## Stabilising farm income of Indian farmers

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In an agrarian county like India agriculture is the back bone as farming is the major occupation of its livelihood, likewise income from agriculture is the major player in economic development. With gamble of climate the population getting involved in the backbone is showing a negative trend ultimately showing a ghastly rise in unemployment. With this background it becomes imperative to give a stabilized and profitable income source from agriculture. When all the possible alternatives are dug in one thing can be noticed that increase in income due to increase in production has already reached a plateau where no further increase can be expected. Then all the possible alternatives needs to be explored focussing on

decreasing cost of cultivation and increasein value addition chain for better marketability.

The major share of farm income is spent on purchase of inputs like fertilizers, pesticides. So any steps taken to reduce the cost of cultivation with maintaining a steady yield level will provide profit by increasing net income. Keeping this in mind all the possible steps that could reduce the cost of

cultivation is to be accounted.

**Selection of cultivars**: Half of the burden is solved if the variety/hybrid selected is as per the needs. Use hybrids needs to be discouraged since hybrids require higher nutrient and plant protection chemicals owing to higher cost of cultivation. Secondly hybrid seeds needs to be purchased each time since farmers can't multiply seeds. So he has to be encouraged to spent a major share on purchasing High Yielding Varieties (HYV) and synthetic seeds, in place of hybrids, where the characters does not segregate easily so the farmer can store and replicate his

seed stocks for few years ultimately reducing the cost of cultivation.

Time of cultivation: Often major disease and pest breakthrough is seen when a large patch of similar crops having same duration is cultivated. In such situation, early or late season cultivars may be chosen to avoid disease and pest breakthrough since the synchrony in susceptibility of host and parasite is broken. Secondly the major drop in prices of agriculture produce is seen due to glut in the market. But with cultivation of early or late season cultivars this glut can be avoided and the produce can be marketed with a premium price.

Method of cultivation: Conventional cultivation solely

depends on use of high cost inputs increasing the cost of cultivation in place of it environmentally safer method like organic farming and practices of sustainable agriculture may be encouraged where dependence on external inputs is nearly negligible leading to less dependence on credit availability of resource poor farmers. Secondly always there is scarcity of agricultural inputs during the peak of



season so when a farm becomes self sustainable with respect to its requirement then shortage of inputs in the market would not affect in performing of agricultural operations which need to be done on timely basis since a farmer deals with a living component i.e. crop where any delay in taking of the cultural operations ultimately hampers the yield, thus steady yield level can be obtained.

Selection of inputs: The major share of cost of cultivation is spent on inputs, so inputs needs to be selected carefully and analysed critically before selection to reduce the cost. With invent of organic and sustainable practices

use of fertilizers and pesticides can be reduced up to a larger extent which cangive greater relief to farmer from credit burden. Secondly availability of manual labour is decreasing side by side wage rate is increasing so in this regard farm mechanisation needs to be adopted which can replace manual labour completely or partly giving a major breakthrough in performing agriculture operations on timely basis with nominal cost as compared to manual labour.

Irrigation: Micro-irrigation seems to be the one step solution for all the water related problems. With invent of drip/sprinkler irrigation water saving can be noticed up to 80-90/50-60 %, respectively, so with conservation of water spatial/temporal (space/time) expansion is possible. When temporal expansion is adopted then it keeps the farm family engaged so the problem of seasonal unemployment can be addressed upto certain extent and secondly often farmers cultivate only during *Kharif* and *Rabi* and keep fallow in summer season due to water scarcity, but with micro-irrigation round the year cultivation is possible.

Plasticulture: Use of drip irrigation with plastic mulching has shown magical result having tremendous potential. In crops where drip irrigation is possible there plastic mulching needs to be made compulsory since giving a plastic covering over the soil surface prevents evaporative loss which keeps the rhizosphere cool and conducive for plant growth and secondly it prevents weed growth due to shortage of sunlight to the weeds so plant growth is also increased due to negligible crop weed interference.

**Offseason cultivation:** When all the inputs are available with the farmer and are generated on the farm itself then farmer can take crops round the year and if offseason

cultivation of perishable commodities like vegetable is given emphasis then it will give premium price due to shortage of off season vegetable in the market owing to bumper profit to farmers. Secondly cultivation of off season vegetables breaks the monotony of cereal cultivation thus breaks the disease and pest cycle in the field.

**Harvesting:** When all the operations are taken to enhance the quality of produce then due care needs to be diverted to time of harvesting since distant marketing often yield higher return, so avoiding local marketing produce needs to be harvested rightly at half matured stage increasing the self life for easier marketing without deteriorating in quality. For this reason several harvesting needs to be performed in crops like fruits and vegetables. Value addition: In a country having annual food grain production of nearly 380 million tonnes but sadly only 2-3% of the produce is value added implying the voluminous quantity being wasted due to short perishability of agricultural produce. With necessary steps to increasing the quantum of produce being value added the wastage which is a total loss can be avoided side by side the income generation capacity of farmers will be increasing due to variability of produce and increase in profit due to value addition.

**Supply chain:** Majority of the share of profit goes to middle men in marketing of perishable agriculture produce who use to quote their price as per there sweet will but with production of quality produce, harvesting at half maturity stage and value addition the producer will get plenty of opportunity time for marketing eradicating the profit that was being paid to the middle men.

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