



## **Production and Marketing Orientation of Kodo millet (*Paspalum scrobiculatum*) Demonstrations' beneficiaries**

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### **ABSTRACT**

*Kodo millet (Paspalum scrobiculatum) is one of the most important dryland crop which are being grown in larger parts of undulating and tribal area of Vindhya region of Madhya Pradesh from ancient times. It is cultivated in wide ranges of climatic conditions and marginal conditions of soil & moisture and critical inputs. The resilience exhibited by Kodo millet makes it quite indispensable to rainfed, tribal and hilly agriculture where crop substitution is not possible. It is more nutritive and climate resilient to environmental extremes and adverse weather conditions than major crops like Rice of the region. Keeping this in view the present study was carried out by under All India Coordinated Research Project on Small Millets at College of Agriculture Rewa (M.P.) to assess the production and marketing orientation of Kodo millet (Paspalum scrobiculatum) demonstrations' beneficiaries during the year 2017-18. A multi-stage sampling technique was used to collect the data from 50 Kodo millet (Paspalum scrobiculatum) demonstrations' beneficiaries of last three years in Raipur Karchulian block of Rewa district. Data were collected through personal interview method by a pre tested interview schedule. The yield data of frontline demonstration depict that the mean grain yield of improved varieties of kodo millet was obtained at farmers' field 8.31q/ha was significantly higher (49.4%) than that of farmers' practice. The mean net return obtained from demonstrations was also increased up to 93.9 % as compared to control plot.. The study clearly reveals that majority of the respondents (88%) were cultivating kodo millet for sole domestic consumption while 8 % of them were growing kodo for both domestic consumption and marketing purposes. Only 4 % of kodo producers were involved in kodo cultivation as cash crop. The study recommends that farmers may be encouraged to adopt improved kodo varieties through awareness, training campaign and improvement on stakeholders' linkages. Processing and value addition facilities are of very much importance for making the kodo millet more remunerative. In view of enhancing the availability of foundation or certified seed of high yielding varieties of kodo millet for innovative farmers, Millet seed Hub has been allotted at two centers of JNKVV, College of Agriculture Rewa and Zonal Agricultural Research Station Dindori.*

**Key words:** Kodo millet ,Frontline demonstration, Processing and value addition

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### **INTRODUCTION**

Kodo millet (*Paspalum scrobiculatum* L.) is indigenous cereal of India. It is one of the most important small millet crop grown in large areas of developing world particularly in Africa and Asia. Kodo millet is one of the most important dryland crop which is being grown in larger parts of undulating and tribal area of Vindhya region of Madhya Pradesh from ancient times. It is cultivated in wide ranges of climatic conditions and marginal conditions of soil & moisture and critical inputs. The resilience exhibited by Kodo millet makes it quite indispensable to rainfed tribal and hilly agriculture where crop substitution is not possible. It is more nutritive and climate resilient to environmental extremes and adverse weather conditions than major crops like Rice of the region.. More over it has high nutritional value and storage quality. Presently, Kodo millet is largely grown in the states of Madhya Pradesh, Chhattisgarh, Maharashtra, Tamilnadu and Karnataka, U.P. and Kerala. Madhya Pradesh has largest area under kodo millet (132 thousand hectare), which shares about 60% of its total area of the country .Average productivity of kodo millet in Madhya Pradesh is 525 Kg/ha.

In context with Rewa district of M.P., kodo is grown in an area of 1044 ha with productivity of 534Kg/ha. With a view to popularize improved kodo production technologies and to enhance the adoption rate of

improved kodo varieties & its package of practices, All India Coordinated Research Project on Small Millets was came into existence in the year 1976 at College of Agriculture, Rewa (M.P.). Under this project improved varieties of kodo millet namely JK439, JK155, JK137 and RK390-25 have been demonstrated with improved package of practices on farmers' field to assess the yield potential of improved kodo production technologies along with popularization of it in kodo producing area of the region. Keeping this in view the present study was carried out under All India Coordinated Research Project on Small Millets at College of Agriculture Rewa (M.P.) to assess the production and marketing orientation of Kodo millet (*Paspalum scrobiculatum*) demonstrations' beneficiaries during the year 2017-18.

