

**1. How are beneficiaries identified for different schemes in India? What are the merits and limitations of the processes adopted for such identifications? Examine.**

**Approach:**

It is straightforward question; it expects student to write about - in first part write method for identification of beneficiaries for different scheme - in second part write merits - in third part write limitation of these processes

**Introduction:**

Government Schemes in India are launched by the government to address the social and economic welfare of the citizens of this nation. These schemes play a crucial role in solving many socio-economic problems that beset Indian society, and thus their awareness is a must for any concerned citizen.

**Body:**

For identification of beneficiaries for different scheme of different ministries wide range of sources used as follows:

- Dated database based on 2011 numbers: The Socio-Economic Caste Census (SECC). The SECC is being used in central schemes such as the Ayushman Bharat and Pradhan Mantri Awas Yojana to identify beneficiaries.
- A district-wise comparison with data from the last census conducted in 2011
- National Family Health Survey (NFHS 2015-16)
- SECC, in principle, remains a targeted approach for welfare delivery mechanism
- Poverty level under different government data
- Most of the government initiatives depend on either land records.

Merits of current beneficiary identification method are:

- It promotes equity and reduce favouritism.
- It brings transparency in identification method.
- It increases penetration of scheme or benefits to needy people.
- It helps in identifying sections of people which needs upliftment.

However, Limitations of current identification method:

- Targeted programs create tensions between those who are excluded—some of whom may be among the poor but “missed” by targeting schemes—and the beneficiaries.
- Many scholars have pointed out the tendency of politicians to abuse targeted programs by converting them into instruments of patronage.
- Additionally, most of the benefits meant for end-up being elite captured. As, Amartya Sen points out, “benefits that go only to the poor often end up being poor benefits.”
- SECC database is that it is already eight years old in an economy which is transforming fast, and where some people have climbed up the income ladder while others have fallen down.
- This means that a SECC-type exercise needs to be repeated at frequent intervals to ensure that it matches current reality. But the more the database is mined for

such use, the greater the chances of reporting biases creeping in, as people learn how to game the database to remain within the 'right' cut-off limits.

- Migration– As the schemes are implemented at state level, migration of poor denies them benefits of scheme in another state.
- Exclusion error– Eligible beneficiaries are excluded from benefits due to infrastructural issues, lack of awareness on part of people, lack of verifiable documents etc.

### **Conclusion:**

The inherent challenges in any targeting exercise suggests that quasi-universal schemes with simple exclusion criteria based on regular and professionally conducted censuses may be a better bet for a country such as ours.

**2. Despite having reasonable success on the food security front, India has fared poorly on the barometer of nutritional security. Why? Analyse. What measures would you suggest to address this anomaly?**

### **Approach:**

When a candidate is asked to Analyse, he/she is expected to break an issue into constituent parts and explain how these relate to one another and present as one summary. The general perception about food security is that it will ensure nutritional security. However, this is not the case on ground level. Hence, here it is expected to show the reasons why India fared poorly on nutritional security. For the intro part, one can start with any report related to food security or nutritional security or one can also start by simply defining what is food security and nutritional security and what are its prospective outcomes. In the main body part it is expected to argue the reasons due to which India fared poorly on nutritional security. To address the problems associated with nutritional security, one needs to give relative measures to ensure nutritional security with it. To fetch more marks, diagrams, tables, graph, any report finding, success stories or best practises can be cited.

### **Introduction:**

As per the report 'National Food and Nutrition Security Analysis' of World Food Programme (WFP) and the Ministry of Statistics and Programme Implementation, malnutrition amongst children in India is projected to remain high, despite all the progress made in food security. Which indicates India has fared poorly on nutritional security.

### **Body:**

Food security is defined as the availability and the access of food to all people; whereas nutrition security demands the intake of a wide range of foods which provides the essential needed nutrients. As per 'National Food and Nutrition Security Analysis', Access to nutritious food has not increased due to following reasons.

