

**1. What are the components of the scheme for Human Resource Development (HRD) in the food processing industry? Why is the scheme important? How does the scheme operate?**

**Approach**

In introduction a candidate can define what is Human Resource development or mention facts related to Human Resource's requirements in food industry of India. In next part write what are its components, its operation and in the end mention what is the importance of this scheme for India overall food sector. In conclusion connect the scheme to goals of Indian economy.

**Introduction**

As per a study conducted by the National Skill Development Corporation on human resource and skill requirement in the food processing sector, the annual human resource requirement in the food processing industry is estimated at about 5.3 lakh persons including about one lakh persons in the organised sector which clearly shows the importance for human resource planning in this sector. Thus the scheme for Human Resource Development in food processing industry works in that direction.

**Body**

- The Ministry of Food Processing Industries (MFPI) has been implementing the Scheme for Human Resources Development since 9th Plan and onwards to augment the supply of trained manpower/personnel at all levels for the food processing sector namely entrepreneurs, managers, sales persons, floor workers etc.
- During the 12th Five Year Plan (2012-13) the HRD Scheme has been subsumed under the National Mission on Food Processing, which is being implemented through State/ UT Governments.

The following are the four components in the HRD Schemes:

1. Creation of infrastructure facilities for running Degree/Diploma courses in Food Processing Technology - To cater to the growing need of the food processing industries for trained manpower and also keep abreast with latest technology.
2. Entrepreneurship Development Programme (EDP) - to train the farmers and prospective entrepreneurs / unemployed youth in an intensive manner so as to sensitise them to the idea of value addition, food processing and encourage them to establish food processing industries.
3. Food Processing Training Centre (FPTC) - Development of Rural Entrepreneurship and transfer of technology for processing of food products by utilising locally grown raw material and providing "Hand- on" experience.

4. Training at Recognised National/State level Institutes etc sponsored by MFPI/other training programmes - To upgrade the knowledge/skill level of entrepreneurs who are already running their Food Processing units but are desirous to expand/modernise their unit.

The Scheme for Human Resources Development of the Ministry of Food Processing Industries (MFPI) operates in the following manner -

- The HRD scheme focuses on developing technologists, managers, entrepreneurs and manpower for quality management in food processing.
- There are also two academic-cum-research institutions under this ministry which offer academic programmes at Bachelors, Masters and Phd Level in food processing. The institutes are also conducting short term skill development training courses.
- Development of Course Curriculum/ Training Module in English, Hindi based on the Food Processing quality protocols validated by NSDC as National Occupational Standards.
- Establishing Training Centre (TC) / Expansion of Existing Training Centre to impart skill training on various job roles in food processing as per National Skill Qualification Framework (NSQF).

The Scheme for Human Resources Development can be seen as important due to the following factors-

- The Indian food processing industry accounts for 32 per cent of the country's total food market, one of the largest industries in India and is ranked fifth in terms of production, consumption, export and expected growth. Here, human resource development plays an important role in further growth of industry.
- Food processing industry in India is a potential source for driving the rural economy as it brings about synergy between the consumer, industry and agriculture. An able human resource helps in leveraging this benefit of FPI.
- A well-developed food processing industry increases farm gate prices, reduces wastages, ensures value addition, promotes crop diversification, generates employment opportunities as well as export earnings where human resource solidifies these advantages.
- India benefits from a large variety of agriculture crops, abundant livestock, and cost competitiveness due to availability of labour. This has led to good investment opportunities in human resource development in this sector.
- A strong human resource would enable adherence to stringent quality and hygiene norms and thereby protect consumer health, prepare the industry to face global competition, enhance product acceptance by overseas buyers and keep the industry technologically abreast of international Best practices.
- Further with the pandemic induced slowdown and wide disruptions in global supply which has led to huge job losses the skilling of Human Resource in such stable supply market will be of immense value for India.

## **Conclusion**

India is in transition to a knowledge based economy and its competitive edge will be determined by the abilities of its people to create, share and use knowledge more effectively. Food processing sector, with huge potential for employment generation, is one of the largest sectors in respect of the requirement of human resources. Thus the scheme on Human resource development will be of high value for employment generation and economic growth for India.



## **2. What are the major challenges associated with post-harvest management, value addition and cost effectiveness with respect to farming in India? Examine.**

### **Approach**

The question is straightforward. Introduce with what is meant by post harvest losses and add any statistics from reliable source to substantiate your point. In next part address the challenges which are associated with post harvest management which affects its cost effectiveness and value addition. In next part try to write how the structural issues hampering agriculture can serve to help in increasing farmers income. In conclusion summarise the issue with future positive outcomes.

### **Introduction**

After production, agricultural produce undergoes a series of post-harvest operations, handling stages and storage -before they reach the consumers. Each post-harvest stage results in some losses and has an effect on the value distribution. These are the factors that determine the gap between consumer and farmer prices of a product. The various inefficiencies in this system has led to farmers not getting their due benefits from production which is an important requirement especially for India to eradicate poverty in rural areas and solve agrarian distress.

