AGRICULTURAL PROBLEMS IN INDIA

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Abstract :-

Agriculture sector is the mainstay of the Indian economy, contributing about 15 per cent of national Gross Domestic Product (GDP) and more importantly, about half of India's population is wholly or significantly dependent on agriculture and allied activities for their livelihood.

Introduction :-

The history of agriculture in India dates back to the Neolithic. India ranks second worldwide in farm outputs. As per Indian economic survey 2018, agriculture employed more than 50% of the Indian work force and contributed 17–18% to country's GDP.

Agriculture helps in the production of commodities that are essential for the maintenance of life that includes fiber, food and other crops. Agriculture involves the various systematic use of growing crops that helps in the production of food which is of the same kinds of plant that are grown at a particular place. The crops grown are further used for selling and obtaining food. Yielding of crops includes vegetables, pulses and various ornamental plants etc. each crop requires some amount of resources which include sunlight and water with carbon dioxide and the nutrients that are provided by nature. Agriculture plays an important role in the Indian economy as most of the rural households are dependent upon agriculture for their survival and it provides employment to half of the population.

Every country depends upon agriculture to sustain their life and it is associated with the production of crops. The initiation of civilization started with agriculture and its importance goes above as it evolved into forestry, food cultivation, dairy, beekeeping etc. A developing or a developed country always depends upon agriculture for its food as the demand for food increases and affects economic growth by making it an important factor for the economic growth of every country. Some crops are required for their raw products as they provide health benefits and constitute minerals and other nutrients that are used for medicinal purposes and are excellent for maintaining a healthy diet and providing nutrients to the human body.

History :-

Indian agriculture began by 9000 BCE on north-west India with the early cultivation of plants, and domestication of crops and animals. Indian subcontinent agriculture was the largest producer of wheat and grain. They settled life soon followed with implements and techniques being developed for agriculture. Double monsoons led to two harvests being reaped in one year. Indian products soon reached the world via existing trading networks

and foreign crops were introduced to India. Plants and animals considered essential to their survival by the Indians came to be worshiped and venerated.
The Middle Ages saw irrigation channels reach a new level of sophistication in India and Indian crops affecting the economies of other regions of the world. Land and water management systems were developed with an aim of providing uniform growth. Despite some stagnation during the later modern era the independent Republic of India was able to develop a comprehensive agricultural programme.

Neolithic

In the period of the Neolithic revolution, roughly 8000-4000 BCE, Agro pastoralism in India included threshing, planting crops in rows either of two or of six and storing grain in granaries According to Gangal et al. (2014), there is strong archeological and geographical evidence that neolithic farming spread from the Near East into north-west India. Yet, Jean-Francois Jarrige argues for an independent origin of Mehrgarh. Jarrige notes the similarities between Neolithic sites from eastern Mesopotamia and the western Indus valley, which are evidence of a "cultural continuum" between those sites. Nevertheless, Jarrige concludes that Mehrgarh has an earlier local background," and is not a "'backwater' of the Neolithic culture of the Near East."

Indus Valley Civilization

Irrigation was developed in the Indus Valley civilisation by around 4500 BCE. The size and prosperity of the Indus civilisation grew as a result of this innovation, which eventually led to more planned settlements making use of drainage and sewers Sophisticated irrigation and water storage systems were developed by the Indus Valley Civilisation, including artificial reservoirs at Girnar dated to 3000 BCE, and an early canal irrigation system from circa 2600 BCE. Archaeological evidence of an animal-drawn plough dates back to 2500 BC in the Indus Valley Civilization.

Republic of India

Special programmes were undertaken to improve food and cash crops supply. The Grow More Food Campaign (1940s) and the Integrated Production Programme (1950s) focused on food and cash crops supply respectively. Five-year plans of India—oriented towards agricultural development soon followed. Land reclamation, land development, mechanisation, electrification, use of chemicals fertilisers in particular, and development of agriculture oriented 'package approach' of taking a set of actions instead of promoting single aspect soon followed under government supervision.

