



ORIGINAL ARTICLE

An Exploratory Study on the Organic Basmati Growers of Jammu District

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ABSTRACT

Considering the importance of organic farming of rice and its export potential at remunerative price, the Department of Agriculture of Jammu Division had taken an initiative for production of organic basmati and made a cluster of three villages namely Suchetgarh, Korotana Khurd and Bidipur Jattan with its headquarters at Suchetgarh. The cluster is named as "Suchetgarh Organic Basmati Rice Cluster" and the project is named as SOBRC Project. The cluster comprises of around 769 organic basmati producing families cultivating Basmati rice in around 570 hectares of land. For the study, twelve key persons or representatives, four each from three villages along with two officials of the Department of Agriculture, two officials of the Department of Rural Development and Panchayati Raj and two middlemen associated with sale and purchase of Basmati rice were selected purposively and for information purposes. The information obtained is summed in the following text of this paper.

Key words: Basmati Rice, SOBRC Project, Jammu, Suchetgarh, Organic Basmati

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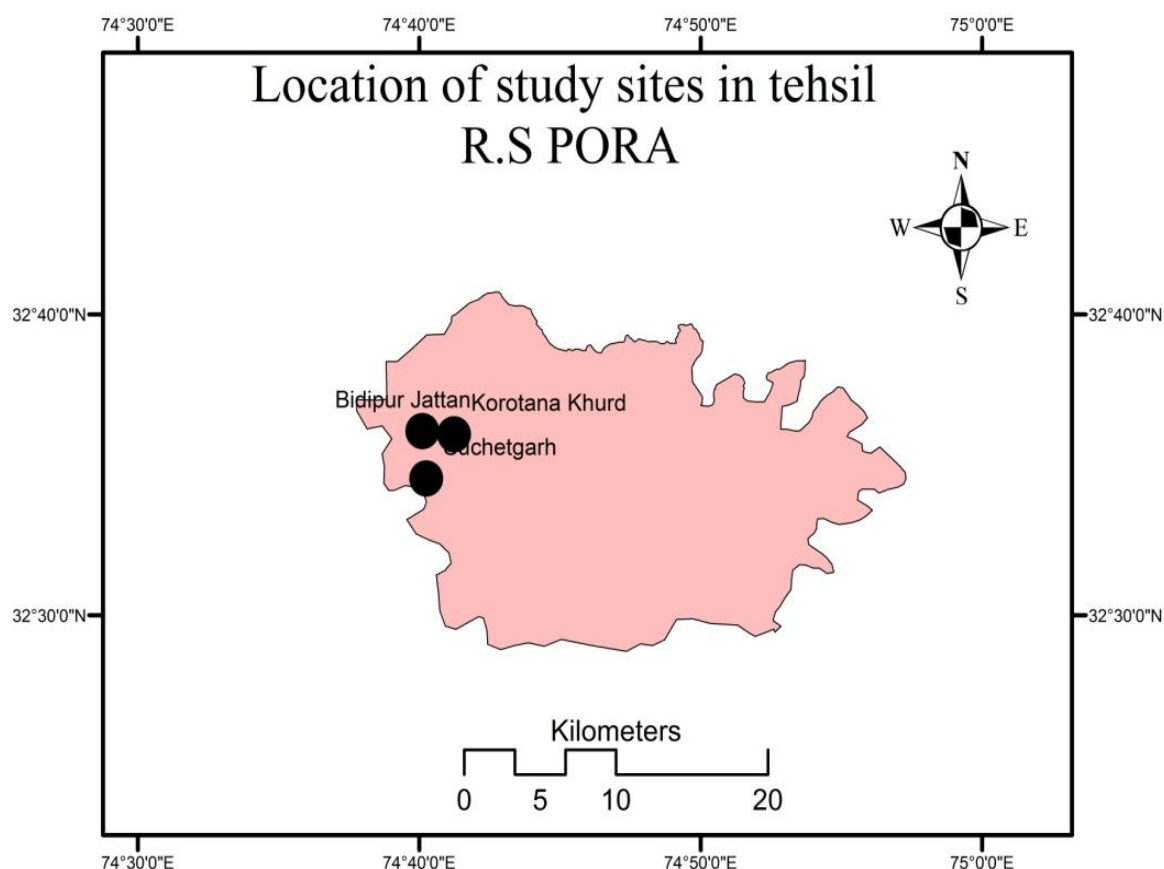
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INTRODUCTION

