period and mainly focus on the key findings of the

endline survey. The data shows that the Project is a great success in terms of its objectives.

I take this opportunity to express our sincere thanks to SSNC for its valuable partnership, especially to Sara Nilsson – the key contact person and Ulrika Hjerstrand for their active involvement, valuable support and guidance for this initiative. We are also thankful to Johanna Sandahl, President, SSNC, Eva Eiderström and Annelie Andersson, who visited Rajasthan on various occasions and provided necessary advice from time to time.

We are also thankful to all the civil society partners in each of the target districts, who implemented this Project on the ground. We thank the office bearers and staff of *Hanuman Gram Vikas Samiti*, Dausa; *Ram Krishan Shikshan Sansthan*, Kota; *Prayatna Samiti*, Udaipur and CUTS Centre for Human Development (CUTS-CHD) along with all other officials, farmers and consumers for their active involvement in the Project activities.

We also thank other agencies, such as Department of Agriculture, Government of Rajasthan, Agricultural University, Jobner, *Krishi Vigyan Kendras* in various districts and civil society organisations (CSOs) working on organic agricultural issues for their assistance.

I acknowledge and thank the valuable guidance of Pradeep S Mehta, Secretary General, CUTS International.

I thank Vimarsh, New Delhi for conducting the baseline survey and Amrat Singh and team of Partners in Development, Jaipur for completing endline survey and submitting the final report.

Last but not the least, I sincerely thank my colleagues at CUTS: Deepak Saxena (Sr. Programme Coordinator) and Dharmendra Chaturvedi (Project Officer), who were associated with the Project throughout; Varidhi Singh, (Project Officer), who was responsible for the Green Action Week (GAW) campaign in 2014 and 2015; Ram Kumar Jha (Policy Analyst) and Renu Beniwal (Assistant Programme Officer), who joined at the ProOrganic team at later stage, who worked directly on the 'ProOrganic' Project till successful completion of the Project for two years. I would also like to thank Madhu Sudan Sharma (Sr. Project Coordinator), Amar Deep Singh (Project Coordinator), and other colleagues at CART for their support. I would also like to thank former colleagues, Amarjeet Singh and Arjun Kant Jha, who were involved in this Project from its inception and acknowledge their contributions in conceptualising this Project and implementing its various activities. I also thank former colleague Amrat Singh (Dy. Head, CUTS CART) for his involvement in the Project.

I also acknowledge the contribution of Garima Shrivastava for editing and Rajkumar Trivedi in layout of this publication and IT team for their support in the development of web page and updating the same. I also express our sincere gratitude to all, without whom, anchoring of 'ProOrganic' Project would not have been possible.

November 2015

George Cheriyan  
Director, CUTS International

## *Executive Summary*

Organic farming is not a new concept, however, due to the changing global scenario it has become more relevant in present times. In India, organic farming has been followed from ancient times. It is considered as a method of farming, which primarily aims at cultivating the land and raising crops in such a way, as to keep the soil fertile and in good condition by using organic wastes and other biological materials along with beneficial microbes to release nutrients to crops for increased sustainable production in an eco-friendly pollution free environment.

In partnership with SSNC, CUTS has implemented a two-year Project, ProOrganic 'to promote organic consumption in the State of Rajasthan through awareness generation, sensitisation, capacity building and advocacy activities'. The objectives of the Project are to generate awareness among the consumers about organic products, their benefits and availability etc., to make the farmers adopt organic farming to promote and increase consumers demand for organic products, to encourage consumers to shift towards organic products and sustainable consumption.

The study is endline evaluation of the 'ProOrganic' Project. The goal of the study is to assess the Project effectiveness and to collect evidences of change due to the Project intervention. The key objective of the study is to capture the perception/experience from various stakeholders about awareness, capacity, challenges and suggestions etc. on organic products consumption and organic farming promotion. This study has been conducted in the districts of Jaipur, Dausa, Udaipur, Chittorgarh, Pratapgarh and Kota.

About 46.6 percent of the respondents were using organic farming for more profit, 87.1 percent for good health and 72.5 percent for good soil. Amongst the farmers, 70.2 percent responded that they were getting help from non-government organisations (NGOs) while only 10.4 percent farmers acquired motivation and suppose from agricultural departments for adopting organic farming. Moreover, about 46.2 percent of total farmers were consuming their organic produce for their own use while

42.2 percent of the total farmers were found to consume and sell. Out of the total farmers engaged in organic farming, there were only 11.6 percent farmers who sold their entire organic produce. Only 13.8 percent of the farmers had availed support in the form of subsidies and other inputs.

High-level of awareness has been observed among the respondents on ill effects of consuming fruits /vegetables grown through use of inorganic fertilisers, pesticides and other harmful means in farming. About 80 percent of the respondents credited that the source of information, which made the consumers aware regarding organic products were the NGOs.

Further, about 49.5 percent consumers were found to be satisfied with the quality of organic products purchased while about 46.2 percent were fairly satisfied. The total farmers' participation in the Project was about 74.7 percent. Among the total farmer respondents, project participation was found to be maximum in Pratapgarh district (93.2 percent) followed by Dausa (86.3 percent). Analysing activity-wise, farmers' highest participation in the Project was at *Gram Panchyat*-level meetings though at this level, maximum number of meetings was conducted. During the Project duration it was noted that about 48 percent of consumers started buying organic products, 23 percent consumers increased products quantity and 20.4 percent consumers increased their frequency of buying organic products while 8.5 percent consumers started buying new products.

Converting the entire field to organic farm and a long processing period of three years were found to be among the major hurdles for adopting organic farming adoption of organic farming. Unavailability of organic products was another major hindrance in adopting organic farming. Spreading awareness among the farmers was the most common suggestion provided by farmer respondents to promote organic production. Other prominent suggestions included spreading awareness among the community and provision of assistance by the Government.

# 1

## *Background and Research Methodology*

Organic farming is a holistic production management system, which promotes and enhances agro-ecosystem health, including bio-diversity, biological cycles and soil biological activity. It emphasises on the use of management practices in preference to the use of off-farm inputs, taking into account regional conditions and locally adapted systems. This is accomplished by using, wherever possible, agronomic, biological, and mechanical methods instead of using synthetic materials to fulfil any specific function within the system.

The United States Department of Agriculture (USDA) study team on organic farming states, “organic farming is a system, which avoids or largely excludes the use of synthetic inputs, such as fertilisers, pesticides, hormones, feed additives etc. and to the maximum extent feasibly relies upon crop rotations, crop residues, animal manures, off-farm organic waste, mineral grade rock additives and biological system of nutrient mobilisation and plant protection”.

