

Strategic Activities for Group Cultivation, Marketing, Scope for Export, Variety Registration, Geographical Indication and AGMARK of Aromatic Tulaipanji Rice of West Bengal, India

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Abstract—Tulaipanji is a medium-grained non-Basmati type aromatic rice, which is traditionally cultivated in Dinajpur districts of North Bengal for about 400-500 years. Major quality features of Tulaipanji rice are: straw-yellow coloured grain with long awns, medium slender type kernel (length 5.3 mm and L/B ratio 2.8), amylose 17.2 %, protein 7.2%, intermediate gelatinization temperature, elongation ratio 1.7 and medium aroma. Based on distribution of quality seeds and periodic training programmes in native areas, the technology-supported group cultivation of Tulaipanji rice was up-scaled from 143 farmers in 4 blocks of 1 district (Uttar Dinajpur) during 2009 to 689 farmers in 8 blocks of 2 districts (Uttar Dinajpur and Dakshin Dinajpur) during 2013 under RKVY Project on 'Bengal Aromatic Rice' of Uttar Banga Krishi Viswavidyalaya (U.B.K.V.) in collaboration with Bidhan Chandra Krishi Viswavidyalaya (B.C.K.V.). With a view to develop production-based marketing system of Tulaipanji rice, 27 farmers' organizations of Hemtabad block of Uttar Dinajpur district had been enrolled done under Paschimbanga Agri. Marketing Corporation Limited, Government of West Bengal during 2015. Besides, the Standing Committee on Commerce, Parliament of India recommended Tulaipanji rice for export in 2011 based on a proposal submitted by B.C.K.V. The Department of Agriculture, Government of West Bengal; B.C.K.V. and Bio-diversity Board, West Bengal extended technical support to Bastian Krishi Unnayan Samity, Uttar Dinajpur; which resulted in registration of Tulaipanji as a 'Farmers variety' under Protection of Plant Varieties and Farmers Rights Authority (PPV&FRA), Government of India. With a view of genotype safeguard and premium price, the Patent Information Centre submitted the technical and legal documents for Tulaipanji rice based on Status Paper submitted by RKVY Project, B.C.K.V. along with related information provided by Rice Research Station, Government of West Bengal for geographical indication (G.I.) to Intellectual Property Office, Government of India during 2015. With an initiative from Government of India; B.C.K.V. submitted a

Proposal during 2015, wherein the University suggested for notification of Tulaipanji rice as a commercial variety in Schedule I and 'Parboiled Milled Fine Aromatic Rice of West Bengal' in Schedule VII, in 'Rice Grading and Marking Rules', 2014 under AGMARK. Overall, the comprehensive approach for Tulaipanji rice initiated by two State Agricultural Universities during last 7-8 years may promote the variety at national and global levels with the improvement of socio-economic status of farming community in North Bengal region of the state.

Keywords: Tulaipanji rice, variety registration, group cultivation, marketing, geographical indication, AGMARK

1. INTRODUCTION

Tulaipanji is a medium-grained non-Basmati type aromatic rice, which is traditionally cultivated in Dinajpur districts of North Bengal for about 400-500 years. Major quality features of Tulaipanji rice are: straw-yellow coloured grain with long awns, medium slender type kernel (length 5.3 mm and L/B ratio 2.8), amylose 17.2 %, protein 7.2%, intermediate gelatinization temperature, elongation ratio 1.7 and medium aroma [1]. It is very popular in domestic market for preparation of scented table rice, *polao* and *biryani*, *payash* (desert), *pistak* or *pitha* (home-made cake), *chira* (flattened rice), etc. during social functions and religious festivals in the region for a long period. At present, it is cultivated in about 7,000 ha. land comprising 6,000 ha. in Raiganj, Hemtabad, Kaliaganj, Itahar, etc. blocks of Uttar Dinajpur and 1,000 ha. in Balurghat, Kushmandi, etc. blocks of Dakshin Dinajpur district, with a production of 14,000–15,000 tonnes paddy every year [2]. Farmers in native areas cultivate Tulaipanji

paddy under traditional farming inter-mixed with some modern technologies for their own use as well as for domestic marketing within the country. Considering the potentiality and scope for marketing-cum-export of Tulaipanji rice, a research-based extension programme has been undertaken by the Rashtriya Krishi Vikas Yojana (RKVY) project team of Bidhan Chandra Krishi Viswavidyalaya (B.C.K.V.), West Bengal, India since 2009 to develop the ‘production to consumption’ system in the state.



2. RESEARCH-BASED STRATEGIC ACTIVITIES FOR TULAIPANJI RICE

2.1 Group cultivation in native areas

The RKVY Project on ‘Bengal Aromatic Rice’ of Uttar Banga Krishi Viswavidyalaya (U.B.K.V.) in collaboration with Bidhan Chandra Krishi Viswavidyalaya (B.C.K.V.) supplied pure ‘Tulaipanji’ paddy seed, extended technology support and, organized farmers’ training programme and group cultivation of ‘Tulaipanji’ rice with the involvement of Rural Co-operatives, Farmers’ Clubs, Krishi Vigyan Kendras (KVKs), Social Organizations, Self-help Groups (SHGs), Trust, etc., which recorded the technology-supported area expansion from 143 farmers in 1 district (Uttar Dinajpur) during 2009 to 720 farmers in 2 districts (Uttar Dinajpur and Dakshin Dinajpur) during 2013 (Table 1).