- Food grain yields have risen 33% over the last two decades, but are still only half of 2030 target yields.
- The consumer's access to rice, wheat and other cereals has not increased at the same rate, due to population growth, inequality, food wastage and losses, and exports.
- As a result, the average per capita consumption of energy among the poorest 30% of the population is 1811 kilocalories, much lower than the norm of 2155 kilocalories per day.

Hence, it is evident that though India has fared well on food security front, it fared poorly on nutritional security front.

Reasons for poor performance on Nutritional security front:

- Too much emphasis on Under nutrition: For several decades India was dealing with only one form of malnutrition- under nutrition. However, in the last decade, the double burden which includes both over- and under nutrition, is becoming more prominent and poses a new challenge for India.
- Micronutrient deficiency: Despite positive trends and patterns in improving food security, the prevalence of malnutrition in India remains high, with many people, especially women and children, suffering from micronutrient deficiency.
- Performance of States: In Bihar and Uttar Pradesh the stunting rate is around 48% and 46% respectively. It shows that in these states almost every 2nd child is stunted. Whereas in Kerala and Goa, it is only one in five children.
- Vulnerable and Marginalised sections: There are high rates of stunting among children in the poorest wealth quintile is (51.4%), Scheduled Tribes (43.6%) and Scheduled Castes (42.5%), and children born to mothers with no education (51%).
- Slow decline of child stunting: Over the last decade, child stunting has reduced at a rate of about 1% per year, the slowest decline among emerging economies. At this rate, 31.4% of children will still be stunted by the 2022 deadline. Almost one in three Indian children under five years will still be stunted by 2022 going by current trends.
- As per comprehensive 'National Nutrition Survey' conducted by the Ministry of Health and Family Welfare and the United Nations Children Fund (UNICEF) to measure malnutrition hard evidence of the coexistence of obesity and undernutrition, among school-going children has been recorded in India.
- According to UNICEF, 38% of children younger than five years of age in India are stunted, a manifestation of chronic undernutrition. Stunting and other forms of under-nutrition are thought to be responsible for nearly half of all child deaths globally.
- Also as per, The State of Food Security and Nutrition in the World 2020, Hundreds of millions of people in India cannot afford a healthy or nutritious diet. Which shows that there is access to food. However, there is less or no access to nutritious food.
- This analysis confirms the fact that the problem of poor nutrition in India is largely on account of the unaffordability of good diets, and not on account of

lack of information on nutrition or tastes or cultural preferences. The reasons for non affordability are different such as more number of people in a household, less per capita income, etc.

- Those we officially count as poor in India – with a cut-off that is lower than the international norm of \$1.9 a day – cannot afford a nutrient-adequate diet let alone a healthy diet.
- Also the Covid-19 pandemic has aggravated this situation as the number of people who cannot afford a healthy diet have risen in the last three months, as employment and incomes collapsed for the majority of workers in the informal sector.

India, currently has the largest number of undernourished people in the world i.e. around 195 million. Nearly 47 million or 4 out of 10 children in India do not meet their full human potential because of chronic undernutrition or stunting. Also As per the Global Hunger Index, 2020, India was ranked 94th out of 107 qualifying countries. The situation is grim and the country is battling widespread hunger and thereby aggravating the problem of nutritional security.

Measures to address the anomaly of nutritional security vs. food security:

