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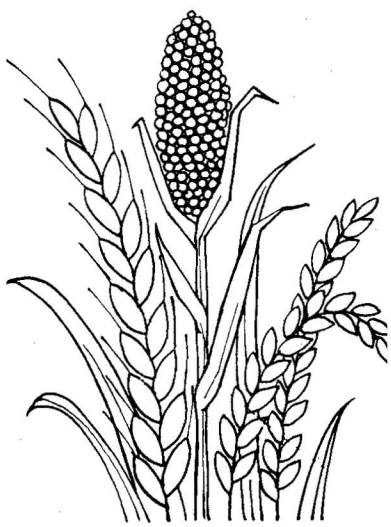

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A NOTE ON THE PRICE RESPONSE STUDIES IN RELATION TO JUTE

Economists like, Clark,[1] Venkataramanan,[2] Rabbani,[3] Hussain,[4] and Huq[5] have tried to explain the price elasticity of jute acreage for different periods in India-Pakistan by using different analytical models. The most common one was one of correlating, by means of a linear regression, each year's acreage of jute with the relative prices of jute and rice (the competing crop) and also acreage under jute, all in the preceding season. In their analyses they have considered both *aus* and *aman* rice as the competitor although in some cases separate calculations were done by taking only *aus* rice as the competitor. The underlying assumption was that there was hundred per cent substitutability between jute and rice. The results obtained in all these studies suggested that jute farmers in India-Pakistan were responsive to prices and that the coefficient of elasticity was larger when only *aus* rice was considered as the competitor which could be expected. But two questions still remain to be answered.

First, whether or not both *aus* and *aman* rice or only *aus* rice should be considered as the actual competitor and second, whether the assumption of hundred per cent shiftability was correct ?

Competition between two crops may arise mainly due to (*i*) the suitability of a particular piece of land for both the crops, and (*ii*) overlapping of growing seasons.

The growing seasons of jute and broadcast *aman* (lowland variety) overlap but the edaphic conditions under which this variety of paddy is grown is not suitable for jute cultivation. The harvesting of lowland jute takes place between June-July and that of highland jute takes place between July-September. The normal transplanting period for *aman* paddy is July-August . Therefore both lowland and highland varieties of jute give an opportunity for growing transplanted *aman* paddy except that some part of highland jute remains for harvesting in September. But this proportion can be considered negligible because highland variety as a whole accounts for only about 30 per cent of the total jute acreage in the country. Moreover, if it is assumed that both *aman* paddy and jute are produced under rain-fed condition, then this small proportion of unharvested jute land can be considered unsuitable for transplanted *aman* paddy due to insufficient water supply after September.

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1. Ralph Clark, "The Economic Determinants of Jute Production," FAO *Monthly Bulletin of Agricultural Economics and Statistics*, Vol. III, No. 9, September, 1957.
2. L. S. Venkataramanan : A Statistical Study of Indian Jute Production and Marketing with Special Reference to Foreign Demand, unpublished Doctoral Thesis, University of Chicago, 1958.
3. A.K.M.G. Rabbani, "Economic Determinants of Jute Production in India-Pakistan," *The Pakistan Development Review*, Vol. V, No. 2, Summer 1965.
4. Syed Mushtaq Hussain, "A Note on Farmer Response to Price in East Pakistan," *The Pakistan Development Review*, Vol. IV, No. 1, Spring 1964.
5. Sayeedul Huq, "Jute Price Stablization and Resource Allocation Between Jute and Rice in East Pakistan," *Pakistan Economic Journal*, Vol. XIX, No. 2, 1968-69.

The growing seasons of jute and *aus* paddy are the same and as such they compete for various resources *of the cultivators especially for land which is suitable for both the crops.* On such land, production of one crop means a conscious sacrifice of the other. Now the question is, in the event of a relative twist in the price ratio of jute and *aus* paddy, to what extent *aus* and jute was shiftable —hundred per cent or less than that? Naturally it depends on the suitability of land for producing both the crops.

Information collected by Jabbar[6] from 51 farms, selected at random from two major *aus*-jute growing villages of Multagacha Thana of Mymensingh district, revealed that on the average 93-95 per cent of the total crop land was suitable for producing *aus* paddy but *aus* and jute could be substituted only upto 79 per cent of the crop land. Data collected by Ahmed[7] from five major *aus*-jute growing Thanas of Mymensigh district suggested that *aus*-jute was shiftable only upto 68 per cent of crop land of the farms surveyed.

In the light of the above two studies, it can be said that roughly 75 per cent of the crop land in the major *aus*-jute growing areas in Bangladesh is shiftable between *aus* and jute in the event of relative changes in their price ratio. That means, about 20-25 per cent of the *aus* acreage has no influence whatsoever on the acreage and price of jute.

It is therefore concluded that a function to explain price elasticity of jute acreage particularly in Bangladesh should include only that proportion of the *aus* acreage as the competitor of jute upto which *aus*-jute is shiftable instead of either both of *aus* and *aman* or of *aus* only. It is further suggested that a detailed investigation should be undertaken to find out the exact possibility of acreage shifting between *aus* and jute.

M. A. JABBAR*

6. Md. Abdul Jabbar: An Economic Study of White Jute Production Improvement in a Selected Area of Mymensingh District, unpublished Master's Thesis, E.P.A.U., Mymensingh, 1971.

7. Jasim Uddin Ahmed : Production and Marketing Practices Affecting Grower Prices of Jute in Some Areas of Mymensingh District, unpublished Master's Thesis, E.P.A.U., Mymensingh, 1971.

*Research Officer, Burcau of Agricultural Economic, Statistical and Sociological Research, Bangladesh Agricultural University, Mymensingh.