Ranbir Singh Pura is located at 32.63°N 74.73°E. It has an average elevation of 270 meters (886 feet). Ranbir Singh Pura is one of the most progressive Tehsil of Jammu District and has been promoted to the status of Sub-District. The main economic activity of R.S. Pura is agriculture and dairy farming. Rice (*Basmati*) and wheat are major crops while mustard, berseem and vegetables are also grown. R.S. Pura is known for the production of best *Basmati* Rice in the world. 'Bas' in Hindi language means "aroma" and 'mati' means "full of" hence the word *Basmati* i.e. full of aroma. R.S. Pura is famous for producing excellent quality of *Basmati* for last many decades. According to 'Note of Information 2014-15' by Department of Agriculture, Jammu, about one lakh hectares of the net cultivated area of Jammu is under paddy, of which about forty thousand (40,000) hectares is under *Basmati* rice cultivation alone. *Basmati* is grown in Areas of Jammu, Kathua, and Samba Districts of Jammu Division but *Basmati* grown in R.S. Pura Sector of Jammu District is of the superior quality. Most areas in and around the R.S. Pura belts are extremely fertile and best suited for *Basmati* cultivation, it is because of the fact that the area is irrigated by Ranbir Canal, a distributary of Chenab River and bringing melted ice waters from the Himalayas to the fields of R.S. Pura and imparting rich aroma to the *Basmati* grown in the belt. Further, this area has special characteristics of ideal temperature, humidity level and unique combination of warm short days and cool long nights during developing stage of grains (September and early October) for producing best quality of *Basmati* rice.

Map 1: Location Map of Study Region

Source: Revenue Department (J&K), Census Atlas of India, 2011

SIGNIFICANCE OF THE STUDY

The study was carried out with a prospect to understand the current scenario of organic agriculture in Jammu district of Jammu and Kashmir. The study revealed that although the traditional Basmati growers have switched to organic production but as the land is in conversion period, the farmers are incurring losses due to low yield, excessive growth of weeds for which manual labor is required, losses due to pests and worms, etc. which is putting upon them the financial burden. Amidst all odds, the farmers are enthusiastic and doing the farming with a zeal to earn better in the days to come.

OBJECTIVES OF THE STUDY

1. To understand the production statistics of Basmati rice in Jammu district.
2. To study the current status and prospects organic cultivation of Basmati rice in the region.
3. To understand the structure of Suchetgarh Organic Basmati Rice Cluster (SOBRC).
4. To understand the need of organic farming in the area.

RESEARCH METHODOLOGY

For the study, two types of data sources were used. Primary data was collected from the key persons of the villages comprised in the SOBRC Project. Further primary data was also collected from the officials from the Department of Agriculture, Jammu Division, officials of the Department of Rural Development and Panchayati Raj and the local middlemen associated with the sale and purchase of Basmati rice. The secondary data was obtained from the internet, newspapers, magazines, annual reports and journals.

Table 1: Research Design

Geographical area of research	Suchetgarh Tehsil of Sub-District R.S. Pura, District Jammu.
Sample Population	Organic farmers of SOBRC
Type of Sampling	Purposive Sampling
Respondents	Key persons of villages in SOBRC, officials of Department of Agriculture, Jammu, officials of Department of Rural Development & Panchayati Raj, Jammu and middlemen associated with sale and purchase of Basmati rice.
Total number of respondents for information purposes.	20
Tool used for data collection	Direct personal interview
Type of research	Exploratory study

PRODUCTION STATISTICS

According to Report Volume- 6 submitted by AgriNet Solutions to APEDA (2016), it highlights that in Jammu & Kashmir, the total *Basmati* area has been 62,250 ha. Out of which, Pusa *Basmati*-1121 has been 8,400 ha and *Basmati*-370 has been 53,600 ha. The estimated production of Pusa *Basmati*-1121 and *Basmati*-370 are likely 25,710 metric tons and 1,03,300 metric tons respectively. Pusa *Basmati*-1509 has been grown in 250 ha only this year and the production is likely 1,100 Metric tons. Non-*Basmati* long Grain variety *Sharbati* is grown in 9,950 ha. with a likely production 35,550 metric tons. In Jammu, the farmers still prefer traditional *Basmati* variety *Basmati*-370 as its straw has a good demand as fodder having more carbohydrate and is liked by the cattle.