Table 1: Technology-supported area under Tulaipanji rice cultivation in native districts of West Bengal during 2009 – 2013

District	Number of Blocks	Number of Farmers		Area under cultivation (bigha)	
		2009	2013	2009	2013
Uttar Dinajpur	5	143	637	243	667
Dakshin Dinajpur	3		52		53
Total		143	689	243	720

Uttar Dinajpur: Raiganj, Kaliaganj, Hemtabad, Itahar and Islampur Dakshin Dinajpur: Balurghat, Kumarganj and Gangarampur

Besides, the State Department of Agriculture extended the programme through seed distribution-cum-field demonstration in about 400 ha. in native areas during last 3-4 years.

2.2 Development of marketing network

With up-scaling the area and production of Tulaipanji rice in the native areas under technical supervision of the University since 2009; the RKVY Project team of U.B.K.V. developed a promotional strategy through model value-chain network of Tulaipanji rice and made packet of 1 kg capacity during 2010 towards better marketing system.

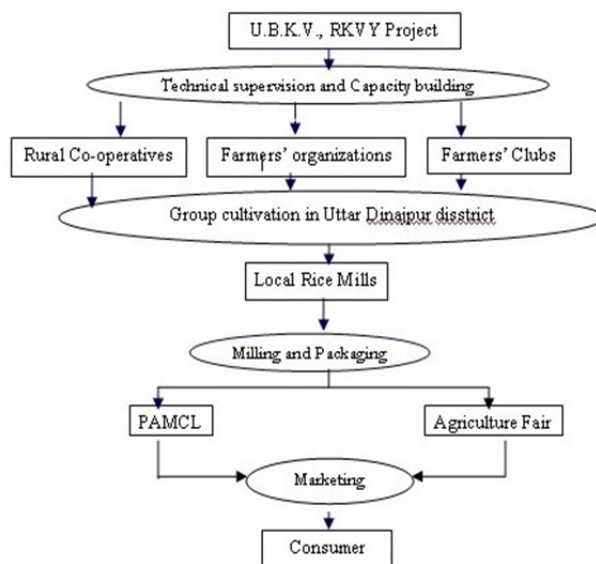


Fig. 1: Development of marketing network of Tulaipanji rice involving farmers’ Clubs in North Bengal

Later, the Department of Agricultural Marketing, Government of West Bengal started to promotion-cum-sale of Tulaipanji rice in 1, 2 and 5 kg packets under ‘Banga Krishisree’ brand at Banga Bhawan, New Delhi since 18 May, 2012. The production-based marketing system has been well-structured and extended through display-cum-marketing of Tulaipanji

rice through participation of the Rural Cooperatives, Farmers' Clubs, etc in collaboration of Paschimbanga Agri. Marketing Corporation Limited (PAMCL) in regional, national and international trade fairs, Government-sponsored outlets, *maati utsav*, *pragati utsav*, University fairs, etc. during last 4-5 years.

2.3 Enrollment of farmers' organizations under Paschimbanga Agri. Marketing Corporation Limited (PAMCL)

The RKVY Project team took initiatives as well as recommended the applications of 27 Farmers' Organizations of Hemtabad block of Uttar Dinajpur district for marketing of Tulaipanji rice to PAMCL under the Department of Agricultural Marketing, Government of West Bengal (No. BCKV/RKVY(AM)/MG/153/14-15, 04.03.2015). As per decision taken in the 12th Board of Directors meeting of PAMCL held on 08 September, 2015; 27 Farmers' Groups / Clubs associated with the RKVY Project on 'Bengal Aromatic Rice' had been enrolled with PAMCL for supply of Tulaipanji rice as and when required as per terms and conditions to be specified by the PAMCL (No. 320, dated 05.10.2015).

2.4 Recommendation for export by Parliament of India

The RKVY Project team on 'Bengal Aromatic Rice' headed by Dr. Mrityunjay Ghosh prepared a proposal on "Promotional Strategy for Export of Bengal Aromatic Rice (Gobindabhog and Tulaipanji)", which was duly forwarded by Prof. S. K. Sanyal, Hon'ble Vice-chancellor and submitted to the Standing Committee on Commerce, New Delhi on 29 October, 2010 (No. VC/BCKV/60/148, dated 29.10.2010). Considering the potentiality and scope for export of these two premium rices, the Standing Committee on Commerce, Parliament of India identified and recommended Gobindabhog and Tulaipanji rice of West Bengal for export as mentioned in the 98th Report on "Export of Food grains - Premium Non-Basmati Rice & Wheat."

