

**1. Examine the key challenge that the horticulture sector faces in India. Also suggest measures to address those challenges.**

**Approach**

The introduction can be based on basic definition about horticulture and including a fact on importance for Indian economy. In next part address the challenges and compliment it with the recommendations to mitigate these challenges. The conclusion can be summary oriented with future direction.

**Introduction**

Horticulture is the branch of agriculture concerned with intensively cultured plants directly used by man for food, medicinal purposes and aesthetic gratification. India is one of the largest producers of Horticultural products in world and it accounts for more than 30% of agricultural GDP of country. Wide range of climatic and physical conditions of the country support for such produces.

**Body**

Recently, Department of Agriculture, Cooperation and Farmers Welfare released the Third Advanced Estimate (2019-20) of Area and Production of various Horticulture Crops. As per the report, the total horticulture production in the country is estimated to be 320.48 million tonnes which is 3.13 % higher than the horticulture production of 310.74 million tonnes in 2018-19.

The major challenges in the path of the emerging Horticulture sector in India are as followed:

- The government has fixed no Minimum Support Price for Horticulture products entailing fruits such as mangoes, bananas, cucumber, pomegranate, and custard apples, and other Horticulture crops. These fruits come under the category of perishable items. Even though Horticulture farmers have raised their voices so many times, the problem still persists.
- As the input costs are higher in Horticulture sector in India in comparison with agricultural products such as food grains, immersing into Horticulture segment is a challenging task, especially without the local governments' assistance to small and marginal farmers.
- Coping with the high price fluctuations is the tough row to hoe for the marginal farmers. Their problems are never-ending ones, and thus, small and marginal farmers are waiting for the ray of hope in their life.
- As there is a lack of sound transport network and scarcity of good cold chain storage, extending the life of perishable products has become a challenge.
- Horticultural export is one of the vital challenges that hinder the progress of the Horticulture sector in India. Limited availability of market intelligence primarily for exports makes it the hardest decision to make.

- As most of the machinery and equipment are obsolete and are thus providing very less value and inputs, binding the time restraints becomes a challenge in itself.
- Limited availability of market intelligence, mainly for exports makes it a tougher option to choose.

Measures to overcome the Challenges in Horticulture sector:

- Attaining science and technology-led advancement along with drafting strategies concerning the utilization of resources in the field of Horticulture would bring some amazing transformation in the Horticulture sector in India.
- Improvement in quality seeds & plants and bringing newly introduced cultivators that ensures quick and efficient cultivation process will eventually accelerate productivity.
- Imparting the meaningful education related to Horticulture to upscale youth knowledge regarding various government schemes and modern equipment and machinery must be considered by one and all.
- As post-harvest management is known for increasing the shelf life of fruits, people engrossed in the Horticulture sector in India must understand the value of post-harvest management. In addition to this, they should adopt post-harvest management exercises to enhance the value of fruits in the long run.
- Value addition in Horticulture crops has become the need of the time. Value addition is the process that meets the requirements of nutritional security. It boosts the economic value of Horticulture crops. Value-added products are gaining attention as such products integrate diversification factor in the daily diet and unlock new markets as well.
- Along with proper planning in the domain of Horticulture, organizing Research & Development Programmes at National level is something that must be considered. Holistic growth of Horticulture sector in India is possible only if the implementation of plans and proper formulation as well as execution of strategies would take place.
- Many horticultural crops such as Ber, Pomegranate, highly nutritious Aonla, Phalsa, Jamun or Black Plum, Citrus, Fig, Bael, Khejri, Field Beans, Cucurbits, and more need insect pollinators for effective and value-rich pollination) in order to reap better outcomes. The pollinators, as well as pollinizers, enliven quantitative along with qualitative traits of Horticultural crop produce.
- Establishing a better long-distance transportation network should be a task of utmost importance to ensure smooth and hindrance-free transportation of fresh Horticultural produce. Putting Horticultural crops into storage would serve layers of protection to such crops.
- Adopting relevant management practices to eradicate nutrient imbalance and keeping nutrient dynamics under observation.
- Expansion of varieties to meet cultivation requirements in non-traditional spheres is a must.
- Preserved cultivation, hydroponic & aeroponic should get enfolded for polishing up productivity along with the quality of produce.

**Conclusion**

Horticulture entails garden cultivation and management. The horticulture sector in India shows immense potential due to the diversification factor and because it is highly remunerative compared to the agricultural sector. In recent time, the Indian government is bringing up several schemes such as Mission on integrated development of horticulture and making strategies to uplift the sector. This will help India to achieve the target of doubling farmers income and achieve increased exports.



