

## STEPS FOR DOUBLING FARMERS INCOME

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The Indian agriculture is on the path of structural as well as institutional transformation. The multipronged approach will make agriculture more dynamic and productive. The focus on FPOs, food processing, agricultural marketing agri-exports are some of the examples how government is able to reach the layers of agriculture dynamism. The setting up of minimum support price for agricultural produce above the 1.5 times of production cost shows government concern to the farmers. The Union Budget has come up rightly on the expectations of agriculture community both on the short as well as long term perspective. This is the way forward in the doubling farmer's income by 2022.

**A**griculture and allied activities are thrust areas in central financing as more than 50 per cent of our population depends on agriculture for their livelihood. In addition, the fortunes of industrial sector as well as service sector are intricately linked with the output and growth of this sector. Hence, accelerating reforms in agriculture for improving its productivity is crucial for inclusive growth. A sustainable solution lies in stepping up investment in irrigation sector, farms and allied activities such as aquaculture & animal husbandry, provision of marketing support, food processing and credit availability on easy terms. There is also a need to address the supply side bottlenecks in the agriculture sector, which have resulted in widening the demand – supply gaps and putting pressure on inflation. With a view to provide a boost to agriculture production and promote inclusive growth, Union Budget 2018-19 has taken various initiatives to transform Indian agriculture to a sustainable source of livelihood for the farmers.

### Irrigation Sector:

Availability of water plays an important role in raising production and enhancing productivity of agriculture. Further, the productivity of irrigated areas is significantly higher than the productivity of un-irrigated areas. In India, only 68 million Ha (48 per cent of Net Sown Area) is currently under irrigation. The Union Budget 2018-19 has given foremost importance to Pradhan Mantri Krishi Sinchai Yojana (PMKSY) with the objective of 'Har Khet Ko Pani' and 'Per Drop More Crop'. PMKSY scheme has four components, namely, (1) Accelerated Irrigation Benefits Programme and

Command Area Development (AIBP-CAD), (2) Minor Irrigation (Har Khet Ko Pani), (3) Watershed Development, and (4) Micro Irrigation (Per Drop More Crop).

The Government of India has initiated 99 projects under mission mode whereas the works for identified 48 projects will remain in progress alongwith left over works of other projects from previous phase. It will create an additional irrigation potential of 44.5 lakh Ha in major and minor irrigation by December, 2019. To execute this, PMKSY- Accelerated Irrigation Benefits Programme & Command Area Development (AIBP-CAD) has been provided Rs. 6000.00crore through NABARD funding along with open market financing. These initiatives are expected to increase the yield of crops & income of farmers, replenishment of ground water and increased water availability for other uses.



### Farmer Friendly #NewIndiaBudget

Record Allocation of Rs 14.34 lakh crore for Rural Development & Agriculture

Farmers to get 1.5 times higher than cost as MSP

22,000 Gramin Agriculture Markets to help farmers sell their produce

Operation Greens to augment Food Processing

Institutional Credit for Agriculture hiked to Rs 11 lakh crore



With the objectives of 1.86 lakh Ha of additional area to be brought under irrigation during 2018-19, PMKSY-Watershed Development has been provided Rs. 2146.00 crore. It will lead to higher agriculture yield and enhance farmer's income too.

As per the Economic Survey 2017-18, the effect of extreme weather shocks are almost twice as high in rain-fed areas as compared to irrigated areas. The government has proposed to include 96 most water deprived districts with an allocation of Rs. 2600 crore where only less than 30 per cent of the land holdings covered are under irrigation. The average annual rainfall of these districts are 750 mm and more, however, less than 60 per cent of the annual replenish able groundwater resources have been developed i.e. there is scope for further groundwater development without endangering groundwater sustainability. In these 96 districts, the government is likely to construct 9.49 lakh groundwater abstraction structures through tube wells, dug wells, bore wells and Dug cum Bore wells. This project envisages convergence with PMKSY-Watershed Component and MGNREGA for supporting water harvesting and groundwater recharge interventions for sustaining longterm groundwater development.

