A case for Geographical Indication of Joha rice of Assam

Among various groups of rice varieties grown in Assam, aromatic rice locally known as *joha* occupies an important position. Despite the inherent weaknesses of the tall traditional indica varieties of being low yielding, photoperiod sensitive, prone to lodging the *joha* rice varieties are surviving the onslaught of the high yielding varieties and are still very popular among the growers as well as consumers of the region due to their unique aroma, superfine kernel, good cooking qualities and excellent palatability.

The Northeast India including Assam is widely recognized as the center of diversity of rice. The landraces of the region is endowed with wide genetic diversity and represents wealth of valuable gene systems (Sharma et al. 1971; IRRI, 1974; Das et al., 1981). Among different types of varieties, joha (aromatic), bora (glutinous) and chokuwa (semi-glutinous) rice varieties occupy a special place in Assam. Of these, joha rice appears to have immense commercial value. The joha rice, with pleasant aroma and fine grain characteristics fetches premium price over the best non-aromatic quality grained rice varieties in the domestic market. It is the most preferred rice varieties for eating and as such the farmers of the state grow this class of rice at least for their home consumption during the special occasions. However, these varieties are rarely grown by the farmers for commercial purpose due mainly to very low productivity. Out of 17 lakh ha of sali rice area in the state, almost 5% area is under joha cultivars (Sarma et al, 2003). The productivity of these photoperiod sensitive, tall traditional joha cultivars is not more than 1.0 t/ha. Moreover, Joha rice is grown in relatively marginal lands. Assam maintains a diverse gene pool of aromatic rices that differs in aroma intensity, durability, grain shape and size, production potentialities etc. Altogether 47 joha rice varieties collected from different parts of Assam are being maintained at different research stations of Assam Agricultural University. Often, people tend to compare joha rice with basmati rice which are indeed very different from each other in respect of their adaptation and grain quality attributes. The aroma of joha rice is also considered to be distinctly different from basmati rice (Pathak and Sharma, 1997). However, there is immense export potential of joha rice like that of basmati rice due to characteristic grain quality. In fact, the first consignment of joha rice amounting to 17.5 metric tons, graded in both size and colour, with organic certification was despatched for the European market in 2007. This was produced under a special project with the European market on mind. According to state Agriculture department, the department is presently supporting 154 joha farmers in over 91 hectares of land across three districts in northern Assam. Assam Agricultural University has initiated activities in collecting, maintaining and characterizing joha cultivars for subsequent improvement and production of this class. An improved joha variety, Keteki Joha was developed and released by Assam Agricultural University with a yield of 3-4 tons/h.

It has become important to register *Joha* rice of Assam for Geographical Indication due to the following reasons:

- 1. It is indigenous to Assam. The famous Assam Rice Collection having more than 6000 rice accessions maintained at International Rice Research Institute, Manila and subsequently shared with Central Rice Research Institute, Cuttack includes *joha* landraces of Assam. These *joha* rice accessions are also being maintained at Regional Agricultural Research Stations (RARS) at Titabar and Karimganj of Assam Agricultural University. RARS, Titabar has also developed improved *joha* variety, "Keteki Joha" involving *joha* landrace of Assam and high yielding variety. Some more such improved *joha* varieties are in the pipeline of recommendation.
- 2. A number of *joha* varieties are under cultivation fetching premium price in the market. Some of them, *viz.*, Kola jaha, Kon joha, Manikimadhuri are being cultivated commercially.
- 3. This specialty rice has attracted attention to qualify as a food commodity for export.
- 4. The historical evidence suggests *joha* rice to be endemic to Assam. In the first Ramayana script in Assamese written some 600 years ago by Madhab Kandoli, there has been reference of attempt to feed Kumbhakarna with various local food items like *joha* rice amongst others providing evidence to the view that *joha* is a favoured rice class prevalent in Assam for centuries.
- 5. The *joha* class of rice is unique in aroma and grain characteristics and distinct from other aromatic rice like *basmati* in biochemical and other quality attributes.
- 6. Besides other publications relating to joha rice of Assam in different research journals, details regarding the extent of genetic variation of 40 indigenous joha rice varieties of Assam have been published in the national journal dealing with plant genetic resources (Medhi et al, 2004).

Reference:

- Medhi K, Talukdar P, Barua PK, Baruah I. 2004. The extent of genetic variation of forty number of indigenous *joha* rice of Assam.Indian Indian Journal of Plant Genetic Resources 17(1): 27-29
- Sarmah N.K. Sharma, K.K. Hazarika, G.N., Saikia, L and Singh, R.K. 2003. The aromatic rices of Assam. In a treatise on the scented rices of India (R.K. Singh and U.S. Singh Eds.), Kalyani Publishers, Ludhiana, 233-249 pp.
- Pathak, P.K. and Sharma, K.K. 1997. variability and correlation among physical quality characters of joha rice of Assam, JASS 9(1): 18-22.