

Addressing Stubble Burning with Cooperative Model

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Pollution by stubble burning has become an annual phenomenon in large parts of northern India. Rice-growing States including Punjab, Haryana, Uttar Pradesh, and Delhi add to the problem of stubble burning. Managing the stubble becomes a constraint for the farmers because of the adopted cropping pattern. The only reason to burn this asset that can yield income and fertility to the soil is the small gap of time between harvesting of paddy and sowing of wheat, the other main crop. Also, the farmers have limited access to dispose the straw, clean the land and prepare the seed bed for wheat well in time.

But looking at the whole issue, one can easily understand increase in the area under cultivation of paddy in Punjab was not a reckless affair and it helped solve food shortage in the country. Rice was not a traditional crop of Punjab; but with increased availability of electricity, the number of tube wells increased, which in turn increased the areas for cultivation of paddy replacing the areas under cultivation of pulses and other commercial crops in the kharif season. Punjab had been contributing about 60 per cent of the share in the food stocks of paddy even with only 1.5 per cent of the area. Apart from burning of paddy straw, the State has other problems like overuse of chemicals, depletion in the water table, etc.

Disposing the paddy straw is not a problem that has no solution; rather, it is simple and remunerative and must be adopted at the earliest. Farmers of Punjab are known for their ability, initiatives and entrepreneurial spirits. They would immediately adopt anything that is remunerative, but sometimes the encouragement and sponsorship of the State become imperative. The Minimum Support Price (MSP) was provided to paddy along with its marketing assurance by State procurement. There are only two crops, wheat and paddy, that

have assured marketing through State procurement. But for 23 other crops for which MSP is announced, State procurement is not assured. Reduction of the sizeable area under paddy would not be a feasible alternative in order to ensure enough food stock. Therefore, the issue of straw burning has to be settled through other measures like manufacturing of paper and cardboard, production of mushroom where paddy straw can be used as raw material, etc. But there is scepticism that an individual farmer may not install such a unit irrespective



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of the size of the farm he is holding. Also, a single unit even of the largest size cannot be economical because the straw is spread throughout the area and transportation to a single point would be a big constraint. Therefore, the cooperative model already experienced in the dairy is the most viable and prudent option in addressing this problem. There is a need of at least two cardboard and paper manufacturing units in every block. A cooperative society in the area with the membership of local farmers and farm labourers can be formed and such units must be affiliated to the apex body of the State federation of cooperative for rice straw management. The Cooperative Department is already in the field to sponsor and help cooperative ventures. Such patronisation can yield the most desirable results not only to tackle this problem but also to generate income and employment in the State.

Production of bio-gas needs technical help and extension services. The cooperative umbrella of the same pattern can however help the farmers

and farm labourers throughout the State in this venture.

Dr. G.S. Bhalla, renowned economist, in his study had concluded that a holding with less than 10 acre is unable to provide the sufficient income to maintain their moderate standard of living but in Punjab 89% of the farmers have their holding less than this size. These farmers are therefore unable to take any risk either of volatile price or of marketing. In case of rice, price and marketing is assured. The same assurance has to be granted for the alternative crops to increase the area of cultivation under them.

Basmati is a variety of rice that is grown on the river banks, India and Pakistan being its major producers. It is much demanded in the Middle East, European and America. The supply cannot fulfil the demand of foreign orders. Punjab cannot discard this single much paying export crop, albeit it involves the problem of stubble burning. Basmati is the single crop that is exported worth about Rs 2688 million (Raj Kumar and Singh 2019)

in the year 2017-18, where Punjab is a main contributor.

Stubble burning has to be stopped. But looking into the real problem at micro as well as macro level concerned with food security and concerns of the farm community at large, it should be dealt sympathetically with the alternative measures, and cooperative model stands out to be the most appropriate approach to address this problem, which is more viable and sustainable. Small-scale farmers would be satisfied with less but assured income than to drift towards commercial crops irrespective of their profit that have any risk of fluctuating price and yield. □

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