- Sustainability of nutritious food productivity: Innovative and low-cost farming technologies, increase in the irrigation coverage and enhancing knowledge of farmers in areas such as appropriate use of land and water should be encouraged to improve the sustainability of food productivity.
- Redefine poverty line: The Indian poverty line of 2011-12, as defined by the Tendulkar Committee, amounted to ₹33 per day in urban areas and ₹27 per day in rural areas, and corresponded roughly to \$1 a day at international PPP prices. It needs to be redefined as per Indian needs.
- Agricultural Diversification: Farmers should be encouraged and incentivised for agricultural diversification. For this the government could improve policy support for improving agricultural produce of traditional crops in the country.
- For instance, Rashtriya Krishi Vikas Yojana initiated with objective of making farming a remunerative economic activity through strengthening the farmer's effort, risk mitigation and promoting agri-business entrepreneurship. Major focus is on pre & post-harvest infrastructure, besides promoting agri-entrepreneurship and innovations.
- It is important to pay attention to the life cycle approach advocated in the National Food Security Act, 2013, particularly the first thousand days in a child's life when the cognitive abilities of the child are shaped. Otherwise, there may be negative effects on nutritional security in the medium to longer term. The life cycle approach of NFSA is as mentioned below in Figure 1.

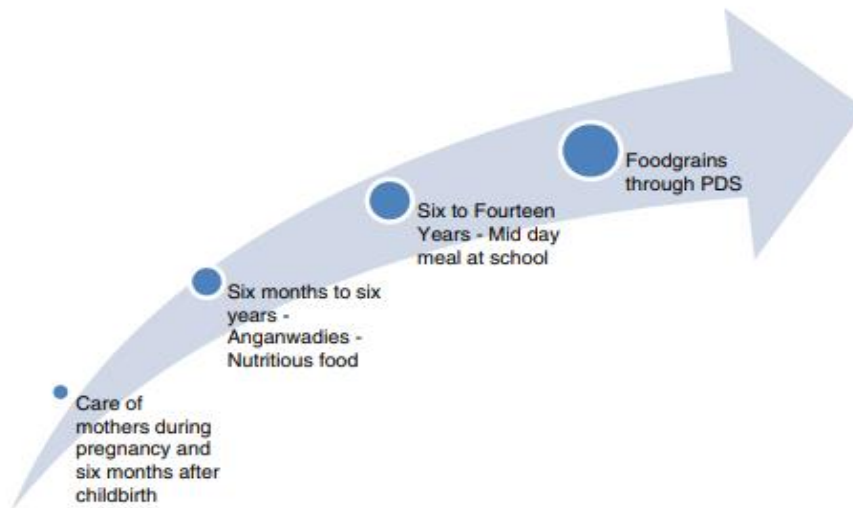


Figure 1: Life cycle approach of NFSA

- Improving forward and backward linkages in agriculture: Storage capacity should be improved to prevent post-harvest losses.
- Fortification of Food: The targeting efficiency of all food safety nets should be improved, especially that of the Targeted Public Distribution System (TPDS), to ensure that the poorest are included. It should be complimented by fortified food. For instance, Golden rice variety.
- Child feeding practices should be improved in the country, especially at the critical ages when solid foods are introduced to the diet. For instance, Under the Pradhan Mantri Matru Vandana Yojana (PMMVY), Rs.6,000 is transferred directly to the bank accounts of pregnant women for availing better facilities for their delivery.
- Fortification, diversification and supplementation may be used as simultaneous strategies to address micro and macronutrient deficiencies.
- For instance, POSHAN Abhiyaan, launched in 2017-18, aims to reduce stunting, under-nutrition, anaemia and low birth weight babies through synergy and convergence among different programmes, better monitoring and improved community mobilisation.
- Mid-day Meal (MDM) scheme aims to improve nutritional levels among school children which also has a direct and positive impact on enrolment, retention and attendance in schools. However, lacunas in its implementation are observed which needs to be checked. For instance, incidences of mixing large quantity of water with 1 packet of milk powder, Also in one of the schools in Uttar Pradesh Salt was provided as a substitute for sabji with Roti.

The Goal 2 of the 2030 Sustainable Development agenda seeks to end hunger and all forms of malnutrition and double agricultural productivity in the next 15 years.

### Conclusion:

The National Food Security Act (NFSA), 2013, aims to ensure food and nutrition security for the most vulnerable through its associated schemes and programmes,

making access to food a legal right. Though its performance on the front of Food security fared good, its effort to address nutritional security is lacking. Hence, arise the need to implement the NFSA,2013 in its letter and spirit with above mentioned measures to ensure 'Nutrition for all with Food for all'.