**2. Examine the moral hazards of agricultural loan waiver. Also comment on the efficacy of loan waivers as a measure to address agrarian distress.****Approach**

Introduce with why there have been demands for loan waiver in past. In next part write about the moral hazard involved in waiving of loans. In next part address the issues with efficacy of loan waivers. In conclusion make some short term and long term solutions to avoid such crises in future.

**Introduction**

The agrarian distress in past years have led to demands of loan waivers. The loan waiver of 2008 was a major loan waiver implemented nationwide. This have created a repeated demands for such steps. But loan waivers leads to moral hazards. The economist Paul Krugman has described moral hazard as “any situation in which one person makes the decision about how much risk to take, while someone else bears the cost if things go badly”.

**Body**

Need of loan waivers:

- Skewed procurement: Physical procurement by FCI is conducted only for rice and wheat leaving out other crops.
- Rain-fed agriculture: Around 52% farm area is still unirrigated and dependant on rainfall, while drip irrigation and sprinkler is limited to 1.6 per cent and 0.8 per cent families respectively.
- Informal credit disbursal: Non-institutional credit to agriculture is around 40%, which not only has exorbitant interest rates but also is exploitative resulting in reduced farm incomes and increased farmer suicides.
- Problem of surplus or cobweb phenomenon: After the prices of an agricultural commodity shoot during a season of scarcity, farmers resort to boosting the production on the premise of the pre-existing demand and prices, leading to a problem of plenty in the next season when prices of the same commodity are at a low.

Moral hazards of agricultural loan waiver:

- Repayment: It will affect even the morality of people who are repaying properly. The loan waiver culture doesn't create a responsible credit taker. It is due to this that repeated loan waivers are required.
- Cheating: Many people will show agricultural field and take loan even when not needed thinking it will be waived off.

- Financial stability: Banks thrive on its loan book to earn and profit. But with loan waivers people will start doubting financial capacity of bank and affect their share prices too if they pull out money.
- Honest credit culture: Loan for agriculture will start decreasing due to waiver issues and non-repayment. This will be rather a unintentional consequence of a well intentioned policy.
- If borrowers suspect they can get away without repaying loans in future, they will borrow even more recklessly and ignore repayments. The lender-borrower relationship, essentially built on trust, will collapse.

#### Efficacy of loan waiver:

- Temporary relief: Loan waivers are a temporary relief for farmers limited to one financial year and does not address the structural problems of agriculture.
- Promotes credit indiscipline: Even those who can afford to pay may not repay loans in the expectation of a waiver. Farmers turn into deliberate defaulters in the hope that their loans will be waived sooner or later.
- Strips farmers of other benefits: Farmers defaulting in anticipation of waivers, lose out on other benefits too. For instance, accounts of many farmers anticipating waivers were sub-standard at the time of enrolment under PMFasalBimaYojana and, thus, the compulsory coverage was not extended to them.
- Leads to fiscal deficit: Loan waivers make a dent in the finances of the government as it has to repay banks and higher fiscal deficits in future may not be offset by higher GDP gains, as per RBI report on State Finances.
- Discourages banks to lend: By eroding credit discipline, loan waivers make banks wary of lending to farmers in the future, as it affects their balance sheets and affect their stocks in markets.
- Decreases capital expenditure: Loan waivers affect state's capacity to invest in creation of capital assets and lead to crowding-out of private investment.
- Cascades indebtedness: Reduction in bank credit following waivers forces farmers to approach informal sector lenders, which increases indebtedness as such loans are expensive.
- Populist tool: Loan waivers are used by political parties as a tool to influence voters during elections, despite proven long-term ineffectiveness of this measure.
- Provides relief to few farmers only: Small and marginal farmers constitute around 86% of all farmers in India and as per Niti Aayog, among this section those who avail themselves of institutional loans, are very few, in some states about 25% only, which is also the reason behind failure of loan waivers.
- Loans misdirected and lack review: A NITI Aayog study highlighted that in some States, about three-fourths of the farm loans were being used for consumption instead of meeting agricultural needs, without any evidence of increase in investment and productivity of beneficiary households.

#### **Conclusion**



Loan waiver is an extreme step to deal with agrarian crises in important situations..But this should not become a regular affair as it hurts viability of banking sector and credit culture in the economic system.Instead short term measures such as restructuring of loans, waiving a part of loan, counselling of farmers needs to be promoted while in the long term the measures such as crop diversification , doing away with skewed MSP system and developing industries to reduce the disguised labour should be the strategy for healthy economy and ethical credit culture.



**3. Agricultural insurance schemes have failed to achieve their objectives in India. Do you agree with this assessment? Comment. Also examine the factors associated with the dismal performance of this segment in India's farm sector. Suggest measures to address the same.**

### **Approach**

In introduction write what is the importance of insurance schemes in Indian agricultural sector and add historical fact on insurance schemes in India. In next part address the part on reasons for dismal performance of insurance schemes and suggest measures to mitigate these issues. In conclusion take a stand on performance of these schemes as question directly asks your opinion.

