Diversification of Cropping Pattern : A Re-Examination, H.S. Shergill, Institute for Development and Communication, 2006. pp V + 105, Rs. 150.00

In my well-considered opinion, the current agrarian problems of Punjab are believed to be caused by the over-specialization in wheat and rice cultivation. It scarcely needs to be over emphasized that adoption of crop diversification and shifting out of the present wheat-rice rotation is the need of the hour. But in the prevailing scenario of modern agriculture farming, marketing and price policy make the farmer adamant to adopt only wheat-rice rotation instead of any other crop in their system. So this is a time to critically review present and future scenario for wheat-rice rotation in comparison to other crops from all social and economic aspects.

This book by a well-known economist Professor H.S.Shergill is an excellent thought process consisting of twelve chapters, giving detailed quantative information pertaining to the wheat and rice rotation as compared to other crops. Chapter One describes clearly the main objectives of the study, i.e., a thorough economic evaluation of wheat and rice crop rotation as compared to other alternative rotations. Is there any urgent need to reduce the area of cultivation under wheat and rice? has been the issue of concern for the learned scholar.

In the Second Chapter, incompatibility of modern commercial farming with diversified cropping pattern has been discussed both in terms of theory and evidence. Profit earning of farming through highly specialised cropping pattern dominated by wheat and rice crops is described in Third Chapter. Comparison of net financial returns per unit of land between wheat and rice and alternative rotations, has also been explained. Only the wheat-rice rotation is found to be profitable for agriculture business. This chapter identifies the various specific sources of increase in cultivable area of wheat and rice which basically came from new area brought under cultivation and extension of double cropping system.

Chapter Four briefly focuses on the various possible reasons for shifting area out of wheat and rice cultivation such as overproduction of wheat and rice, less potential for foodgrains exports, unsustainability of minimum support price system, changes in environment system, degradation of soil and depletion of water resources etc. Size, stability and growth of net financial return per hectare yielded by wheat and rice in comparison to other crops is clearly shown in Chapter Five.

The estimates of the possible side effects on farm incomes and incomes of other occupational strata as a result of shifting area out of the cultivation of wheat and rice have been presented in Chapter Six. On the basis of income loss estimates, it has been observed that the farmer will never

agree to shift area out of wheat and paddy cultivation. In commercial agriculture, marketing plays a vital role. The facts presented to this effect in Chapter Seven of the book under reference make it abundantly clear that the marketing prospects for Punjab's surplus wheat and rice are quite powerful in that there is evergreen demand for cereals in the domestic as well as in foreign markets.

Comparative cost advantage of Punjab's wheat and rice over the other crops and in comparison to the rest of India has been analyzed in Chapter Eight. In Chapter Nine it is argued that an effective and sustainable minimum support programme for wheat and rice is the foundation stone of Punjab's commercial agriculture. Similar platform of marketing cannot be possible for other crops because of WTO pressures, fiscal crisis and budgetary compulsions of the Central Government. It is maintained that there is no such MSP for alternative crops that can substitute wheat and paddy crops.

In the cultivation of wheat and rice the cost of cultivation is low on account of the fact that these two crops are already partially mechanized and the farmers have become the experts in raising them over the period of time. These developments have resulted into lowering the cost of land preparation as well as mechanical harvesting. Rice cultivation cannot be the only cause of depletion of water resources. Even with any other crop rotation, agriculture requires irrigation. For preservation of valuable water resources we should plan scientific and economic use of canal and tubewell systems. In Chapter Eleven, the author emphatically argues for the revision of the pricing policy for power supplied to the agriculture sector.

An important conclusion which needs to be underlined in respect of the book under review is that there is no urgent need of shifting out of the cultivation of rice and wheat. Rather, what is actually needed is to have a revision of Government policies to strengthen the wheat and rice cultivation. Optimal cropping pattern for Punjab cannot be considered only from micro point of view. Rather, there is also imperatively a need for looking at the cropping pattern from macro point of view. While calculating the cost of production of paddy we should also include the social cost which the society is incurring in the form of depletion of valuable natural resources. The reasons coined to shift out of wheat and rice are absolutely noteworthy but to save the sustainability of agriculture, ecosystem and to uplift the farmers from their huge debt burden there is certainly a need of low cost cultivable, eco-friendly, high output return, export potential and value added crop. For instance Australia is the major producer of lentil and chickpea crops and a major part of its production is being exported. Even India is also the major importer of pulses from Australia. We can reduce the import bill through shifting towards diversification.

Even scientifically it is not advisable to grow cereal after cereal. Each cereal should be followed by some leguminous crops e.g. pulses, groundnut etc. which can conserve the fertility of soil naturally. There is only need to shift kharif crop i.e. paddy from the rotation which is causing depletion of ground water and turning Punjab into a desert. The farmers can shift to sesame which has export potential and fetches three times more prices as compared to ordinary groundnut.

If we talk from the heart of the farmer, they are ready to adopt and to shift to new cropping pattern but present marketing policies of government block their path to shift for diversification.

Farming, to my mind, is a vocation for the majority of rural populace in India. There is a difference between vocation and profession as vocation denotes providing means for livelihood and survival whereas profession is based on specialised knowledge.

To make agriculture a profession, there is imperatively a case for making it knowledge intensive. The need of the hour is to train our farmers in using genetic engineering for producing products like pomato (potato + tomato) to reduce perishabilty in tomato for improving returns in the future. Besides, the farmers as are using vermiculture biotechnology to increase productivity to give natural death to the social evils of all kinds including debt related suicides also need to be trained and motivated appropriately. The extension services of agriculture universities are also required to be strengthened with motivated manpower to reach farmers of all kinds with a sense of firm commitment. This calls for incentives and higher allocation of financial resources. The case for rural industrialization for reducing under-employment and disguised unemployment in agriculture can therefore scarcely be overemphasized. In all essentiality, what it actually means is not village industries but industries with backward and forward linkages with agriculture.

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