Food and Agriculture Organisation (FAO) has suggested, “Organic agriculture is a unique production management system, which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles and soil biological activity, and this is accomplished by using on-farm agronomic, biological and mechanical methods in exclusion of all synthetic off-farm inputs”.

Organic farming has grown out of the conscious efforts by inspired people to create the best possible relationship between the earth and humankind. Since its beginning, the sphere surrounding organic agriculture has become considerably more complicated. A major challenge at present is its entry into the policy-making arena and into anonymous global market and the transformation of organic products into commodities.

During the past two decades, there has also been a significant sensitisation of the global community towards environmental preservation and assuring of food quality. Ardent promoters of organic farming believe that it can meet both these demands and become a good source of development for rural areas. After almost a century of development, organic agriculture is currently being embraced by the mainstream and shows great potential commercially, socially and environmentally. While there is a continuum of perceptions from earlier days till present, the modern organic farming movement is radically different from its original form. It has environmental sustainability at its core in addition to the founders' concerns for good soil, healthy food and healthy people.

### **Features of Organic Farming**

The key characteristics of organic farming include:

- Protecting the long-term fertility of soils by maintaining organic matter levels, encouraging soil biological activity, and careful mechanical intervention.
- Providing crop nutrients indirectly using relatively insoluble nutrient sources, which are made available to the plant by the action of soil micro-organisms.
- Nitrogen self-sufficiency through the use of legumes and biological nitrogen fixation as well as effective recycling of organic materials including crop residues and livestock manures.
- Weed, disease and pest control relying primarily on crop rotations, natural predators, diversity, organic manuring, resistant varieties and limited (preferably minimal) thermal, biological and chemical intervention.
- The extensive management of livestock, paying full regard to their evolutionary adaptations, behavioural needs and animal welfare issues with respect to nutrition, housing, health, breeding and rearing and
- Careful attention to the impact of the farming system on the wider environment and the conservation of wildlife and natural habitats.

### **Organic Farming Scenario**

India is mainly an agricultural country, where over 58 percent of nation's population is dependent on agriculture for livelihood. There is huge untapped potential of organic farming in India. Organic farming has emerged as a potential alternative for meeting food demand, maintaining soil fertility and increasing soil carbon pool. The modern agriculture methods are one of the major causes of environmental degradation. In India, various steps have been taken to promote organic farming.

Rajasthan is currently the largest State of India covering nearly 10.4 percent of total geographical area of the country. Nearly 65 percent of its population (56.5mn) is dependent on agriculture. The total cultivated area is around 220.00 lakh hectare. The State enjoys first position in the country concerning the production of rapeseed and mustard, coriander, cumin, fenugreek, guar and moth beans, all being unique to the State. Scanty rainfall, scarcity of water and incompetent water management practices pose major challenges to the State.

### **Project Background**

In partnership with SSNC, CUTS has implemented this two-year Project to promote organic consumption in the State of Rajasthan (India) by awareness generation, sensitisation, capacity building and advocacy activities.

### **Project Objectives**

The Project's aim is to promote organic consumption in Rajasthan (India) covering six major agriculture potential districts.

The objectives of the Project are as following:

- To generate awareness amongst the consumers about organic products, their benefits and availability etc.;
- To encourage farmers to adopt organic farming;
- To promote and increase consumers' demand for organic products;
- To encourage consumers to shift towards organic products and sustainable consumption; and
- To sensitise and support the concerned stakeholders including government agencies to promote organic products in the State of Rajasthan.

### **Project Activities**

The project activities are as following:

- Project Launch and Partner Orientation Meeting;
- Baseline Survey under Action Research;
- District-level Orientation with Farmer Groups;
- Exposure Visits of Farmer Groups;
- Village-level Awareness Campaign;
- Annual Stakeholder Consultation and Feedback Meeting;
- District-level Consultations;
- Endline Survey; and
- State-level Advocacy cum Dissemination Meeting.

This study is endline evaluation of the 'ProOrganic' Project. The goal of the study is to assess the Project effectiveness and also to collect evidences of change due to Project intervention.

The key objective of the study is to capture the perceptions/experiences from various stakeholders regarding awareness, capacity, challenges and suggestions etc.

### **Research Methodology**

To fulfil the objectives of the study the following research methodology has been used for conducting endline research studies:

#### ***Coverage***

The quantitative survey has been mainly focussed on two groups, i.e., Farmers/Producers and Consumers. This study has been conducted in the districts of Jaipur, Dausa, Udaipur, Chittorgarh, Pratapgarh and Kota (given in map).

#### ***Geographical coverage of the Project***

The *gram panchayats* from each of the five blocks in six districts were selected, so a total of 102 *gram panchayats* were covered under the study. Nearly 3122 sample stakeholders' feedback was collected from 102 *gram panchayats* of six selected districts of Rajasthan. Conscious efforts were made to target the stakeholders who responded in the baseline and took part in Project activities. Special focus was made on gender perspective under the research in sampling and analysis. Out of the total samples, 1605 were farmer respondents while 1517 consumers were interviewed. Around 40 percent respondents out of the total sample comprised women.

#### ***Research technique***

Qualitative research technique was used to collect the responses of the following:

1. Policy-makers/concerned government agencies.
2. Subject experts and
3. Organisations/institutes working on organic farming and consumption issues in the State of Rajasthan.

#### ***Research instruments***

Proposed survey methodology included both quantitative and qualitative research. Survey of consumers and farmers was largely quantitative in nature. It was supplemented by qualitative interviews with other relevant stakeholders including policy-makers, concerned

government agencies, subject experts and organisations/institutes working on organic farming and consumption issues in Rajasthan. The survey also involved study of Project related documents/reports etc.

Following set of study instruments were developed for collecting the required information:

- Structured questionnaire for interviewing consumers;
- Structured questionnaire for interviewing farmer producers;
- Guidelines for in depth interviews of policy-makers and/or government agencies; and
- Guidelines for interviewing subject experts, organisations/institutes working on organic farming and consumption issues.

Survey instruments were originally prepared in English and then were translated into Hindi.

#### *Pre-testing*

All the research instruments developed for the study were thoroughly tested in order to ascertain their suitability in actual field conditions. Researchers with the support of field executives carried out the pre-testing exercise. Questionnaires were tested under field conditions by professionals and investigators. Besides, respondent debriefing sessions were also conducted for post field-testing.

#### *Field team composition and deployment*

A core team consisting of five key persons were deployed for the study. This core team included the Project Coordinator, Research Manager, Field Manager and two Research Officers. Apart from the core team, four supervisors and 21 investigators were deployed for the study.