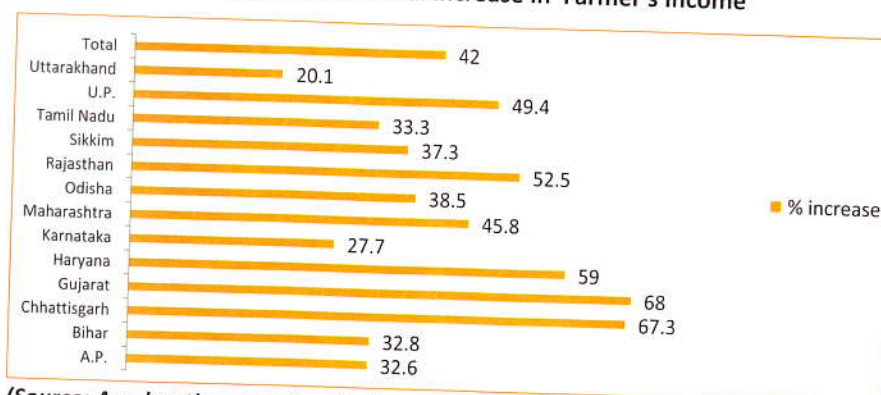
The Water Use Efficiency (WUE) in Indian agriculture, at about 30-40 per cent, is one of the lowest in the world, against 55 per cent in China. This requires paradigm shift in conservation and in agriculture policies, which should lead to saving of water, fertilizer and energy resulting in crop diversification and equitable distribution of resources. The objective of PMKSY-Per Drop More Crop is the use of innovative water saving technologies in irrigation called Micro Irrigation. Micro irrigation saves irrigation water from 40 to 70 per cent (Mo Agri & FW, 2004), conserves energy from 10-17 per cent, reduces fertilizers consumption from 15 to 50 per cent, and decreases labour cost of about 30-40 per cent (FICCI, 2016). This technology leads to increment in gross irrigated areas, adaptation of multi crop system, reduction of various inputs together, shrinks the expenditure on agriculture and enhances farmer's income.

A look on the impact of micro irrigation (state-wise) on the potential farmer's income (Figure-1) clearly envisages that if micro irrigation is applied at its full potential, the average increase in farmer's income at all India level will be 42 per cent. There is a large variation on the impact of micro irrigation in potential increase in farmer's income across the states. Uttarakhand state has marked minimum increase (20 per cent) in farmer's income whereas Gujarat state has marked highest increase (68 per cent) in potential farmer's income. Although the cost of adoption of technology is high as compared to other irrigation system, the benefit cost analysis for the adoption of technology (FICCI, 2016) in each state too shows that the benefits accrued to the farmers outweigh the cost of installing in every case. Recognizing the importance of micro irrigation in the contemporary agriculture, the government has provided Rs. 4000 crore for the water saving induced technology adaptation under "Per drop More Crop".

### Minimum Support Price (MSP):

MSP is a tool of market intervention by the Government of India to ensure the farmers from any sharp fall in the market price of a commodity. While the structural reforms of agriculture takes time to trickle down the effect on the grass root level, the increase in Minimum Support Price has immediate effects on the farmers income, agricultural productivity & growth. Addressing the issue of agrarian distress of farmers in India, the Union Budget has ensured MSP for all 23 crops with at least one and half times of their production cost (A2) plus the imputed value of family labour at prevailing wage rate (FL). Cost A2 includes all expenses paid by farmers in cash or kind in

Figure 1: Potential Increase in Farmer's Income



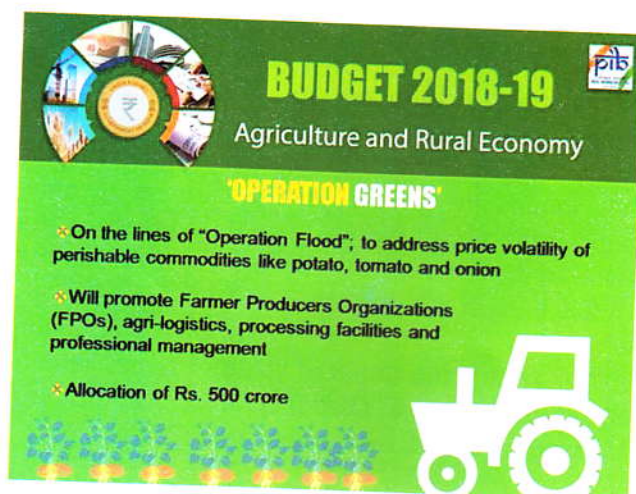
(Source: Accelerating growth of Indian Agriculture, GT & FICCI, 2016)



production of the crop like seed, fertilizer, manure, chemicals, hired human, bullock and machine labour, irrigation expenses, maintenance cost, etc. It also includes imputed cost of own seed, manure, bullock and machine labour, rent paid for leased in land, depreciation of assets and interest on working capital. Ensuring MSP is a significant and straight step in moving towards the goal of doubling farmer's income by 2022.