According to the latest information from the officials of Department of Agriculture, Jammu, the total cultivable area in all the three villages under SOBRC is 668 hectares, out of which 570 hectares land is under organic basmati cultivation. The sale of *Basmati*-370 which is also the traditional Basmati variety of R.S. Pura area fetches a good remuneration of Rs. 4000.00 to 4200.00 per quintal at the time of harvest to the farmers whereas sale of *Sharbati* fetches around Rs. 1900.00 to 2100.00 per quintal to the farmers in R.S. Pura. The sale of *Basmati*-1121 fetches a little below as that of *Basmati*-370 and it is sold at Rs. 3700.00 to 3900.00 per quintal. Not only the grains of *Basmati*-370 are in great demand but also the straw of the same variety fetches a handsome amount of Rs. 14,000.00 per hectare to the farmers. The straw of *Sharbati* is sold at Rs. 4,000.00 per hectare and that of *Basmati*-1121 is sold at Rs. 12,000.00 per hectare. The yield of *Basmati*-370 is around 30 quintal per hectare and that of *Basmati*-1121 is 35 quintal per hectare but farmers of R.S. Pura purposively cultivate *Basmati*-370 for its quality and aroma which it emanates after cooking and further it is the native variety of R.S. Pura. The yield of *Sharbati* is 40 quintal per hectare according to the recent production trends.

CURRENT STATUS AND PROSPECTS ORGANIC CULTIVATION OF BASMATI RICE

While interacting with the key person (*Sarpanch* of Suchetgarh), Mr. Swaran Lal Bhagat, we came to know about the essential and innovative role played by the Department of Agriculture in starting up the organic *Basmati* farming. He told us that the Department provided them with the trainings and field visits required for the organic farming. The demonstrations were also carried by the technical staff of the department which enabled them to prepare their field beds according to the conversion protocols from non-organic to organic, before transplantation of *Basmati* saplings for organic production. At this point of time, conversion period is on the way and the farmers are only using certain mineral supplements like Zinc in the soil for maintain the viability of the soil for *Basmati* production. The farmers have completely stopped the use of fertilizers and other agrochemicals like weedicides, insecticides and pesticides, etc. in their organic fields. The weeds are though flourishing in the organic beds and these weeds are manually removed by the farmers. When asked about the constraints they are facing, he told us that as the cluster of villages is located on the border belt, the irrigation is the major constraint they

are facing. The major canal for irrigation supplies to whole R.S. Pura belt is Ranbir Canal and its distributaries are not extended upto Suchetgarh area thereby leading to severe water crisis for irrigation. Although the government had established pumping stations at different locations in the area for irrigation but those pumping stations are not supplying optimum water for meeting the needs for irrigation. Few well settled and large farmers have dug their own bore wells but majority are marginal or small farmers which don't possess enough capital for establishing their own bore wells. He demanded that the department should come up with some schemes which will have mandate of providing ample subsidy for establishing bore wells for individual farmers and pumping stations for the whole cluster.

When we inquired about the certification of the produce, he told that the certification process has been initiated and Regional Centre of National Centre of Organic Farming (NCOF) situated at Panchkula is undertaking the registration process for the farmers. The registration is being done under Participatory Guarantee System (PGS) for India, A Decentralized Organic Farming Certification System initiated by Department of Agriculture & Cooperation, Ministry of Agriculture and Farmers Welfare, Government of India. All the farmers of the cluster have registered with the PGS and have been provided with 'Green Certificate' (symbolizing conversion period) which will be valid for next one and a half year. In 2019, they will be provided with 'Organic Certificate' symbolizing the official organic certification of their produce. As far as the marketing of the produce is considered, he told us that department will open its own procurement centers for organic *Basmati*. Further few individuals are interested in selling their produce to big giants of the market and they are in constant touch with them. These big players of the market are too interested in opening their procurement centers near the cluster. Few local rice mills have also approached the farmers for procuring their produce. Further, the department is also motivating farmers to open their own retail outlets for selling their organic *Basmati*. Also, some of the large rice processing mills like *Sarveshwar*, *Zamindara*, etc are in constant touch with the farmers for contract organic *Basmati* production. We as veterinarians, on our part are in constant touch with the farmers to initiate organic livestock farming in the area as the by-products obtained from the organic *Basmati* can be used as the feed resource for rearing the organic livestock.