### **Body**

An assessment of crop losses conducted by the Indian Council of Agricultural Research in 2016 revealed that about 3.9% to 6% cereals, 4.3% to 6.1% pulses, 2.8% to 10.1% oilseeds, 5.8% to 18.1% fruits, and 6.9% to 13% vegetables were lost during harvesting, post-harvesting activities, handling and storage. On the other hand, as per the estimates of the Committee on Doubling Farmers' Income (2019), at the all-India level, farmers are unable to sell about 40% of the total fruits and vegetables produced in the market or lose around `63,000 crore every year for not being able to sell their produce for which they have already made investments.

The importance of post-harvest management is that it has the capability to meet food requirements of a growing population by eliminating losses, making more nutritious food items from raw commodities, i.e., fruits and vegetables, and by proper processing and fortification.

In this regard, challenges associated with post-harvest management include:

- Post-harvest losses (PHL) in India which stem from a range of factors including lack of post-harvest infrastructure, limited technical know-how on good agricultural practices, imperfect market knowledge, and inadequate market access.
- Fragmentation of agricultural landholdings and a post-harvest value chain that is riddled with inefficiencies cause PHL to stack up progressively throughout the value chain.



- Small Holding Farmers or SHFs, comprising 80% of India’s farming community, are affected by the challenges of fragmentation and value chain inefficiencies in the form of weak access to markets, low investment in agriculture, low productivity and low income.
- Value Chain Management, Prevention of Losses and Food Wastes, and Linking Farmers with Markets Harvest and post-harvest loss of major agricultural produce in 2018 was estimated at Rs. 92,651 crore (\$ 13 billion) (Ministry of Food Processing) per year largely due to storage, logistic, and financing infrastructure inadequacies. Prevention of these losses could feed 50 million people per year.
- Inadequate and declining investment and financial resources in agricultural universities/colleges; opening of new universities without matching resources; unmindful splitting of agricultural universities, and poor resources planning; Disconnect among agricultural education, employment, and industries’ requirements.

Looking at the present agricultural production and post production scenarios in India, the most appropriate action for minimizing post harvest losses, enhancing income of farmers, generating employment and export growth would be encouraging processing and value addition, which is nothing but secondary agriculture.

In view of this, following are the challenges in this field:

- Access to finance - Agricultural value chain system in India is completely unorganised and the local firms lack required capacities to export agricultural products to external markets.
- Non-tariff barriers - In India, some agricultural value chains are oriented towards exports as the products find global markets, such as fruits, vegetables, coffee, tea, spices, cashew etc.
- Market access - The improvement of the agriculture value chain in India continues to be a challenge. The existence of middlemen and agents, absence of data and information about other links in the chain and inability to invest in improving the performance in almost every part of the chain led to inefficiencies.
- Capacity building - Another major challenge is improvement in the production and supply competencies of the small and marginal farmers. To export agricultural products in external markets, it is necessary that quality and safety of product is maintained.

Indian agriculture, with all its diversity and plurality, is at a turning point. There are difficult trade-offs between short-term exigencies and long-term structural reform. The need of the hour is to seek ways to address the short-term distress via palliatives, without foregoing the long-term vision for agricultural reform. There are five immediate challenges associated with the latter.

- The first is to outline the choices between forms of regulation that would best work for Indian agriculture in the long run. This would require balancing the interests of producers and consumers.
- The second is choosing between forms of support. There is great merit in moving away from input subsidies and price-based support that have had

harmful environmental and distributional consequences to more transparent income support.

- Mechanisation is another aspect with a significant impact on agricultural cost effectiveness. The use of agricultural machinery in agriculture enables agricultural labour to be used in other activities. It can make the use of labour in agriculture more cost-effective.
- The Economic Survey 2015-16 observed that India largely uses the technique of flood irrigation, where water is allowed to flow in the field and seep into the soil. Thus, the cost of irrigation is a challenge here.
- MSPs are the prices at which the central government purchases food grains from farmers. MSPs are fixed by the central government in order to ensure remunerative prices to farmers. This becomes an important factor in cost effectiveness of farming in India.

### **Conclusion**

Post-harvest food is one of the many direct ways in which value distribution between the consumer and producer is affected. Therefore to increase the value of food, cost effectiveness and reduce losses there is a need to invest in better infrastructure, capacity building, rural urban connectivity and also reducing the burden on farm land. This will help India achieve its target of doubling the farmers income and therefore to address the agrarian distress which have other socioeconomic consequences such as caste atrocities, caste violence, migration, and demands for reservation.

### **3. How significant is the issue of mental health in a world affected by the COVID pandemic? What should be the immediate priorities in this direction? Discuss.**

#### **Approach**

Mention in introduction how covid 19 has led to increase in mental health burden. In next part mention the significance and issues which have risen due pandemic. Suggest some probable solutions in the end. Try to mention initiatives of government of India for value addition.

#### **Introduction**

The COVID-19 pandemic has had a major effect on people's lives. Many are facing challenges that can be stressful, overwhelming, and cause strong emotions in adults and children. Public health actions, such as social distancing, are necessary to reduce the spread of COVID-19, but they can make us feel isolated and lonely and can increase stress and anxiety. Therefore it becomes necessary to understand the mental health crises induced by covid. This is also more important when mental health has not been accorded the deserved attention especially in a country like India.