For field data collection, research investigators having relevant experience and ability to understand and speak the local language were hired locally. The Project was headed by a Project Coordinator who was the chief functionary throughout the assignment. There was one Research Manager who was in charge of research work in coordination with the Project Coordinator. The Field Manager was responsible to manage the fieldwork and consistently report to the core team comprising Project Coordinator and Research Manager. Field Managers was the manager for the field operations and was responsible for coordination, planning and execution of main survey. Two research executives were involved for quality control for field data collection and during the field work as well as data cleaning and analysis.

### *Training of field teams*

Training for survey teams was conducted to brief the investigators, supervisors and field manager on survey objectives, survey tools, sampling design and expected data quality to ensure that all team members have a shared understanding of the study. Training of field teams was carried out before execution of the actual field work and the overall purpose of the survey was explained to them. Further, the investigators were trained to invest appropriate time on identifying the possible questions and responses.

Initially, the trainings were proposed at two locations one at Jaipur and another at Udaipur. However, later on due to field-level issues, the training was conducted in four phases in a decentralised manner at Jaipur, Udaipur, Kota and Chittorgarh. Training was delivered by key team members and experienced professionals. CUTS' representatives participated in three trainings out of the four and provided valuable inputs to the survey team.

### *Quality control*

Controlling the quality of the data collection was considered to be the most important function of the Field Manager/Field Executives. Throughout the fieldwork, they were responsible for observing interviews and carrying out field editing. By checking the interviewers' work regularly they ensured that the quality of the data collection remains high throughout the survey. This was ensured by the following measures:

- Some of the interviews were closely observed, to ensure that the interviewer is conducting well, asking the questions in the desired manner and interpreting the given answers correctly.
- Spot checking of some of respondents selected for interviews was done to ensure that the investigator interviewed the right person and
- Field executives ensured that for all sampled area/call wherein completion rate is found to be low or in case of a problem, back checks were done by them.

For field work, quality control and monitoring of data collection, rigorous field visits were conducted in all the field locations. These visits were carried out by key team members and supervisors. CUTS representatives also made monitoring visits in some of the field locations.

### *Data disaggregation and analysis*

The data collected was disaggregated and analysed at the following minimum level:

- Geography (District/Block/*Panchayat*-level) and
- Gender

After collection of data, the data was subjected to data processing, which included editing, coding and decoding of new variables. The data entry, validation work and analysis of the survey were handled by using the most advanced data analysis packages. Subsequent to editing, data analysis was carried out. Analysis of the data was guided by the specified research objectives.

## 2

# *Farmers' and Consumers' Responses: Key Findings*

Farmers' responses and information related to various variables, such as economic status of the farming, nature of farming adopted, awareness of hazards of chemical farming etc. are illustrated in **Table 1**.

### **Economic status of the responding farmers**

Economic status has been captured through type of ration cards and other documents like BPL card or on door marking or as per status claimed by the respondents. Accordingly, the respondents were classified into Above Poverty Line (APL) and Below Poverty Line (BPL). **Table 1** presents the district-wise comparison of economic status of the farmers. It is observed that as mentioned on ration card 88.1 percent of the respondents in Jaipur were above poverty line whereas 68.2 of respondents in Udaipur were BPL. These two districts represented highest APL and BPL percentage among the selected districts.

### **Nature of farming adopted by the farmers**

On comparing the nature of farming adopted by the farmers district-wise, in **Table 1** it was found that in Udaipur district 93.8 percent of respondents were reported using both types of farming, whereas in Pratapgarh district 51.5 percent of respondents were reported for adopting chemical-based agriculture.

It is a very important finding that most of the farmers (except in Pratapgarh district) were using organic inputs in good proportion or organic stuff along with chemical inputs. The materials used in farming were fertilisers/pesticides/weedicides: manure, urea, diammonium phosphate (DAP), potash, zinc, ash, super phosphate, neem leaves and vermi compost.

Table 1: Farmers' Profile and their Awareness on Organic Farming (values in %)

Variables	Sub-Variables	Districts						
		Chittorgarh	Dausa	Jaipur	Kota	Pratapgarh	Udaipur	Total
Economic Status	Above Poverty Line (APL)	62.4	75.8	88.1	72.7	35.6	26.1	59.6
	Below Poverty Line (BPL)	37.6	24.2	11.9	27.3	64.4	73.9	40.4
Nature of farming adopted by the Farmers	Chemical base	8.8	2.2	3.2	17.4	51.5	2.6	14.4
	Organic	16.2	44.4	8.7	19.9	3.0	3.6	16.3
	Both	75.0	53.4	88.1	62.1	45.5	93.8	69.6
Awareness on hazards caused due to chemical inputs	Yes	93.2	98.9	97.5	98.8	99.2	99.5	97.6
	No	6.8	1.1	2.5	1.2	0.8	0.5	2.4
Reason for using chemical inputs in agriculture	Increased production	65.6	46.6	64.7	70.8	23.5	36.6	51.3
	Lesser Cost	19.2	10.7	36.1	43.5	3.8	44.7	26.3
	Easily available	27.0	16.9	9.0	29.8	79.5	52.3	35.7

Contd...

Variables	Sub-Variables	Districts						
		Chittorgarh	Dausa	Jaipur	Kota	Pratapgarh	Udaipur	Total
Reasons for farmers adopting organic farming	More profit	36.7	46.6	43.8	21.1	26.0	34.7	34.8
	Good health	64.6	87.1	64.4	68.9	34.8	63.9	63.9
	Good for soil	51.1	72.5	39.6	67.7	31.9	67.7	55.1
	Organic input easily available	6.8	1.7	8.2	5.0	7.3	6.2	5.9
	Other	0.3	0.0	0.5	11.8	0.0	1.0	2.3
Source of motivation for farmers adopting organic farming	Self	5.8	33.7	9.3	54	14.6	13.4	21.8
	Friend	15.8	2.8	5.4	1.2	4	11.8	6.8
	Agricultural Department	10	25.3	11.1	1.9	2.6	11.2	10.4
	NGOs	73.6	41.6	74.1	89.4	78.7	63.6	70.2
Support received by farmers for organic farming	Subsidy	8.7	29.2	28.1	0.6	0.0	2.1	13.8
	Inputs	4.5	3.4	18.2	5.6	0.0	0.7	6.5
	Any other	1.6	1.7	0.0	0	3.0	0.7	1.8
	None	85.2	65.7	53.7	93.8	97.0	96.4	82.0

Contd...