## MATERIAL AND METHODS

The present study was carried out under All India Coordinated Research Project on Small Millets at College of Agriculture Rewa (M.P.). As stated earlier under this project a large number of demonstrations under Frontline Demonstration Programme have been conducted during the last three years on improved varieties of kodo millet namely JK439, JK155, JK137 and RK390-25 with improved package of practices on kodo millet producing farmers' field A multi-stage sampling technique was used to collect the data from 50 Kodo millet (*Paspalum scrobiculatum*) demonstrations' beneficiaries of last three years in Raipur Karchulian block of Rewa district..Improved varieties, integrated weed management, integrated nutrients management, line sowing and timely sowing, plant protection measures and post harvest management technology have been incorporated in these demonstrations

Data were collected through personal interview method by a pre tested interview schedule. The study was under taken through mandatory activities of the project viz. farmers meeting, training, survey and diagnostic visit. Mathematical and statistical tools viz. percent and mean were applied for the interpretation and analysis of data.

## RESULT AND DISCUSSION

### Production and economics of kodo millet under Frontline Demonstration

The average yield of different varieties of kodo millet and their economics recorded at farmers' field under frontline demonstration programme during the last three years have been presented in Table 1 as under-

**Table 1: Production and economics of kodo millet under Frontline Demonstration**

S.No.	Cultivars	Grain yield q/ha	Cost of cultivation Rs./ha	Gross return Rs./ha	Net return Rs./ha	B:C ratio
1	JK 439	8.11	6837	17817	10979	2.61
2	JK 155	8.06	6737	17756	11019	2.64
3	JK 137	8.51	6758	18717	11958	2.77
4	RK 390-25	8.56	7022	18885	11863	2.69
	<b>Mean</b>	8.31	6838	18293	11455	2.68
	<b>FP</b>	5.56	6395	12202	5907	1.94

The Table 1 reveals that under the demonstrations out of the selected varieties the improved variety RK390-25 recorded the highest yield (8.56 q/ha) followed by JK137, JK439 and JK155. The yield data of frontline demonstration depict that the mean grain yield of improved varieties of kodo millet was obtained at farmers' field 8.31q/ha was significantly higher (49.4%) than that of farmers' practice. The mean net return obtained from demonstrations was also increased up to 93.9 % as compared to control plot. The mean of B: C ratio worked out in case of demonstration fields also shows superiority of improved varieties as gaining about 40% higher benefit than that of farmers' practice. Similar results were reported by [1], [2], [3] and [7].

### Purpose of production of kodo millet

The respondents were classified according to the purpose of kodo production its marketing pattern and use of produce of small millets and are presented as under-

**Table.2 Distribution of the respondents according to their purpose of production of small millets**

S.No.	Purpose of Production	No.of respondents	%
1	For domestic consumption	44	88
2	For domestic consumption and marketing	4	8
3	For marketing only	0	0
4	For cash crop	2	2

The data in the Table 2 clearly reveal that majority of the respondents (88%) were cultivating kodo millet for sole domestic consumption while 8 % of them were growing kodo for both domestic consumption and marketing purposes. Only 4 % of kodo producers were involved in kodo cultivation as cash crop. However, none of the kodo producers was growing the kodo for sole marketing purpose.

Marketable surplus is the excess of the produce, keeping aside the amount for self-consumption. It was observed that the surplus was too less to sell, so the production of kodo is mainly for self-consumption only. Therefore, a very little amount of kodo millet was marketed by the respondents. This finding is in line with the finding of [6] .

### CONCLUSION

On the basis of the above findings the study highlights the tremendous productivity and profit potential of the kodo through adoption of its improved varieties and package of practices. The study recommends that farmers may be encouraged to adopt the location specific improved kodo varieties through awareness, training campaign and improvement on stakeholders' linkages. Processing and value addition facilities are of very much importance for making the kodo millet more remunerative. In view of enhancing the availability of foundation or certified seed of high yielding varieties of kodo millet for innovative farmers, Millet seed Hub has been allotted at two centers of JNKVV, College of Agriculture Rewa And Zonal Agricultural Research Station Dindori. This hub may become a boon to this climate resilient nutraceutical millet crop.

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