### Operation Green :

The government has launched "Operation Green" for onion, potato and tomato crops on the line of "Operation Flood". It will promote FPOs, agri logistics, processing facilities and professional management with a budgetary allocation of Rs 500 crores. These three vegetables are consumed throughout the year, however, the seasonal and regional production of these perishable commodities pose a challenge in connecting farmers and consumers. In addition, CPI inflation at all India level for FY 2016-17 has driven mainly due to prices of vegetables and fruits.



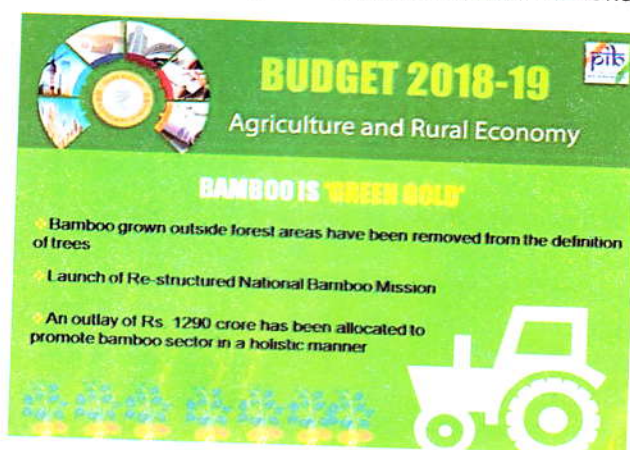
### FPOs :

Farmer Producer Organizations (FPOs) are the most appropriate institutional form for a prosperous and sustainable agriculture sector that enable farmers to enhance productivity through efficient, cost-effective and sustainable resource use and realize higher returns for their produce, through collective action supported by the government, and fruitful collaboration with academia, research agencies, civil society and the private sector. FPOs remove hurdles in enabling farmers' access the markets, both as buyers and sellers, enable policy

environment for investments in FPOs to leverage their collective production and marketing power. FPOs are very important drivers for socio economic growth in the rural areas. Encouraging enabling environment for aggregation of farmers into FPOs will help take advantage of economies of scale. The 100 per cent tax deduction for FPOs with annual turnover of Rs 100 crore will boost 'Operation Greens' and 'SAMPADA' Yojana. Also, organic farming will also be promoted under the cluster model by encouraging women self help groups, Farmer Producer Organizations (FPOs), and Village producer organizations (VPOs) to take up organic farming. This will bring in economies of scale, spur establishment of entire value chain, and boost exports besides giving recognition to the districts for specific crops.

### National Bamboo Mission:

Recognizing the significance of Bamboo tree as a 'Green Gold', the government has launched a Restructured National Bamboo Mission, a sub scheme of Mission for Integrated Development of Horticulture (MIDH), a 100 per cent Centrally Sponsored Scheme of Department of Agriculture & Cooperation (DAC), Ministry of Agriculture with an outlay of 1290 crore to promote bamboo sector in an inclusive manner. There is also a change in the definition of bamboo too i.e. bamboo grown outside forest areas is removed from the definition of trees. The objective of the mission is the holistic growth of the bamboo sector which contains enhancing acreage (in forest and non-forest areas) and productivity of bamboo through varietal change and improved agriculture, marketing of bamboo and bamboo based handicrafts, promotion of Research and Development (R&D) of varieties and technologies through a seamless blend of traditional





wisdom and modern scientific knowledge and creation of employment opportunities for skilled and unskilled persons. It requires a coordinated approach between multi stakeholders and synergy among production, R&D & marketing agencies in public as well as private sectors.

### **Agri-exports:**

India is the fourth-largest agri-export country that constitutes around 12.08 per cent (FY 2016-17) of the country's exports. India mainly exports tea, coffee, rice, cereals, tobacco, spices, cashew, oil meals, fruits, vegetables, and marine products. The country's agricultural exports are around \$ 33.38 billion at present against the potential of \$100 billion. To harness the optimum potential, the Union Budget 2018-19 has proposed to set up state-of-the-art facility in 42 mega food parks to facilitate agri produce to meet global standards through certification and traceability. The government is also in the process of identifying and creating new markets for Indian agri products. The boost in export of agri products will lead to the boost to Indian agriculture and enhance productivity through upsurge demand and better prices.