**3. Without a much deeper technology assimilation, India's farm sector can't compete in the global markets. Do you agree? Identify the areas that require such technology assimilation to improve the overall performance of the farm sector.**

#### **Approach:**

In the first part, you need to give your views regarding deeper technology assimilation in India's farm sector for competing in the global markets. Further in the second part, you need to identify the areas that require such technological assimilation to improve overall performance of the sector.

#### **Introduction**

Technology has always played a crucial role in every industry in our country. The farm sector is no exception to this. This industry is gaining tremendous benefits from several modern technologies that are arising which is helping it improve its competitiveness in the global markets where multiple interventions have led to improved overall performance of the farm sector.

#### **Body**

- Consequently, it becomes inevitable that without a much deeper technology assimilation, India's farm sector can't compete in the global markets due to the following factors:
  1. **Technology assimilation leads to more precise targeting of pests and diseases** - Technological advances in the science of pest control are expected to continue to produce chemical control agents that over time are at least as effective in controlling pests as the ones they replace, but which are also less toxic, less persistent and less mobile through the soil.
  2. **Technology assimilation leads to more efficient administering of nutrients** - Inorganic fertilisers allowed the separation of crop production from animal husbandry, restored fertility to depleted soils, and contributed to the development of livestock production based on grain and other feed ingredients.
  3. **Technology assimilation lead to more efficiency** – For example, Drones eliminate wastage of time by quickening activities. Agricultural drones are very much useful for farmers in monitoring crop growth and allows to take necessary steps for increasing the production.
  4. **Farm Mechanisation** - India's massive agricultural potential can be best utilised by increasing productivity through timely and cost-effective field work. To make this possible, agricultural mechanisation plays a principal role.

5. **AI and related technology** - With the help of AI and IT, this sector is now advancing rapidly in spaces like satellite monitoring, data analytics and weather simulations. One such major area that has been impacted by both these technologies is 'precision agriculture'. This area involves collecting and analysing data at the individual plant level.

But at the same time, it is important to consider that competitiveness in global markets is not only a function of technology assimilation but other factors too, like –

- Developed countries are providing huge subsidies to agriculture sector and thereby, create distortions in the international market.
- The lack of know-how about foreign markets and consumers, coupled with stringent quantitative and qualitative restrictions, make access to international markets difficult.
- There is definitely a need to look into the food consumption patterns of target markets vis-a-vis Indian produce.

Following can be considered with regards to technology assimilation to improve the overall performance of the farm sector in India:

1. Training in good agricultural practices, climate-smart agriculture, agri-input usage, modern packaging facilities, pre-harvest and post-harvest management practices in line with importing country requirements are important.
2. A national contaminant and residue monitoring programme is also proposed to boost spice exports. Investments through public-private partnerships could prove beneficial in this regard.
3. In 2015, the EU rejected Indian grape consignments due to the use of a banned chemical, as a result of which scientists at the National Research Centre for Grapes trained farmers in the appropriate use of pesticides through a software called Grapenet. Such intervention are a need of the hour.
4. On the operational front, future actions must include strengthening export infrastructure: investment in cold chains, logistics, etc. The development of integrated food processing facilities might help in pushing processed food, which occupies minimal share in India's exports.
5. Further, synchronisation of Indian production regimes with target markets in terms of counter-seasonality, quality, consumer behaviour and technical barriers to trade can help attain our targets of enhancing exports and doubling farmers' incomes.
6. In order to overcome quality hurdles, advanced specialised capacity building programmes for farmers might help. Specialised training programmes refer to those targeted at specific commodities and specific markets.

### **Conclusion:**

The new Indian agricultural export policy aims to double agricultural exports from the present \$30 billion to \$60 billion by 2022 and attain a market size of \$100 billion in the next few years which requires bridging the gap between farmers and markets through world-class knowledge and technologies—AI, GIS, remote sensing—backed by appropriate policy measures.