Variables	Sub-Variables	Districts						
		Chittorgarh	Dausa	Jaipur	Kota	Pratapgarh	Udaipur	Total
Agencies providing assistance on organic farming	State Govt.	5.2	8.5	4.5	0.0	35.8	52.5	17.7
	NABARD	24.3	36.5	10.4	6.0	35.8	12.5	20.9
	National Horticulture Mission	11.6	3	3.6	9.5	0	12.5	6.7
	NGO	59	52	81.5	84.4	28.3	22.5	54.6
Farmers availing certification for their Produce	Yes	10.3	16.9	13.7	1.9	0.8	0.2	7.3
	No	19	67.4	57.5	57.1	55.3	25.2	46.9
	Unaware	70.7	15.7	28.9	41	43.9	74.6	45.8
Problems faced by farmers in marketing	Yes	80.4	17.4	46	22.4	92.4	6.7	44.2
	No	19.6	82.6	54	77.6	7.6	93.3	55.8
Reasons of farmers not getting good returns	Less demand	22.1	32.2	29	11.2	9.5	14.5	20.4
	Lack of awareness	46.8	41.7	40.3	35.5	87.2	55.1	44.9
	Not certified	11.8	5.1	6.9	28.9	3.3	18.4	12.9
	Less cost of Inorganic products	19.3	21.0	23.8	24.4	0.0	12.0	21.8
<i>Source: Primary Survey</i>								

It is a very important finding that most of the farmers (except in Pratapgarh district) have been using organic inputs in good proportion or organic stuff along with chemical inputs. List of material used in farming, such as fertilisers/pesticides/weedicides: manures, urea, diammonium phosphate (DAP), potash, zinc, ash, super phosphate, neem leaves, vermi compost.

#### **Awareness on hazards caused due to chemical inputs**

Table 1 shows that awareness of ill effects of use of inorganic inputs was found to be very high. It is a good sign that 97.6 percent farmers are aware on the hazards caused due to the use of inorganic inputs. This awareness was found to be high almost equally in all the districts where the study was conducted.

Table 1 also shows the respondents attributing the reason for using chemical inputs in agriculture mostly for increasing production (51.3 percent) followed by easy availability of chemical inputs (35.7 percent). Although less cost incurred on purchasing chemical inputs also plays a role (26.3 percent).

#### **Reasons for adopting organic farming**

The respondents were asked about the reasons for following organic mode of farming. Highest percentage of respondents were recorded in Dausa district in the collected information. About 46.6 percent for more profit, 87.1 percent for good health and 72.5 percent for good for soil was the perception of the respondents. In other districts, a good proportion of respondents responded under the said reasons. This perception was almost equally shared by male and female respondents.

#### **Motivation for adopting organic farming**

On being asked about the motivation for adopting organic farming, farmers provided different responses. It was noticed that the role of Non-government Organisations (NGOs) was a major factor in motivating the farmers for adopting organic farming. Among the farmer respondents, 70.2 percent indicated that they were getting help from the NGOs while only 10.4 percent farmers got inspired from agricultural departments for adopting organic farming. Motivation from the NGOs was found to be highest in Kota district i.e., 89.4 percent.

#### **Support availed by the farmers for organic farming**

A startling fact revealed by the farmer respondents was that 82 percent of them did not receive any support for organic farming. Only 13.8 percent

of the farmers availed support in form of subsidy and other inputs. Maximum subsidy support was received in Dausa (29.2 percent) and Jaipur (28.1 percent) districts while Pratapgarh (0.0 percent) followed by Kota (0.6 percent) and Udaipur (2.1 percent) received very less support.

#### **Agency providing assistance to farmers**

Farmer respondents receiving support for promoting organic farming mainly from NGOs (54.6 percent) and NABARD (20.9 percent). Although some of the farmers received support from the State Government (17.7 percent) and Horticulture Mission (6.7 percent) as well.

#### **Availing certification of farm produce**

Regarding certification of the farm produce a total of 7.3 percent farmers responded that they have either received the certification for their produce or were in the process. However, the issue is that about 45.8 percent farmers were not even aware about certification. Looking at various districts, it was explored that 16.9 percent farmers in Dausa availed certification followed by Jaipur (13.7 percent) and Chittorgarh (10.3 percent).

#### **Problems in marketing and returns on organic product**

Among the total farmers, about 55.8 percent responded that they do not face any problem in marketing of organic farm produce; however a sizable proportion of respondents had a different view. In Pratapgarh, about 75.8 percent and in Jaipur about 59.7 percent farmers shared that they were getting better premium price for organic farm produce, however, in Udaipur about 76.7 percent farmers shared that they were not getting higher returns.

#### **Reasons for not getting higher returns on organic products**

The most important and prevalent reason for not getting premium price for organic farm produce was found to be the lack of awareness.

#### **Consumers' Responses: Key Findings**

Consumer's responses on awareness regarding organic products are presented in **Table 2** and information related to selected variables is being discussed in the following sections.

#### **Monthly income of the respondents**

Table 2 shows that most of the respondents hailed from low economic background. More than one-third of the respondents reported income of less than ₹5000 per month while more than 40 percent of the respondents reported income in the range of ₹5000 to ₹10,000 per month.

Table 2: Consumers' Profile and their Awareness on Organic Consumption (values in %)								
Variables	Sub-Variables	Districts						
		Chittorgarh	Dausa	Jaipur	Kota	Pratapgarh	Udaipur	Total
Income range of respondents	<5000	43.3	14.4	14.1	37.1	25.2	69.2	33.9
	5001-10000	44.0	71.1	36.9	48.3	38.7	27.5	44.4
	10001-15000	9.0	13.3	14.6	10.6	20.9	2.4	11.8
	15001-20000	2.5	1.1	21.1	3.3	14.1	0.9	7.2
	20001-25000	1.2	0.0	9.5	0.7	1.2	0.0	3.2
	25001>	0.0	0.0	3.8	0.0	0.0	0.0	0.6
Average monthly expenditure on consumables	<500	12.4	7.8	4.6	9.9	4.3	7.9	7.8
	500-1000	18.0	20.0	21.7	31.1	11.0	33.2	22.5
	1000-2000	17.0	30.6	24.7	25.8	12.9	29.3	23.6
	2000-3000	25.1	30.0	26.8	14.6	11.7	22.4	21.7
	3000-5000	20.7	10.6	16.0	14.6	31.3	7.3	16.7
	5000-10000	6.5	1.1	2.7	2.6	27.0	0.0	8.0
	10000>	0.3	0.0	3.5	1.3	1.8	0.0	1.7

Contd...

