

1. What are the institutional measures in place to ensure food security during pandemics? Examine.

Demand of the question:

It expects students to investigate and establish the key facts and issues related to institutional measures in place to ensure food security during pandemics. It also expects students to provide innovative ways and constructive solution to ensure food security.

Introduction:

The United Nations (UN) has warned that the world stands at the cusp of a food crisis not seen in at least 50 years and urged governments to act swiftly to avert the crisis. It also said that 820 million people in the world, or more than 10% of the world's population, were already 'chronically food insecure' prior to the onset of the COVID-19 pandemic.

Body:

As Food and Agricultural organisation estimates, even before COVID-19 Some 820 million people around the world are experiencing hunger – consuming an insufficient amount of calories (dietary energy) for a long period.

- COVID-19 pandemic has aggravated this situation by forcing the governments across the world to disrupt the global food supply chains as a containment measure.
- Informal labourers, pastoralists, children, women etc. will be hard hit by the risen food insecurity. Millions of children are already missing out on the school meals they have come to rely upon, many of them with no formal access to social protection, including health insurance.
- With respect to India, The continuing lockdowns across the country, affecting labour and input availability for agricultural operations, coupled with the stoppage of transport networks, will seriously disrupt food supplies.
- The consequent fall in rural incomes is expected to impact food demand and also the overall economic growth adversely.

Hence, there arise the need to have a look on the institutional measures to ensure food security during pandemics:

- National Food Security Mission: It is a Centrally Sponsored Scheme launched in 2007. It aims to increase production of rice, wheat, pulses, coarse cereals and commercial crops, through area expansion and productivity enhancement.
- Pradhan Mantri Fasal Bima Yojana- it ensures insurance for crops against natural calamities hence, secures farmers income.
- E-marketplace: The government has created an electronic national agriculture market (eNAM) to connect all regulated wholesale produce markets through a pan-India trading portal. It will ensure farmer to sell her produce more easily during pandemics.

- The National Food Security Act (NFSA), 2013, legally entitles up to 75% of the rural population and 50% of the urban population to receive subsidized food grains under the Targeted Public Distribution System.
- Also on international level, Food and Agricultural Organization (FAO) Established as a specialized agency of the UN helps eliminate hunger, food insecurity, and malnutrition by promoting cooperation between different countries.
- The High-Level Task Force (HLTF) on Global Food and Nutrition Security was established by the UN Secretary-General Ban Ki-moon in 2008. It aims to promote a comprehensive and unified response of the international community to the challenge of achieving global food and nutrition security.
- UN-SDG Goal 2 End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

As it seems there are adequate institutional measure in place to address food insecurity, some areas still need attention:

- Logistical problems in planting, harvesting and transporting food will leave poor countries exposed.
- The closure of schools amid lockdowns is also a part of this problem. Of the 1.6 billion young people who are currently not in school due to coronavirus, over a third of one billion are not receiving nutritious meals which are crucial to their immune systems.
- Particularly vulnerable are war-ravaged countries, already suffering from food crises and malnutrition.
- There are some NGO's, civil society groups who worked amidst this pandemic to ensure food for needy one, utilised their own money to supply food. Hence, help in terms of monetary support to them can also ensure food security amidst pandemic.

Conclusion:

As we have observed pandemics can cause great disruption to the global food system. To prevent a catastrophic food crisis, formulating comprehensive food security policies and creating a solidarity among Nations will ensure to strengthen institutional measures to ensure food security in pandemic.

2. In terms of global competitiveness, the livestock sector of India leaves a lot to be desired. Do you agree? Substantiate your views.

Demand of the question:

It expects students to express their views on competitiveness of livestock sector of India on global scale. It also expects students to substantiate their views by giving examples.

Introduction:

India is the highest livestock owner of the world. The overall contribution of livestock sector in total GDP is nearly 4.11% as per the 19th livestock census of 2012. Livestock provides livelihood to two-third of rural community.

Body:

The farmers in India maintain mixed farming system i.e. a combination of crop and livestock where the output of one enterprise becomes the input of another enterprise thereby realize the resource efficiency. Apart from providing food and non-food items to the people, livestock sector has a prominent role in farmer's economy.

- Livestock sectors growth has multidimensional potential. For instance, Operation Flood, launched in 1970, helped dairy farmers direct their own development, increased milk production ("a flood of milk"), augmented rural incomes and ensured reasonable prices for consumers.
- It provides self-employment to millions of people especially rural households. It has contributed significantly to the empowerment of women and has increased their income and role in society. So, it's one of the prominent keys for poverty reduction.
- The livestock products such as milk, meat and eggs are an important source of animal protein to the members of the livestock owners. It is producing about 95.22 billions of eggs, 7.70 million tonnes of meat in a year.
- The value of output of livestock sector at current prices was Rs 9,17,910 crores at current prices during 2016-17 which is about 31.25% of the value of output from agricultural and allied sector.
- Inclusive Growth: Livestock is more equitable than that of land. Small farmers possess more than half of the country's cattle as against 24% of land.