### **Introduction**

Farmers in India are exposed to large agriculture risks due to vagaries of nature. One of the most effective mechanisms to mitigate agricultural risks is to have a robust insurance system. Although crop insurance has been in the country since 1972, yet it has been beset with several problems such as lack of transparency, high premium, delay in conducting crop cutting experiments and non-payment/delayed payment of claims to farmers. Realising the limitations of existing system of crop insurance, a new crop insurance scheme was launched, Pradhan Mantri Fasal Bima Yojana (PMFBY), from Kharif season 2016.

### **Body**

Crop Insurance schemes before Pradhanmantri Fasal Bima Yojna (PMFBY):

- Until recently (till March 2016), there were three crop insurance schemes operating in India – National Agriculture Insurance Scheme (NAIS), Modified National Agriculture Insurance Scheme (MNAIS) and Weather Based Crop Insurance Scheme (WBCIS).
- The penetration of agricultural insurance was low and stagnant in terms of area insured and farmers covered. In the three year period from 2013-14 to 2015-16, the average area insured under all the schemes was 47 million hectare covering 39 million farmers.
- The high premium rates of 8-10 per cent under MNAIS and WBCIS, delay in settlement of claims, which took around 6 to 12 months, inadequate sum insured and their capping under MNAIS and inadequate government support in the form of premium subsidies had left a vast majority of farmers without any significant insurance coverage

Changes brought by Pradhanmantri Fasal Bima Yojna (PMFBY):

- Removal of capping on premium rates leading to higher amount of sum insured.

- Fixing premium rates at 2 percent in Kharif season and 1.5 percent in Rabi season for farmers, leading to substantial increase in premium subsidy by the government.
- The use of mobile based technology, smart Crop Cutting Experiments (CCEs), digitisation of land record and linking them to farmers' account for faster assessment/settlement of claims are other steps required for effective implementation of the new crop insurance scheme.

Factors responsible for dismal performance of these insurance schemes:

- The insurers are mostly private firms who do not have a local office. This makes it difficult for the farmers to reach out to them, and mostly it is through the banks from which they took their loans.
- Most insured farmers have no knowledge about whom to report their losses to. They do not have any details about the insurance policy, which crop was insured, or the amount of coverage (sum insured).
- The helplines of the private insurers' do not work most of the time, and when they do; the customer executives seldom follow the local language of the farmers.
- There has also been report of cases where a private bank sold mortgage insurance to a Telangana farmer who was made to believe it was crop insurance.
- Most insurers expect farmers to intimate them within 48 hours of crop damage. But in reality, 48 hours of a calamity are critical for farmers and such an outreach to the insurer is not feasible or possible. For example, in case of Kosi flooding in Bihar, most farmers reported their homes being under water for the first 48 hours.
- There is limited use of technology which has affected efficiency of the schemes. It made the process arbitrary in nature with less transparency.
- Farmers and insurers are increasingly getting caught up in a web of distrust regarding the insurance schemes.
- Many a times farmers lack documents and land records to avail the insurance benefit. This is due to lack of proper land records in India.

Solutions to fill in the gaps in crop insurance scheme:

- Because the process is manual, the possibility of dispute is high and farmers are often unhappy about the choice of plots to estimate yields. Moving away from yield-based insurance to a weather-based product could offer a solution.
- The way ahead could also lie in extensive use of technology, such as satellite imagery and drones to estimate losses, which PMFBY has been slow to implement.
- Data on a host of parameters like the groundwater situation, soil moisture, irrigation, weather and remote sensing can be used to estimate yields.
- Crop Cutting Experiments (CCE) which is used to assess yields should only be used as a confirmation measure, so that the large burden of crop loss estimations is minimised. New technologies can be adopted for this purpose.



- Awareness: Spreading of awareness about Insurance schemes at gram sabha level.
- Credit facility: Cheap and affordable credit facility. This is necessary for farmers to reduce the informal debt.
- Technology: Usage of technology like satellites to take aerial pictures and give claims.
- Village level assessment: Assessment at village level for disaster and release of funds at once.

### **Conclusion**

Between 1985 and 2012-13, the reach of India's crop insurance schemes was modest. PMFBY made some progress in addressing in reducing insurance premiums and expanding the insurance coverage to include more crops and risk factors faced by farmers. By riding on an insurance model backed by private and public partnership along with technological advancements, the PMFBY scheme can include and protect the vulnerable farming population, by not only acting as an insurance scheme but also leading to the financialisation and formalisation of the economy.