Variables	Sub-Variables	Districts						
		Chittorgarh	Dausa	Jaipur	Kota	Pratapgarh	Udaipur	Total
Awareness towards ill effects of consuming fruits/vegetable grown through use of inorganic fertilisers, pesticides and others in farming	Yes	92.5	81.1	56.9	62.5	96.7	86.9	78.3
	No	7.5	18.9	43.1	37.5	3.3	13.1	21.7
Awareness on hazards caused by chemical inputs	Yes	91.6	98.3	95.7	99.3	90.8	97.9	95.5
	No	8.4	1.7	4.3	0.7	9.2	2.1	4.5
Distribution of source of information	Government Department	8.4	25.6	21.7	4.6	14.7	16.0	15.2
	Media	4.6	1.1	3.0	0.7	12.3	6.0	4.5
	NGOs	92.9	76.7	68.6	93.4	63.2	82.0	79.4
	Other	0.6	0.6	13.6	5.3	0.6	26.8	7.9

Contd...

Variables	Sub-Variables	Districts						
		Chittorgarh	Dausa	Jaipur	Kota	Pratapgarh	Udaipur	Total
Perception on the reason of organic products being better	Insecticide not used	37.8	31.7	22	70.2	42.2	62.0	44.3
	More nutritious value	59.4	66.1	38.5	62.3	28.6	49	50.7
	Easily available good for health	4.3	23.9	37.1	6.0	15.8	14.8	17.0
	Highly popular in the society	26.9	41.1	51.2	82.1	12.7	59.6	45.6
Reasons for not purchasing any organic products	Costly	0.9	2.2	37.1	4.0	0.7	0.4	7.6
	Unavailable	6.3	32.4	53.8	6.8	3.8	26.1	21.5
	Useless	30.6	17.6	14.6	89.4	27.5	43.5	37.2
	Unknown quality	44.6	0.0	25.4	0	26.9	1.4	16.4
	Others	16.4	50.0	3.8	3.8	41.9	24.6	23.4
Perception on price comparison	Expensive	1.9	0.0	2.3	0.0	0.0	4.3	1.4
	Equal	36.5	40.8	49.6	21.4	100	15.5	43.9
	Inexpensive	43.1	43.7	44.4	12.4	0	79.1	37.1
		20.4	15.5	6	66.2	0	5.3	18.9

Contd...

Variables	Sub-Variables	Districts						
		Chittorgarh	Dausa	Jaipur	Kota	Pratapgarh	Udaipur	Total
How consumers identify organic products	Faith on shopkeeper	27.7	20.1	36.4	18.1	30.9	86.3	36.6
	Certified	20.0	44.3	17	28.9	28.3	3.6	23.7
	Taste	14.2	11.5	20.9	47.0	18.7	8.6	20.2
	Label details	5.8	3.6	3.1	6.0	13.1	0.5	5.4
	Branded shops	32.3	20.6	22.5	0.0	9.0	1.0	14.2
Perception on easy availability of organic products	Yes	38.7	70.7	89.7	30.5	78.7	53.9	60.4
	No	61.3	29.3	10.3	69.5	21.3	46.1	39.6
Reasons for organic products not being easily available	Lesser Demand	15.6	24.3	26.2	22.5	23.7	23.9	22.7
	Unaware Consumer	61.9	31.1	36.9	39.7	46.1	51.3	44.5
	Expensive	11.3	36.6	13.6	9.4	10.1	7.2	14.7
	Lesser production	11.2	8	23.3	28.4	20.1	17.6	18.1
Satisfaction-level of Consumers with purchased product	Satisfied	25.0	73.0	55.6	42.9	62.0	38.5	49.5
	Fairly satisfied	70.6	25.2	36.2	57.1	28.7	59.4	46.2
	Not satisfied	4.4	1.8	8.2	0.0	9.3	2.1	4.3
<i>Source: Primary Survey</i>								

### **Average monthly expenditure on consumables**

A majority of the consumer respondents (69.6 percent) reported making average monthly expenditure on consumables in the range of ₹500 to ₹3000 per month. Surprisingly, Pratapgarh district consumer respondents were reported making highest average monthly expenditure on consumables in the range of ₹3000 to ₹5000.

### **Awareness on hazards of products grown by inorganic means**

Table 2 also shows district-wise awareness level towards ill effects of consuming fruits/vegetable grown through use of inorganic fertilisers, pesticides and other stuff in farming. High-level of awareness has been observed among the respondents. It is a significant parameter for turning respondents to consumer of organic products. On observing the level of awareness district-wise, out of 151 respondents from Pratapgarh about 96.7 percent have been reporting positively for awareness towards ill effects. Whereas Jaipur being the major urban centre in the State only 56.9 percent of respondents from Jaipur were aware of harmful effects of products grown by inorganic means.

### **Awareness on hazards caused by chemical inputs**

A broad view of consumer perception, awareness on hazards caused by chemical inputs was recorded and it was found that about 78.3 percent of total respondents were aware of ill effects of consuming fruits and vegetables grown by using inorganic fertilisers pesticides. Analysing this from a gender perspective, it was found that male consumers were more aware though women were not far behind.

### **Distribution of source of information**

The source of information, which made the consumers aware of the organic products, most of the respondents (close to 80 percent) credited this to the NGOs working in their area on this issue. The percentage of gender-wise awareness responses on perception on source of awareness of organic products differed in the different districts ranging from 63.2 percent in Pratapgarh to 93.4 percent in Kota (Table 2).

### **Considering organic products better than inorganic**

Consumers responded that they considered organic products better than inorganic products due to various reasons. The most common perceptions were that the organic products have more nutritious value (50.7 percent) and were good for health (45.6 percent). Surprisingly, more than 7.6 percent consumers linked the reason of organic products being

better than inorganic products as were more popular in the society. The consumers having this perception was found to be maximum (37.1 percent) in Jaipur district.

### **Buying or not buying organic products**

About 55.3 percent consumer respondents were buying organic products at any point of time during the Project period. However, observing the trend district-wise there was a high degree of difference in buying patterns of organic products. While consumers of Dausa district reported a very high purchase followed by Jaipur and Udaipur, this was found to be very low in Pratapgarh.

### **Reasons for not buying any organic products**

Consumers not buying any organic products, shared that the unavailability (37.2 percent) of such products and considering them not of much utility value. Another reason was found to be not being sure of the quality (23.4 percent) of the products.

### **Organic/inorganic products: price comparison**

Regarding the comparison based on pricing of organic and inorganic products, half of the consumers were of the perception that the prices were somewhat equal. More than one-third of the respondents conveyed that they feel organic products were expensive than the inorganic products.

### **How consumers identify organic products**

How do the consumers identify whether the product is organic or not? On being questioned about this fact, about 36.6 percent consumers shared that they rely on the shopkeeper selling the product.