Here, we have observed that Indian livestock sector has tremendous growth and export potential, but despite this Indian livestock sector lacks in some aspects to meet some global standards and compete with the global livestock sector economy due to following reasons:

- The Frequent outbreaks of diseases like Food and Mouth Diseases, Black Quarter infection, Influenza etc. continue to affect Livestock health and lowers the productivity.
- Crossbreeding of indigenous species with exotic stocks to enhance genetic potential of different species has been successful only to a limited extent.
- The sector will also come under significant adjustment pressure to the emerging market forces. Though globalization will create avenues for

increased participation in international trade, stringent food safety and quality norms would be required.

- Livestock sector did not receive the policy and financial attention it deserved. The sector received only about 12% of the total public expenditure on agriculture and allied sectors, which is disproportionately lesser than its contribution to agricultural GDP.
- The sector has been neglected by the financial institutions. The share of livestock in the total agricultural credit has hardly ever exceeded 4% in the total (short-term, medium-term and long-term). The institutional mechanisms to protect animals against risk are not strong enough.
- Access to markets is critical to speed up commercialization of livestock production. Lack of access to markets may act as a disincentive to farmers to adopt improved technologies and quality inputs.

Measures to promote livestock sector:

- Increasing commercialization of livestock products by improving technologies, increasing market connectivity, processing and storage centre, training etc.
- Cross breeding of indigenous species with exotic stocks to enhance genetic potential of different species. e.g. Artificial Insemination mission.
- Develop and conserve indigenous breeds of bovine population & enhance milk production and make it more remunerative to the farmers by infusing more funding in to missions such as Rashtriya Gokul Mission & Gokul grams.
- Ensure quantitative and qualitative improvement in livestock production systems and capacity building of all stakeholders giving impetus to missions such as National Livestock Mission.
- To appreciate innovations coming from the villages & to expand the dairy sector in India new start ups needs to be encouraged by launching initiatives such as Animal Husbandry Start up Grand Challenge.

Conclusion:

As we know from the experience of Operation flood that if steps are taken in the right direction then desired outcome can be achieved. Hence, we can say that Indian livestock sector can compete with the global livestock sector as it has tremendous potential for its growth and development provided the lacunas are addressed.

3. Examine the potential of contract farming in improving the condition of farmers. What recent measures have been announced by the Government to reform contract farming? Discuss.

Demand of the question:

It expects students to write about the potential of contract farming in improving the conditions of farmers. It also expects to discuss the recent measures announced by the government to reform contract farming.

Introduction:

Contract farming can be defined as agricultural production carried out according to an agreement between a buyer and farmers, which establishes conditions for the production and marketing of a farm product or products.

Body:

Typically, the farmer agrees to provide agreed quantities of a specific agricultural product. These should meet the quality standards of the purchaser and be supplied at the time determined by the purchaser. In turn, the buyer commits to purchase the product and, in some cases, to support production through, for example, the supply of farm inputs, land preparation and the provision of technical advice.

Potential of contract farming to improve the condition of farmer:

- Inputs and production services are often supplied by the sponsor so reduction of burden to manage input and production services on farmer. Hence, it reduces cost of production for farmer.
- This is usually done on credit through advances from the sponsor, as credit is easily available, farmer doesn't need to take credit from the private money lender. Hence, it ensures farmer to focus on improving the quality of production & also addresses Rural indebtedness problem.
- Contract farming often introduces new technology and also enables farmers to learn new skills, it cumulatively increases the productions quantity, quality and hence, results in win-win situation for farmer.
- Farmers' price risk is often reduced as many contracts specify prices in advance which gives impetus to farmer to invest the money to improve agricultural production.
- It also ensures that the surplus money can be used to invest to maintain health family members and continuation of children's' education.
- Contract farming can open up new markets which would otherwise be unavailable to small farmers. Hence, it carries big potential to increase the income of farmer by expanding farmers choices to sell her/his product.

Considering, this potential of contract farming, Government of India with intention to improve the farmers income recently promulgated, "The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Ordinance, 2020".

- It provides a framework for the protection and empowerment of farmers with reference to the sale and purchase of farm products. The provisions of the Ordinance will override all state APMC laws.
- Farming agreement: The Ordinance provides for a farming agreement prior to the production or rearing of any farm produce, aimed at facilitating farmers in selling farm produces to sponsors.
- It also specifies the Duration of agreement.
- Pricing of farming produce: The price to be paid for the purchase of a farming produce will be mentioned in the agreement.
- Delivery and payment: The Ordinance specifies that the sponsor will be responsible for all preparations for the timely acceptance of deliveries and will take deliveries within the agreed time.
- Dispute Settlement: The Ordinance requires a farming agreement to provide for a conciliation board as well as a conciliation process for settlement of disputes.

These reforms will increase farmers income and will also expand farmers market choices. It will also ensure income security, insurance for investment. But at the same time there are some concerns raised by some experts:

- The move seems to promote free trade under the slogan of one nation one market where some small and marginalised farmers need some state backed protection.
- The peasantry at large will be at the mercy of the Agri Business Corporations since there will not be any arrangements for price support and price stabilisation for crops.

Conclusion:

The recent reforms announced by the government with respect to contract farming represent progressive approach and hence, they will surely culminate in improving farmers economic and social life. Hence, these reforms by the government with respect to Contract farming truly has potential to improve farmers conditions & contribute to achieve the ambitious target to double the farmers income by 2022.