#### 4. Critically evaluate the performance of direct benefit transfers in addressing food security challenges.

##### Approach:

It expects students to write about the challenges of food security, and role of DBT in addressing those challenges. It also expects students to write issues in DBT to ensure food security.

##### Introduction:

Food security, as defined by the United Nations' Committee on World Food Security, means that all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life. Estimates show that while 27.8% of India's population suffered from moderate or severe food insecurity in 2014-16, the proportion rose to 31.6% in 2017-19. National Food Security Act (2013) provides for reforms in the TPDS including schemes such as Cash transfers for provisioning of food entitlements.

##### Body:

Food security challenges in India:

- **Corruption:** Diverting the grains to open market to get better margin, selling poor quality grains at ration shops, irregular opening of the shops adds to the issue of food insecurity.
- **Increase in rural-to-urban migration:** Nation-wide lockdown in March 2020, migrant workers, among the country's poorest citizens, had a particularly difficult time adhering to lockdown measures faced food insecurity. Large proportion of informal workforce resulting in unplanned growth of slums which lack in the basic health and hygiene facilities, insufficient housing and increased food insecurity.
- **Inadequate distribution of food through public distribution mechanisms (PDS i.e. Public Distribution System):** Deserving beneficiaries of the subsidy are excluded on the basis of non-ownership of below poverty line (BPL) status, as the criterion for identifying a household as BPL is arbitrary and varies from state to state.
- **Lack of access to remote areas:** For the tribal communities, trans migratory communities, habitation in remote difficult terrains and practice of subsistence farming has led to significant economic backwardness and intensity of food insecurity goes on increasing with extreme climate.
- **Climate Change:** Higher temperatures and unreliable rainfall makes farming difficult. Climate change not only impacts crop but also livestock, forestry, fisheries and aquaculture, and can cause grave social and economic



consequences in the form of reduced incomes, eroded livelihoods, trade disruption and adverse health impacts.

- Gender inequality: Women are vulnerable on all dimensions of food security: availability, access, utilization and stability. Due to patriarchal pattern in food consumption many times women and girls in household goes through deficiency in food and nutritional level and faces malnutrition condition due to food insecurity.

Direct benefit transfer ensures food security:

- To reduce the need for huge physical movement of food grains: it reduces the stress on different mode of transport and warehousing challenge from wastage of food grains and spoilage.
- To provide greater autonomy to beneficiaries to choose their consumption basket in specified area and Identified areas for example tribal community's different requirement based on their local conditions.
- To enhance dietary diversity: with money in bank account or cash a household has option to consume different high nutritional food.
- To reduce leakages: Direct transfer to bank account ensures no intermediary in between therefore fall in leakages.
- To facilitate better targeting: Benefit is provided directly to needy and vulnerable people with increasing their purchasing power. Eligible households to enable them to purchase food grains from open market.
- Direct benefit transfer policy can cover the entire country. If implemented effectively, this policy may yield positive outcomes for migrants who were facing food shortage and food insecurity during lockdown phase.

Issues in Direct benefit transfer for food security:

- Diversion of benefit: Direct cash may not be used for intended purpose and can be used in unhealthy ways. For example, the cash instead of food subsidy may be spent on drinking and smoking as most of beneficiary family heads are men.
- Social exclusion: Still there are many homeless family in urban-rural & tribal areas, which don't have banking facility and road connectivity. Many daily wages workers involved in manual labor face identification problem due to finger prints during authentication. Lack of adequate documents also leads to exclusion of many poor from banking sector.
- Difficulty in identifying beneficiary: As of now, only 3% Indians pay income tax. So, determining the income of the rest of the citizens is still a challenge hence making it difficult to identify the deserving beneficiaries.
- Infrastructure deficiency: Micro ATMs, which were set up to deliver cash benefits at door step are not present in many areas hence many beneficiaries have to travel long to withdraw money.
- Illiterate vulnerable community: Most of the banks appoints Business Correspondents to enroll beneficiaries in rural areas. They may open more than one account for each beneficiary for incentive. And there are many complaints that they are not giving passbooks to the beneficiaries making

them unaware of the scheme. Illiterate beneficiaries are more vulnerable in this case.