### **Easy availability of organic products**

Table 2 shows that about 39.6 percent consumers feel that organic products are easily available in the market. The most prominent reason for organic products not being easily available was consumers' unawareness followed by lack of demand.

### **Satisfaction-level of consumers with the products bought**

About 49.5 percent consumers were satisfied with the quality of organic products bought while about 46.2 percent were fairly satisfied. Out of those consumers buying organic products, most of them were either fully or partially satisfied. Very few consumers were found to be dissatisfied with the organic products.

### 3

## *Project Involvement and Experiences of the Farmers and Consumers*

Farmers' responses on involvement in the Project and their experiences and information related to selected variables are presented in **Table 3**.

#### **Awareness of the farmers about 'ProOrganic' Project**

On being asked if the farmers are aware about the 'ProOrganic' Project, it was found that more than 80 percent of the farmers were aware about the Project. This awareness was found to be highest in Kota (96.9 percent) followed by Pratapgarh (93.9 percent) and Dausa (93.3 percent). Jaipur district farmers were found to be least aware about the Project.

#### **Farmers' participation in the Project**

District-wise farmers' participation in the 'ProOrganic' Project is illustrated in **Table 3**. About 74.7 percent was the total farmer's participation in the Project. Among the total farmer respondents' Project participation was found to be maximum in Pratapgarh district (93.2 percent) followed by Dausa (86.3 percent). Observing activity-wise, farmers' highest participation in the Project was at *Gram Panchayat*-level meetings though at this level maximum number of meetings was conducted.

#### **Project impact and effect on farming patterns**

Perception of farmers regarding impact of the 'ProOrganic' Project was found to be favourable in all the Project districts. In Dausa district, maximum respondents (89.3 percent) reported that the Project did create an impact followed by Kota and Pratapgarh districts also.

Table 3: Farmers Involvement in the Project and their Experiences (Values in %)								
Variables	Sub-Variables	Districts						
		Chittorgarh	Dausa	Jaipur	Kota	Pratapgarh	Udaipur	Total
Farmers' participation in the Project	Yes	76.8	86.3	61.7	84.5	93.2	71	74.7
	No	23.2	13.5	38.3	15.5	6.8	29.0	25.3
Farmers' participation in activity-wise presentation	<i>Gram Panchayat</i> -level awareness campaign	79.2	60.7	62.6	82.3	70.7	83.8	73.2
	Exposure visit	9.4	3.9	4.2	15.8	28.4	7.6	11.5
	Village-level meeting	8.6	39.9	23.1	1.2	0.0	3.9	12.8
	District-level meeting	2.9	8.4	8.7	0.0	0.9	4.5	4.2
	State-level meeting	0.0	4.5	1.4	0.0	0.0	0.0	1.0
	Other	0.0	0.6	0.0	0.6	0.0	0.2	0.2
Impact of the Project	Yes	81.4	89.3	59.5	88.8	88.6	73.2	76.0
	No	18.6	10.7	40.5	11.2	11.4	26.8	24.0

Contd...

Variables	Sub-Variables	Districts						
		Chittorgarh	Dausa	Jaipur	Kota	Pratapgarh	Udaipur	Total
Project effect on farming pattern	Started organic along with inorganic	13.2	24.7	32.6	14.2	1.7	13.2	16.6
	Increased land size of organic farming	35.7	25.3	33.6	49.7	41.5	27.3	35.5
	Doing only organic cultivation	32.2	39.3	18.0	12.3	0.9	47.0	25.0
	Started backyard/ kitchen gardening	23.8	25.8	15.8	10.3	55.9	12.2	24.0
	Others	4.2	0.0	0.0	13.5	0.0	0.2	3.0
Visible changes in awareness during project period	Yes	94.5	74.7	91.8	78.2	98.4	67.7	83.0
	No	5.5	25.3	8.2	21.8	1.6	32.3	17.0
In past two years, whether organic landholding or farmers have increased	Farmers increased	42.6	33.9	35.0	40.9	68.9	35.4	40.0
	Landholding Increased	38.0	15.5	23.3	29.3	0.0	28.7	25.1
	No change	11.0	38.9	27.8	7.1	7.6	7.5	17.1
	Not aware	8.4	11.7	13.9	22.8	23.5	28.4	17.8

Contd...

Variables	Sub-Variables	Districts						
		Chittorgarh	Dausa	Jaipur	Kota	Pratapgarh	Udaipur	Total
Perception of the people towards government assistance for organic farming	Increase in financial assistance	8.3	15.5	15.6	0.0	1.5	0.2	7.7
	Increase in training	9.2	17.8	13.4	65.0	1.5	8.9	16.3
	Increase in Input material	8.9	3.9	10.5	3.7	0.8	0.6	5.6
	No change	30.7	53.3	48.3	28.2	58.3	33.4	40.2
	Unaware	43.0	9.5	12.1	3.1	37.9	56.8	30.2
<i>Source: Primary Survey</i>								

Talking about the impact created by the Project interventions the fact emerged that on account of the Project about 35.5 percent of farmers increased their cultivated land under organic farming. About 25 percent farmers started following only organic cultivation and 24 percent farmers initiated organic farming as backyard farming or kitchen gardening.

#### **Noticeable changes in awareness during the Project period**

About 83 percent of the farm respondents reported an increase in awareness during the Project period in the Project implementing districts on organic farming. Highest awareness level was found to be in Pratapgarh (98.4 percent) followed by Chittorgarh (94.5 percent) and Kota (78.2 percent) districts.

#### **Increase in organic landholding during the Project period**

About 40 percent respondents responded saying that the number of farmers doing organic farming increased over the Project period, while 25.1 percent respondents reported that there was an increase in the area under organic farming. More changes were reported in the number of female farmers adopting organic farming while among the male farmers increase in land areas under organic farming was reported.

#### **Demand of organic products in the Project period**

Increase in demand of organic products had increased in Project duration as almost half of the interviewed farmers reported the same. Increase in the demand of organic products was reported by 66.9 percent in Chittorgarh followed by Dausa (62.4 percent) and Jaipur (58 percent). The increase in demand was least reported in Udaipur district, wherein less than one-third farmers acquired this perception. However, a good number of farmers were found to be unaware of any such change.

#### **Farmers' perception towards government aid for organic production**

About 40.2 percent farmers stated that there has been no major change in the government assistance towards promoting organic production. However, 16.3 percent and 7.7 percent farmers' responded that there has been an increase in training programmes and financial assistance for promoting organic agriculture.

#### **Project Involvement and consumers' experiences**

Consumer's responses on Project involvement and their experiences and information related to selected variables is presented are presented in the Table 4.