As per Report, "The Committee observed that India produces some fine quality non-Basmati varieties also such as Sona Masuri, Matta and Ponni, Gobindabhog and Tulaipanji, etc. These varieties are very good quality rice and are bound to be appreciated by international buyers."...

"Accordingly, the committee recommends that the Government should come out with a planned policy whereby, all types of premium rice varieties should be considered for testing and research and those varieties that fulfill international norms may be encouraged for export." The report was presented in the Rajya Sabha on 11 August, 2011 and subsequently accepted for future course of action on the part of the Government of India [3].

2.5 Registration of Tulaipanji rice as Farmer's Variety under Protection of Plant Varieties and Farmers' Rights Authority (PPV&FRA)

The protection of farmers' varieties is of great necessity in the present-day agricultural system of the world. Keeping in view, Bio-diversity Board, Bidhan Chandra Krishi Viswavidyalaya and Department of Agriculture, Government of West Bengal took initiatives and extended technical help to Basian Krishi Unnayan Samity, Basian, Dist. Uttar Dinajpur, West Bengal to submit the filled-in application along with relevant documents during 2009 for registration of Tulaipanji rice as a Farmer's Variety of West Bengal, India.

The application duly forwarded by the Director of Research, B.C.K.V., West Bengal was received at the office of Protection of Plant Varieties and Farmers' Rights Authority (PPV&FRA), Government of India, New Delhi on 09.12.2009, which was assigned with No. REG / 2009/ 653. At present, it is being considered under the process of DUS testing towards the registration as a Farmer's Variety of India [2].

2.6 Submission of status paper on Tulaipanji rice for geographical indication (G.I.)

Tulaipanji as a premium scented rice of West Bengal may come under the protection of 'The Geographical Indication of Goods (Registration and Protection) Act, 1999' considering its grain quality, market potentiality and scope for export. Based on the history, traditional cultivation, grain quality, market potentiality, etc.; the RKVY Project on 'Bengal Aromatic Rice' prepared a Status Paper entitled 'Registration for Geographical Indication: Status Paper on Tulaipanji, Aromatic Rice of West Bengal', which was recommended and forwarded by Prof. C. Kole, Hon'ble Vice Chancellor, B.C.K.V., Nadia (No. VC/BCKV/175/924, dated 04.07.2014) and subsequently submitted to the Patent Information Centre, West Bengal Council of Science and Technology, Department of Science and Technology, Government of West Bengal during July, 2014.

The technical and legal documents on Tulaipanji rice prepared by Patent Information Centre based on the Status Paper and Logo made by the RKVY Project on 'Bengal Aromatic Rice', B.C.K.V. and related information provided by Rice Research Station, Department of Agriculture, Government of West Bengal had already been submitted to the Intellectual Property Office, Government of India during July, 2015 [4].

2.7 Submission of proposal on Tulaipanji rice for AGMARK

With the initiative of Assistant Agricultural Marketing Advisor, Directorate of Marketing and Inspection, Government of India (vide F No. 11011/1/2011-Notification, dated 13.05.2014), the RKVY Project on 'Bengal Aromatic Rice' prepared a Proposal for inclusion of two aromatic rices of West Bengal (Gobindabhog and Tulaipanji) as commercial

varieties in ‘Rice Grading and Marking Rules’, 2014 under ‘AGMARK’, which duly recommended by Prof. A. K. Chakravarti, Hon’ble Vice Chancellor of Bidhan Chandra Krishi Viswavidyalaya (vide No. VC/BCKV/175/1157/1, dated 23.07.2015) was submitted to the Head Office, Directorate of Agricultural Marketing and Inspection, Government of India, Faridabad, Haryana during July, 2015.

As per the Proposal, the University suggested for notification of Tulaipanji rice as a commercial variety in Schedule I and ‘Parboiled Milled Fine Aromatic Rice of West Bengal’ in Schedule VII, in ‘Rice Grading and Marking Rules’, 2014 under ‘AGMARK’. As per the letter of M. Thangaraj, Deputy Agricultural Marketing Advisor (vide No. F.No. 11014/1/2013-Std-223, dated 01.09.2015), the Proposal is now being considered at the Directorate of Agricultural Marketing, Government of India considering the importance of Tulaipanji in national rice trade network [4].

3. CONCLUSION

Thus, it can be concluded that the RKVY Project on ‘Bengal Aromatic Rice’ of Uttar Banga Krishi Viswavidyalaya in collaboration with Bidhan Chandra Krishi Viswavidyalaya achieved some milestones in the field of production-based marketing system of Tulaipanji rice of West Bengal during last 7-8 years like group cultivation, development of marketing network with PAMCL, recommendation for export by Parliament of India, variety registration, submission of status paper and Proposal for geographical indication (G.I.), AGMARK, etc; which require co-operation from the line Departments of both State and Central Governments, farming communities, millers, rice companies, exporters, etc. for future up-scaling and long-term sustainability

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