#### **Body**

##### Significance of mental Health

- Mental health has taken a massive toll on the people across age segments, right through the Covid-19 pandemic.
- The successive waves of the Covid-19 pandemic have affected school/college education, led to job losses and salary cuts, domestic squabbles with the lines between office and home blurring in the times of work from home (WFH), loneliness due to death of near and dear ones, lack of closure on being prohibited from performing last rites of family members dying of Covid-19, and the lasting anxiety over oneself getting infected by Covid-19 and fears of dying from it.
- A combination of these have played a cruel dance on people's mental health. Deep-seated depression, anxiety, panic attacks and a constant worry over an uncertainty that was never experienced before, is the result of this, leading to impact on mental wellness.
- The long-term impact of WFH has turned homes into houses accommodating family members and their multiple needs and functions with no room for individual privacy. Homes have turned into school-turned-office-into-broadband-driven lifestyles, all crumbled into one ghetto. Cases of domestic violence have gone up considerably since last year, with women having to bear the brunt of it.

Therefore its necessary to understand these concerns and address them to avoid affecting it people's lives and allow them to work and enjoy their life even in this difficult times.

#### Issues which have arisen due to pandemic

- **Aspecific and uncontrolled fears related to infection:** This is commonly one of the most frequent psychological reaction to pandemics. Several existing studies demonstrated that those who have been exposed to the risk of infection may develop pervasive fears about their health, worries to infect others and fear infecting family members. Other studies reported that pregnant women and individuals with young children are the most at risk to develop the fear of becoming infected or transmitting the virus.
- **Pervasive anxiety:** Social isolation related to restrictions and lockdown measures are linked to feelings of uncertainty for the future, fear of new and unknown infective agents resulting in abnormally increased anxiety.
- **Frustration and boredom:** Distress, boredom, social isolation and frustration are directly related to confinement, abnormally reduced social/physical contact with others, and loss of usual habits. Frustration and pervasive loneliness seem to derive by the inhibition from daily activities, interruption of social necessities, not taking part in social networking activities..
- **Disabling loneliness:** The final effect of social isolation is pervasive loneliness and boredom, which have potential dramatic effects on both physical and mental individual well-being. Pervasive loneliness may be significantly associated with increased depression and suicidal behaviour.

#### Solutions to tackle the Mental health crises

- Specific preventive strategies at the community level such as (i) implementing effective communication and (ii) providing adequate psychological services should be carried out in order to attenuate the psychological and psychosocial impact of COVID-19 outbreak.
- Health education needs to be enhanced using online platforms, social fear related to COVID-19 needs to be correctly addressed while stigma and discrimination need to be recognised as major challenges able to reinforce the feelings of uncertainty in a period of social crisis.
- Hospitals protocols linked to the early and effective management of health emergency need to be implemented while healthcare professionals need to be supplied by adequate protective facilities.
- Scientific community should provide appropriate information to attenuate the impact of anxiety, frustration, and all the negative emotions which represent important barriers to the correct management of social crisis and psychological consequences related to pandemic.
- Unmet needs should be rapidly identified by medical staff who need to communicate frequently and in a timely manner with most of patients to understand the risk to develop new symptoms or worsen a preexisting psychological distress.
- Furthermore, telephones helplines, Internet access, active social networks, dedicated blogs and forums should be implemented in order to reduce social isolation and loneliness as well as allow to specific populations (e.g. infected subjects in hospitals or quarantine settings) the successful communication with their loved ones.



- Marginalized populations such as elderly individuals or those with psychological problems should be able to actively consult with clinical psychotherapists to rapidly detect warning signs.
- Telemedicine should be really implemented especially in areas where mental health services are poorly represented or severely impaired by the rapid spread of pandemic and lockdown restrictions.

#### Indian institutional support to tackle mental health

- **National Mental Health Program (NMHP):**To address the huge burden of mental disorders and shortage of qualified professionals in the field of mental health, the government has been implementing the National Mental Health Program (NMHP) since 1982. The Program was re-strategized in 2003 to include two schemes, viz. Modernization of State Mental Hospitals and Up-gradation of Psychiatric Wings of Medical Colleges/General Hospitals.
- **Mental HealthCare Act 2017:**It guarantees every affected person access to mental healthcare and treatment from services run or funded by the government. It has significantly reduced the scope for the use of Section 309 IPC and made the attempt to commit suicide punishable only as an exception.
- **KIRAN Portal :** It is a 24\*7 helpline launched to tackle the pandemic induced health crises.
- **Ministry of Health** has released detailed guidelines to tackle various issues such as isolation induced stress, PTSD arising due to pandemic

#### **Conclusion**

Government expenditure on hospitals dealing with mental health issues as a percentage of total government expenditure on mental health is 1.3% in India; in developed countries, it ranges from 3% to 15%. Therefore with the aggravating crises of mental health in India both in people infected and not infected due to Covid-19 needs to be given high priority and a separate budgetary allocation on lines of health infrastructure augmentation should be carried out.