Table 4: Consumer's Involvement under Project and their Experiences (values in %)								
Variables	Sub-variables	Districts						
		Chittorgarh	Dausa	Jaipur	Kota	Pratapgarh	Udaipur	Total
Consumer participation in ProOrganic activities	<i>Gram Panchayat</i> awareness campaign	88.5	58.3	69.6	87.2	95.7	94.6	79.4
	Exposure visit	5.6	18.9	6.9	8.5	8.6	0.0	8.7
	Village-level meeting	6.8	37.2	11.6	2.2	9.8	3.1	11.7
	District-level meeting	1.9	15.6	10.5	2.2	1.2	2.2	5.7
	State level consultation	0.9	1.1	1.4	0.0	1.2	0.0	1.2
District-wise effect on consumer food habits	Start buying organic products	78.1	22.6	33.1	69.8	26.0	58.6	48.0
	Increased buying frequency	9.0	34.3	29.3	13.6	8.3.0	27.9	20.4
	Increased product quantity	8.3	34.3	21.0	5.9	61.5	7.2	23.0
	Buying new products	4.5	8.9	16.5	10.7	4.2	6.3	8.5

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Variables	Sub-variables	Districts						
		Chittorgarh	Dausa	Jaipur	Kota	Pratapgarh	Udaipur	Total
How do organic products affect health of the consumers?	Decrease in diseases	42.4	59.4	50.4	44.4	30.7	38.8	—
	Health condition improved	72.1	88.9	80.5	49.7	55.8	80.0	—
	Other	8.0	0.0	3.5	12.6	23.9	10.0	—
Opening of organic shops during project period	Yes	8.4	56.1	37.9	14.6	10.4	8.0	22.8
	No	91.6	43.9	62.1	85.4	89.6	92.0	77.2
Increase in purchase of organic products in past two years	Yes	58.2	75.6	72.9	29.8	33.7	29.2	53.3
	No	41.8	24.4	27.1	70.2	66.3	70.8	46.7
Organic products becoming more affordable in past 2 years	Yes	37.5	68.3	54.5	24.5	31.9	5.6	38.2
	No	62.5	31.7	45.5	75.5	68.1	94.4	61.8

*Source: Primary Survey*

### **Participation in the 'ProOrganic' Project**

Among the consumer respondents, most of the consumers were reported participating in the 'ProOrganic' Project activities.

### **Activity-wise participation of consumers in the Project**

On observing activity-wise, consumers' highest participation in the Project was at the *Gram Panchayat*-level meetings though at this level, maximum number of meetings was conducted.

### **Impact of the Project on consumer food habits**

During the Project duration, consumers' food habits were found to change. It was noted that about 48 percent of the consumers started buying organic products, 23 percent consumers raised products quantity and 20.4 percent consumers increased the frequency of buying organic products while 8.5 percent consumers started buying new products.

### **Impact of organic products on consumers' health**

On being questioned on the effect of organic products, the consumers responded that there was a decrease in diseases and improvement in their health condition. This was due to the usage of organic products.

### **Opening of organic shops during Project period**

About 22.8 percent consumers reported that new shops/outlets have been opened for organic product. This was reported maximum in Dausa district (56.1 percent) followed by Jaipur district (37.9 percent).

### **Increase in buying organic products**

On studying the buying and consumption pattern of the consumers it was found that more than half of the consumers were buying more organic products during the execution of the Project.

### **Affordability of the organic products in past two years**

About 38.2 percent consumers responded that organic products were becoming more affordable in past two years. Although this perception was different in different districts, about 68.3 percent in Dausa whereas about 5.6 percent consumers reported in Udaipur that organic products were becoming more affordable in past two years.

## 4

# *Perceptions on Organic Farming*

The perceptions of the farmers on the various aspects of organic farming are being discussed below.

### **Agencies working for promotion of organic farming and consumption**

- There are a number of agencies including KVK, Agriculture Department, National Horticulture Mission, National Seed Certification Agency and various national and international organisations including NGOs working towards promotion of organic farming.

### **Main functions of the agencies**

The major functions of the various agencies working for the promotion of organic farming are as following:

- Government agencies, such as agriculture and horticulture department are providing training to the farmers for spreading awareness, preparing and distributing organic inputs and conducting research on agriculture aspects.
- Some agencies are guiding the farmers for improving soil and checking use of insecticides and informing the concerned department for intervention.
- KVKs are organising awareness and training programmes for reducing/controlling ill effects of chemicals in farming and for production of organic products. They are also monitoring farmer's groups and model *panchayats* and are giving training and technical assistance and providing equipment on subsidised cost.

- Banks are providing rural finance and credit to SHGs and farmers in various districts for preparation of organic inputs and other agricultural activities.
- NGOs are involved in research, education, promotion of socio-economic balance, promoting art and culture, formation of demonstration groups/sites on various issues.
- Some agencies are creating awareness for adoption of organic farming, promotion of solar energy among farmers and linking farmers with government schemes.
- Other agencies are assisting farmers in form of trainings, conducting research, creating awareness and developing two villages as model for organic production. Formation of farmers groups for organic production is also being done by them.

#### **Planning and stakeholder engagement**

- Organic farming and consumption is emerging as one of the important policy aspects in government planning and interventions. However, at district-level, not much is happening due to lack of priority in planning.
- NABARD and some other agencies have related components in their plans, however, much focus is required on implementation and stakeholders' engagement.

#### **Reasons for the farmers being receptive to organic farming**

- Farmers are receptive to organic farming as they are aware of harmful impact and economic burden of inorganic inputs in agriculture.
- Farmers are receptive but lack of organic inputs prevents them to adopt organic farming. Whereas market cost of organic inputs are higher as compared to chemical inputs.

#### **Challenges in promoting organic farming/consumption**

- Lack of coordination among various line departments like watershed, agriculture, seed certification, NGOs, NABARD and KVK.
- Unavailability of market for farmers and consumers, lack of interest among farmers and absence of knowledge for preparation of organic inputs posed challenge to organic farming.
- Absence of organic inputs for farmers, lack of willingness to put hard labour and confusion prevailing among the farmers regarding the organic production.

## 5 *Comparative Assessment between Baseline Endline and Indicators*

Keeping into consideration some parameters **Table 5** provides a comparative assessment between Endline and Baseline Indicators.