- Zero balance accounts: Bank staff are reluctant to cooperate in opening accounts, especially unprofitable 'zero balance' accounts, they are quite unfamiliar with opening and operating bank accounts and they are often seen as supplicants rather than clients.
- Various socio-cultural factors: Food based discrimination to women and children in different households and varied socioeconomic conditions cannot be fulfilled by Direct benefit transfer.

Way forward:

- Through Conditional Cash Transfer in identified and specified area.
- Coupon/token system.
- 'Bolsia Familia' style of giving benefit preferentially to a female head of household.

### **Conclusion:**

DBT has helped the government plug subsidy leakages by eliminating intermediaries and middlemen, which in turn resulted in a savings of about billions for government. Though there are some loopholes involved in Direct Benefit Transfer scheme, this program is an excellent way to ensure that every paisa reach the deserving beneficiaries, if carefully implemented and with appropriate reforms. Aggressive awareness campaign of DBT for food security will help India fight under nutrition and malnutrition and achieve 2<sup>nd</sup> goal of SDG for zero hunger and build inclusive growth for India.

### **5. Developing entrepreneurship in the field of livestock and fisheries can be a game changer for the rural economy. Elucidate.**

#### **Approach:**

It expects students to write about - in first part write about livestock and fisheries sector - in second part write about how developing entrepreneurship in the field of livestock and fisheries can be a game changer for the rural economy - in third part write way forward.

#### **Introduction:**

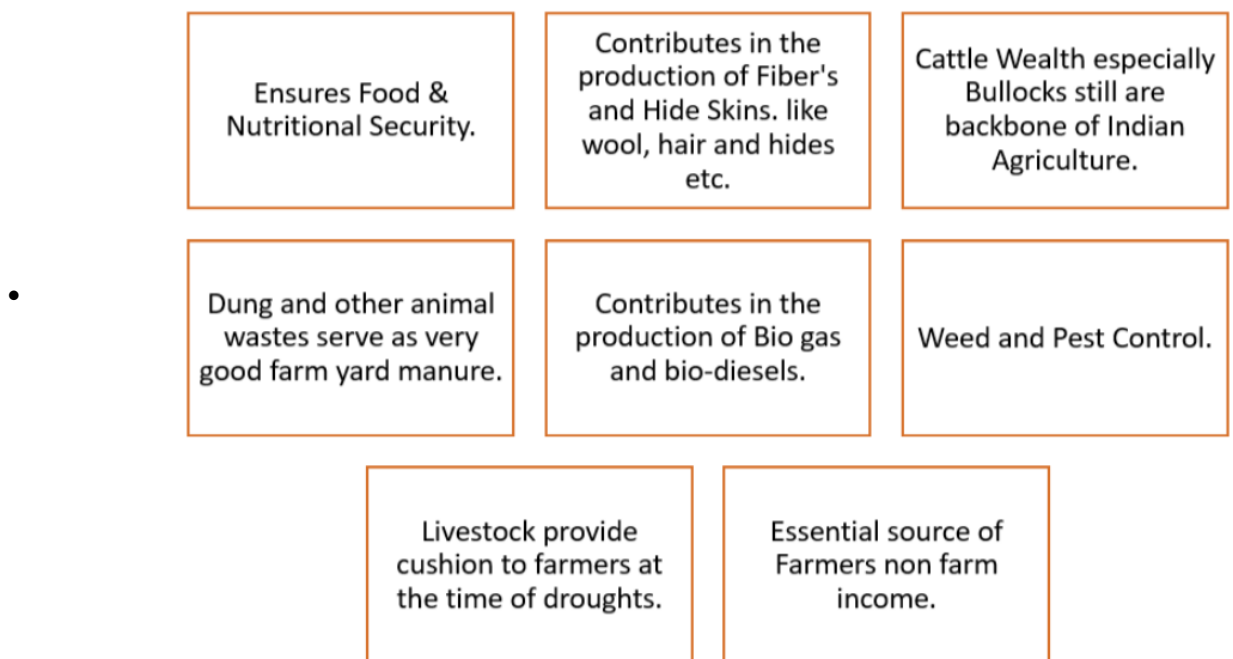
Livestock rearing, Dairying, Fisheries activities, along with agriculture, are an integral part of human life since the start of civilization. These activities have helped to improve the food basket and to gain draught animal power. As a result of conducive climate and topography, Animal Husbandry, Dairying and Fisheries Sectors have played a prominent socio-economic role in India.