### **Agriculture Marketing :**

The objective of doubling farmer's income and improvement in the conditions of agriculture depend largely only on the efficient management and elaborate arrangements of agriculture marketing; farmers can dispose their surplus produce at a fair and reasonable price. To strengthening and upgrading the agriculture marketing networks, the government has proposed to set up an Agri-Market Infrastructure Fund with a corpus of Rs. 2000 crore to develop and upgrade existing 22,000 rural haats into Gramin Agricultural Markets (GrAMs) and 585 APMCs using MGNREGA and other Government Schemes. Through the electronically linked GrAMs, farmers can sell directly to the last end consumers. This step will reduce wastages and improve farmer's income. Further, the linking habitations of Pradhan Mantri Gram Sadak Yojna Phase III to GrAM results to the end-to-end connectivity in agriculture marketing.

### **Food Processing:**

The food processing industry plays a vital role in minimizing wastage at all stages in the

food processing chain, enhancing shelf life of food products, ensuring value addition to agricultural produce, diversification & commercialization of agriculture, generation of employment, enhancing farmer's income and creating surplus for the export of agro & processed foods. To make food-processing sector dynamic and strong, there is a need to encourage R&D in food processing for product and process development and improved packaging. Further, a policy support, and support for creation of Infrastructure, capacity expansion/ Upgradation and other supportive measures needed for the growth of the sector. The allocation to food processing doubled to Rs 1,400 crore and establishment of specialized agro processing financial institutions. The increased allocations will ensure flow of further investments and promote employment in the sector. Focus on infrastructure and testing facilities will help reduce wastages, increase value addition and address food safety aspect as well. Establishment of specialized agro processing financial institutions will help design suitable financial instruments and increase flow of credit to the sector.

### **Agriculture Credit:**

Credit for agriculture plays a pivotal role in the agricultural development of India. It adds to the productivity by supporting mechanization and contributes to the growth of Agriculture by enabling the purchase of variable inputs. The direct agriculture credit amount has a positive and statistically significant impact on agriculture output and its effect is immediate (RBI, 2009). Recognizing the multifold benefits of agricultural credit, the volume of institutional credit for agriculture sector has been raised from Rs. 10 lakh crore in 2017-18 and to Rs. 11 lakh crore for the year 2018-19. Meeting the rural economy's credit requirement will improve livelihood for farmers, reduce dependency on the informal lending sector, allow investment in better inputs & help the farmer deploy technology at the field level.

### **Aquaculture and Animal Husbandry:**

Small-scale fisheries and aquaculture have an important contribution in the areas of employment generation as well as adding to the farmer's income and agri exports. As the population of India is growing and per-capita income is rising, the demand



for aquaculture products and livestock products are expected to grow. To meet the required demand, there is a need for government intervention to utilize the optimum potentials of aquaculture and animal husbandry. The government has proposed to set up Fisheries & Aquaculture Infrastructure fund and Animal Husbandry Infrastructure fund with a combined corpus of 10,000 crores. The creation of these funds will help in strengthening the agricultural value chain and help to attract investment as well as technology in these areas. Further, the government has decided to provide Kisan Credit Card benefit to fisheries farmers.

### Other Initiatives

The government has provided Rs. 200 crore to encourage an organized cultivation of highly specialized medicinal and aromatic plants and associated industry. There is also a provision of subsidized machinery for management of crop residue for Haryana, Punjab & UP farmers to get rid of environmental hazard.

### Conclusion:

The Indian agriculture is on the path of structural as well as institutional transformation. The multipronged approach will make agriculture more dynamic and productive. The focus on FPOs, food processing, agricultural marketing agri-exports are some of the examples how government is able to reach the layers of agriculture dynamism. The setting up of minimum support price for agricultural produce above the 1.5 times of production cost shows government concern to the farmers. The Union Budget has come up rightly on the expectations of

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### Union Budget 2018-19: Benefit for Farmers, Poor and other vulnerable sections:

- Free LPG connections to the poor through Ujjwala yojana.
- 4 crore households are being provided with electricity connections under Saubhagya Yojna
- More than 800 medicines are being sold at lower price, through more than 3 thousand Jan Aushadhi Centers.
- Special scheme for free dialysis of poor have been initiated.
- Persons belonging to poor and middle class to be provided relief on interest rates on housing schemes and in all government services, whether bus or train tickets or individual certificates on line, including passports which may be delivered at doorstep in two or three days or Company registration in one day time.