<b>Table 5: Comparative Assessment of Endline and Baseline Indicators</b>			
<b>S. No.</b>	<b>Parameters</b>	<b>Baseline Status</b>	<b>Endline Status</b>
1	Awareness of negative effects of chemical fertilisers/pesticides/weedicides on soil and quality of crop produce	91.3 percent are aware of the negative effects of chemical fertilisers/pesticides/weedicides on soil and quality of crop produce.	97.6 percent of farmers are aware on the hazards caused due to use of inorganic inputs.
2	Assistance received from any govt. agency	Only 3.5 percent reported to receiving some kind of discount/training/assistance from one of the mentioned agencies.	13.8 percent of the farmers had availed support in form of subsidy and 6.5 percent of other inputs.
3	Farmers practicing organic farming for their own consumption and selling their organic products	79.2 percent of farmers practicing organic farming responded that they consume their organic produce.	46.2 percent of farmers were consuming their organic produce while 42.2 percent of farmers were consuming and selling.

S. No.	Parameters	Baseline Status	Endline Status
4	Farmers facing challenges in marketing and selling of their organic produce.	580 (67.8 percent) of farmers practicing organic farming do not face any challenges in marketing and selling.	55.8 percent of farmers reported that they do not face any problem in marketing.
5	Receiving higher value for their organic produce	726 (84.9 percent) farmers responded that they do not receive higher value for their organic produce.	44.9 percent of farmers were receiving high returns on their produce.
6	Awareness towards adverse effects of consuming fruits/vegetables grown through inorganic pattern	78.4 percent consumers are aware.	Average awareness on this issue was found to be 78.3 percent.
7	Awareness of organic products availability in market	23.6 percent consumers conveyed their awareness of availability of organic products in the market.	60.4 percent consumers were aware.
8	Organic product being better than inorganic products.	77.8 percent consumers feel that organic products are better.	On being asked this 88.6 percent respondents were aware of the fact.
9	Satisfaction from the quality of organic products (those buying organic products)	60.7 percent consumers were satisfied.	49.5 percent consumers were satisfied with the quality of organic products purchased while 46.2 percent were fairly satisfied.

# 6

## *Conclusion, Challenges and Recommendations*

### **Conclusion**

From the study findings it can be concluded that the Project has made remarkable impact on many parameters in the Project area. However, the area of the interventions was very limited and in the assessment, careful efforts have been made to target the beneficiaries. Hence, the findings suggest that the impact cannot be generalised and is limited in terms of coverage. To make the impact long lasting and to expand the benefits it is essential to sustain such efforts in the long run, however, the Project can be termed a very good initiative and might catalyse many other such initiatives since a wide range of stakeholders were involved during the course of implementation of the Project.

### **Challenges in adopting organic farming**

The major challenges faced by the farmers for adopting organic farming and suggestions from farmers and consumers for promoting organic farming are as following:

- Converting entire field difficult
- Long process of 3 years
- Cost intensive
- Absence of market
- Certification problem and
- Unavailability of organic inputs

### **Promoting organic production among the farmers**

Spreading awareness among the farmers was the most common suggestion given by farmer respondents to promote organic production.

Other prominent suggestions were spreading awareness among community and the provision of getting assistance by the government. These are as following:

- Community awareness generation
- Reducing cost of organic product
- Farmers' awareness generation
- Assistance by the Government
- Easy certification
- Strengthening market supply chain

### **Suggestions for increasing organic consumption**

Varied responses were received to the question as to what should be done to increase the consumption of organic products. Most common measures suggested by consumers were spreading farmers' producer's awareness and consumer awareness. Although other factors, such as cost reduction and certification related issues were also considerable for increasing organic consumption.

### **Recommendations**

- State Government should launch a 'Mission Organic Rajasthan' on the side lines of region-specific plans.
- Initially, four to five districts should be identified for complete conversion to organic hub through market development and access initiatives, pricing support and forward and backward linkages.
- Organic farming should be recognised and integrated in the main policies of the Union Government in the sectors, such as agriculture, food, health and environment. This will ensure that all needs of organic sector are properly addressed and considered in Government programmes and budgetary allocations.
- Besides, mapping the status of organic farming and certification along with agro-climatic zones must be carried out to tap the potential of organic crops and understand micro level production potential.
- State Government should adopt a cluster-based approach for promoting organic farming in different parts of Rajasthan.
- Dedicated food parks with complete linkage of value chain with national and international market should also be set up to boost the exports from the State.
- The cultivated land area to be increased through cluster approach to generate marketable surplus and provide economy of scale in marketing the production.

- The State Government should also promote a concept to set up an organic village in each district to encourage usage of organic fertilisers in order to protect the land from residual effect of chemical fertilisers.
- The State Government must provide information on new technologies and rural credit to farmers should be provided through cooperatives, commercial institutions and regional rural banks.

### **Advocacy to promote organic agriculture**

Following advocacy issues emerged on the basis of the project recommendations:

- The government should provide proper policy support to organic product pricing and forward and backward market linkages.
- Certification process should be more farmer-friendly and there should be more agencies.
- Government wings should emphasise on buying organic food for army, mid-day meal and for canteens.
- The Government should encourage railway canteens to provide organic food and this will encourage farmers to adopt organic agriculture.

## About the Project

In partnership with SSNC, CUTS has implemented this two-year (November 2013-October 2015) Project to promote organic consumption in the State of Rajasthan. The Project aims to promote organic consumption in Rajasthan covering six major agriculture potential districts i.e., *Jaiपुर, Dausa, Udaipur, Chittorgarh, Pratāgarh and Kota*. The main objectives of the Project are to generate awareness among the consumers about organic products, their benefits and availability etc. This is to build the capacity of farmers to adopt organic farming, to promote and increase consumers demand for organic products, to encourage consumers to shift towards organic products and sustainable consumption, and to sensitise and advocate with concerned stakeholders including government agencies to promote organic products in the State.

This document is an attempt to focus in brief the intervention taken up during the Project period. The Project activities undertaken are the project launch and partners' orientation meeting, base line survey under action research, district-level orientation with farmer groups, exposure visits of farmer groups, village-level awareness campaign, annual stakeholder consultation and feedback meeting, district-level consultations, endline survey and State-level advocacy cum dissemination meeting. The quantitative survey mainly focussed on two groups, i.e., Farmers/Producers and Consumers. Two *gram panchayats* from each of the 51 blocks in 6 districts were selected, so a total 102 *gram panchayats* were covered under the study. Out of the total samples, 1605 were farmer respondents while 1517 consumers were interviewed. About 40 percent respondents out of the total sample were women. Qualitative research was used to collect the responses of: 1) Policy-makers/concerned government agencies 2) Subject experts and 3) Organisations/institutes working on organic farming and consumption issues in the State of Rajasthan.

For more information please visit:  
<http://cuts-international.org/cart/ProOrganic/Index.html>

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