Photo 1: Plantation of *Basmati* Rice under conversion period



A NOBLE INITIATIVE: SUCHETGARH ORGANIC BASMATI RICE CLUSTER PROJECT

Keeping in mind all the losses promulgated by the use of agrochemicals in *Basmati* production, the Department of Agriculture of Jammu Division, Government of Jammu & Kashmir, has promulgated the concept of producing 'Organic *Basmati*' in 2012 under the project named "Suchetgarh Organic Basmati Rice Cluster (SOBRC) Project". As we all know that the world markets are now flooding with the organic produce and keeping the public health status in mind, medicos and dieticians are advocating the use of organic products to their clients for reducing the ill effects of antibiotics and other chemicals used in food production cycle. Analyzing the present scenario, the Department of Agriculture of Jammu Division for producing organic *Basmati* has made a cluster of three villages namely *Suchetgarh*, *Korotana Khurd* and *Bidipur Jattan* headquartered at *Suchetgarh* and the cluster is named as "Suchetgarh Organic *Basmati* Rice Cluster". The cluster comprises of 769 organic *Basmati* producing families in all the three villages cultivating around 200 hectares of land. The specialty of the cluster is the location of the cluster as it is located right at the much tensed India-Pakistan International Border. In spite of the location, the farmers are very enthusiastic and had accepted the protocols of organic farming. Till date, the farming is in conversion period from non-organic to organic and by early 2019; the produce will be labeled as organic.

Photo 1: Actual Image of the SOBRC at Indo-Pak Border in R.S. Pura



Source: DNA India

NEED FOR ORGANIC FARMING

The whole scenario seems to be very beneficial both for the farmer in quantitative terms and for the ecology in qualitative terms. The Department of Agriculture is acting as a stakeholder and maintaining a perfect balance between both the farmers and ecology. The farmers are going to earn good amount of money after the sale of their produce and the environment of the particular cluster will get freed of the agrochemicals which have been used since ages in the area. This is a small beginning by department in the area for creation of healthy farmers and healthy soils. The department is proposing some more clusters for organic production nearby to the existing cluster. Today, the Department of

Agriculture is taking care of both the backward and the forward linkages of organic *Basmati* producing cluster and providing the farmers with incentives and opportunities to grow more and more. The organic agriculture is very important in the area in one more aspect. Nearer to the cluster, Gharana village is located which receives migratory birds every year in the month of January from Serbia. The migratory birds are centre of attraction to various birdwatchers and tourists in the area and are serving as an integral part of ecology of the area. The chemical free agriculture will not only replenish the health of the soil but also the health of the birds as for 2-3 months, the birds dwell on the same soil and water. Organic agriculture initiated by Department of Agriculture will not only boon the economy of the farmers but also help to preserve healthy soils, healthy migratory birds, and healthy individuals of the area, thereby having an overall prospective prosperous agro-ecology.

CONCLUSION

One of the officials of the State Department stated that organic *Basmati* rice fetches 25 percent more for farmers than the normal variety, which sells for about Rs.28,000 to Rs.29,000 per quintal. R.S. Pura produces 550,000 quintals of *Basmati* rice. By introducing organic farming on commercial, scientific and organized lines the farmers can harvest rich dividends here and farming can become sustainable. Jammu's main competitors in *Basmati* rice exports are Punjab, Haryana and Uttarakhand. Their rice is slightly longer in size but the aroma and flavor of Jammu *Basmati* is much richer. After Jammu and Kashmir lifted the ban on export of *Basmati* in 2010, about 630 quintals of the rice was exported from the Jammu region during 2010-11 to the US and Middle East, which increased to 1,350 quintals in 2011-12. The exports are going to increase manifold once the organic *Basmati* of Jammu hits national and international Markets. The manures which can be used to increase the productivity are Vermicompost, bio-dynamic compost, microbe-mediated compost, besides slush of bio-gas units. The agriculture department is providing assistance for production of such manures. Cow urine is one of the best pesticides which are substituting the chemical pesticides in other organic farming systems and can be used here also. Further, the by-products of the organic *Basmati* like straw, husk, etc. can be fed to dairy animals and thereby organic milk production can be started by motivating the farmers, providing them with need-based training and opening new marketing channels for them.

REFERENCES

1. Basmati Export Development Foundation (2016): Basmati Acreage & Yield Estimation in Punjab, Haryana, Delhi, Uttarakhand, Himachal Pradesh, Western Uttar Pradesh and Parts of Jammu & Kashmir, Report Volume- 6, Kharif-2016, Submitted to Basmati Export Development Foundation (APEDA), New Delhi by AgriNet Solutions, New Delhi
2. Directorate of Agriculture, Jammu (2015): Note of Information. Government of Jammu & Kashmir, Krishi Bhawan, Talab Tillo, Jammu,
3. Organic Basmati, new buzz among Jammu farmers. Accessed from www.hillpost.in/2012/07/organic-Basmati-new-buzz-among-jammu-farmers/46426 on 20-09-2017.