**Body:**

Livestock and fisheries sector of India:

- Livestock, fishing and aquaculture account for nearly 32% of the overall agricultural GDP and 5% of national GDP.
- Livestock and fish products together contribute over Rs 7 lakh crore to total value of the agricultural output.
- The average annual growth rate of Livestock and fisheries sector together is 6 times more than that in the crop sector between 2012-13 and 2016-17.
- The share of crops in the value of agricultural output has been declining, but that of livestock and fish products is on a steadily upward trend.

**Importance of Livestock sector in the Indian Economy.**



Developing entrepreneurship in the field of livestock and fisheries can be a game changer for the rural economy because:

- Livestock contributed 16% to the income of small farm households as against an average of 14% for all rural households.
- Livestock provides a livelihood to two-third of the rural community. It also provides employment to about 8.8 % of the population in India.
- It will provide self-employment to millions of people especially rural households.
- It will have contributed significantly to the empowerment of women and has increased their income and role in society.
- It can be a major risk mitigation approach for small and marginal farmers, particularly across the rain-fed regions of India.
- It will be at the centre of poverty alleviation programs from equity and livelihood standpoints.
- A Food and Agriculture Organisation study has shown that one rupee of investment in the livestock sector can generate a return of four rupees.

- It will be faster than many other sectors of agriculture and continuing this trend will contribute as main sector for development of Indian economy.
- Livestock productivity has been identified as one of the seven sources of income growth by the Inter-Ministerial Committee under the government's target of doubling of farmers' income by the year 2022.

Important Initiatives by the Government:

- Animal Husbandry Startup Grand Challenge
  - To appreciate innovations coming from the villages to expand the dairy sector in India.
- National Livestock Mission
  - To ensure quantitative and qualitative improvement in livestock production systems and capacity building of all stakeholders.
- Central Sector Scheme on Blue Revolution: Integrated Development and Management of Fisheries (CSS)

Way forward:

- Schemes of integrated approach for enhancing inland fish production and productivity with forward and backward linkages.
- Large scale adoption of culture-based capture fisheries and cage culture in reservoirs and larger water bodies are to be taken up.
- Sustainable exploitation of marine fishery resources especially deep sea resources and enhancement of marine fish production through sea farming, mariculture.
- Encouraging Public-Private Partnership for sustainable livestock rearing.
- Increasing commercialization of livestock products by improving technologies, increasing market connectivity, processing and storage centre, training etc.
- By setting up a consortium with National Bank for Agriculture and Rural Development (NABARD) and National Centre for Disease Control (NCDC) to fund the dairy cooperatives.

**Conclusion:**

Livestock and fisheries sector shouldn't be just a vehicle for poverty alleviation or securing livelihoods. Rather, it must emerge as a platform for creating an army of rural entrepreneurs. Tending to cattle, pigs or poultry may not be seen as glamorous, but earning good money is certainly an attractive proposition. The sector should be pitched as such — livestock for prosperity.