Agricultural exports continued to grow at well over 10.1% annually through the 1990s. Contract farming—which requires the farmers to produce crops for a company under contract—and high value agricultural product increased. Contract farming led to a decrease in transaction costs while the contract farmers made more profit compared to

the non-contract workforce. However, small landholding continued to create problems for India's farmers as the limited land resulted in limited produce and limited profits.

Problems faced by Indian agriculture

Small and fragmented land-holdings: The seemingly abundance of net sown area of 141.2 million hectares and total cropped area of 189.7 million hectares (1999-2000) pales into insignificance when we see that it is divided into economically unviable small and scattered holdings. The problem of small and fragmented holdings is more serious in densely populated and intensively cultivated states like Kerala, West Bengal, Bihar and eastern part of Uttar Pradesh where the average size of land holdings is less than one hectare and in certain parts it is less than even 0.5 hectare.

Seeds: Seed is a critical and basic input for attaining higher crop yields and sustained growth in agricultural production. Distribution of assured quality seed is as critical as the production of such seeds. Unfortunately, good quality seeds are out of reach of the majority of farmers, especially small and marginal farmers mainly because of exorbitant prices of better seeds. High Yielding Variety Programme (HYVP) was launched in 1966-67 as a major thrust plan to increase the production of food grains in the country.

Manures, Fertilizers and Biocides: Indian soils have been used for growing crops over thousands of years without caring much for replenishing. This has led to depletion and exhaustion of soils resulting in their low productivity. The average yields of almost all the crops are among t e lowest in the world. This is a serious problem which can be solved by using more manures and fertilizers. Manures and fertilizers play the same role in relation to soils as good food in relation to body. Just as a well-nourished body is capable of doing any good job, a well nourished soil is capable of giving good yields. It has been estimated that about 70 per cent of growth in agricultural production can be attributed to increased fertilizer application.

Irrigation: Although India is the second largest irrigated country of the world after China, only one-third of the cropped area is under irrigation. Irrigation is the most important agricultural input in a tropical monsoon country like India where rainfall is uncertain, unreliable and erratic India cannot achieve sustained progress in agriculture unless and until more than half of the cropped area is brought under assured irrigation.

Lack of mechanisation: In spite of the large scale mechanisation of agriculture in some parts of the country, most of the agricultural operations in larger parts are carried on by human hand using simple and conventional tools and implements like wooden plough, sickle, etc. Little or no use of machines is made in ploughing, sowing, irrigating, thinning and pruning, weeding, harvesting threshing and transporting the crops. This is specially the case with small and marginal farmers. It results in huge wastage of human labour and in low yields per capita labour force.

Soil erosion: Large tracts of fertile land suffer from soil erosion by wind and water. This area must be properly treated and restored to its original fertility.

Agricultural Marketing: Agricultural marketing still continues to be in a bad shape in rural India. In the absence of sound marketing facilities, the farmers have to depend upon local traders and middlemen for the disposal of their farm produce which is sold at throw-away price. In most cases, these farmers are forced, under socio-economic conditions, to carry on distress sale of their produce. In most of small villages, the farmers sell their produce to the money lender from whom they usually borrow money.

Inadequate storage facilities: Storage facilities in the rural areas are either totally absent or grossly inadequate. Under such conditions the farmers are compelled to sell their produce immediately after the harvest at the prevailing market prices which are bound to be low. Such distress sale deprives the farmers of their legitimate income.

Inadequate transport: one of the main handicaps with Indian agriculture is the lack of cheap and efficient means of transportation. Even at present there are lakhs of villages which are not well connected with main roads or with market centres.

Over-dependence on unreliable rain and lack of irrigation facilities had led to a decline in agricultural output.

Poverty and illiteracy of the farmers prevent them from making large-scale capital investments and adopting scientific methods of cultivation.

Small land holdings due to fast-growing population which leads to fragmentation of land at quick succession. As a result, the size of the plot becomes smaller with every passing generation this greatly hinders the mechanism of farming.

Erosion of soil by heavy rain, floods, insufficient vegetation cover etc., reduces farm productivity.

Inadequate irrigation facilities and poor management of water resources have led to a great decline in agricultural productivity.

Sources

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