<u>www.ijaar.co.in</u>



ISSN – 2347-7075 Peer Reviewed Impact Factor – 7.328 Bi-Monthly



Vol.10 No.3

January – February 2023

## A STUDY ON IMPACT OF AGRICULTURAL DEVELOPMENT AND

## SUSTAINABLE DEVELOPMENT

Dr. Ashok Shamrao Patil

Department of Geography, Rajarshi Shahu Arts and Commerce College, Rukadi, Tal-Hatkanangale, Dist-Kolhapur Corresponding Author -Dr. Ashok Shamrao Patil E-mail -patilashok824@gmail.com DOI - 10.5281/zenodo.7772845

#### Abstract:

India is known throughout the world as an agricultural country and India is the second largest country in the world in terms of population. As India's economy is based on agriculture, agricultural implements policies are implemented, thus contributing to the development of Indian agriculture. The concept of Green Revolution has been created with the aim of increasing the agricultural production due to the growing population and the need for food grains and its sustenance. Agriculture has been discovered all over the world about ten thousand years ago and since then till today agriculture is seen to be related to human life. In the current scenario, sustainable development of Indian agriculture is very important as it is the agriculture sector that the majority of the people of India depend.

Key words: Sustainable Development, Agricultural Development, Impact on Agricultural, rural development, population, green revaluation etc.

#### Introduction:

Providing food, clothing and shelter for present and future generations by managing them in a balanced way without depleting the quality of renewable land. resources like crops, forests. livestock, wildlife, fish, environment etc. Sustainable farming is also known as organic farming, natural farming, and ecological farming. Environmental balance is highly valued in sustainable agriculture. Hence it is called ecological agriculture. Sustainable agriculture uses organic matter

main for nutrient the source as management. World renowned agricultural expert and progressive farmer VasantraoNaik gave a message for the welfare of agriculture and farmers giving the basic mantra of sustainable agriculture. Due to extensive erosion of agricultural land in India, the causes of agricultural land erosion are soil erosion due to heat of the sun and erosion of the top layer of soil due to wind and water and flood water, which can reduce the productivity of the land reduce sustainable and the

### IJAAR

Vol.10 No.3

development strategy. The average size of agricultural land in India is small and economically affordable, but as about 25% of the average land size in India is less than four hectares, India can implement its concept of sustainable Development economically in terms of land size.

#### **Problems of the Study:**

Maintaining the balance of the environment is one of the most important benefits of sustainable agriculture as sustainable agriculture reduces the cost of production as well as clean environment and food production without any harmful residues is done through sustainable agriculture. Choice Social benefits which are increased in sustainable farming practices and losses due to adverse weather and market prices can be avoided through sustainable farming, so in the present scenario sustainable farming as well as organic farming is very important in developing and agrarian democracies like India. Companies have also reached small villages through agricultural service centers. Word of mouth promotion through them is very effective. Farmers cannot refuse the advice of the owner of the agricultural service center. He is their guide, supplier, buyer everything. Through him, the companies get what they want in the farmer's throat. He is constantly promoting that the new chemicals and

seeds used in agriculture are beneficial to the country and the farmer.

#### **Objectives of the Study:**

While studying the agricultural sector and sustainable development in India, the researchers have determined the impact on Indian agriculture and the concept of sustainable development as the main topic of this research and some specific objectives have been given as follows.

- To Study the Development of Indian Agriculture and impact on Indian agriculture through sustainable development.
- 2. To Study the Indian Agriculture and Indian Economy.
- 3. To Study the factor effect on Indian Agricultural Development.

#### Significance of the Study:

Considering the strengths of both the countries, both the countries have good opportunities in the future through Along cooperation. with crop management, saline land development, water reuse, use of soluble fertilizers to increase crop productivity, adoption of micro irrigation system is the need of the hour. If we consider the Indian continent, there is enormous biodiversity in agriculture. There are different climate zones, soil type, and variety of crops. At

### IJAAR

#### Vol.10 No.3

the same time, the cultivated area is also larger than Israel. Importantly, India is a big market. In terms of exports, there is a good opportunity for Indian agricultural products in the markets of Gulf countries, East Asian countries. Development of pest-free nurseries, greenhouse farming, strict crop management to increase the productivity of orchards, integrated pestdisease control, water management, adoption of pruning techniques, climate change resistant and more productive varieties to increase the productivity and quality of agricultural produce in India in the coming years. Along with production, hybrid seed production, research has to be speeded up regarding the selection of suitable stakes for orchards.

#### Scope of the Study:

For adoption of sustainable farming practices, watershed management, integrated nutrient management, efficient management, integrated water weed management, conservation of native genetic resources and integrated pest and disease management are strictly used. It is sustainable production without pollution and harm to natural resources by using manufactured inputs. According to the most arable locations in India, farming systems are used strategically in India. A farming that contributes system significantly to the farming system in India

is organic farming, organic industrial farming. India's economy is heavily dependent on agriculture. India is known as an agricultural country. Therefore, agriculture is of unique importance.

#### **Period of the Study:**

While studying the impact of Indian agriculture sector on sustainable development, the researchers have completed the member research assuming the year 2022.

#### Limitation of the Study:

Renowned agriculturist and farmer KaiwariVasantraoNaik worked to give a new dimension to Indian agriculture by giving the message of 'sustainable agriculture' and 'advanced agriculture. The agricultural sector in India varies geographically; some are based on horticulture, arable farming, agro forestry and many others. Due to geographical location of India some regions have different climate thus climate affects agricultural production differently in each region. India's agriculture has an extensive background that dates back at least 10,000 years. Currently, India ranks second in agricultural production in the world. Agriculture and other industries accounted for more than 16% of India's GDP in 2007. Agriculture is the largest industry in the country and plays an important role in the

Vol.10 No.3

socio-economic development of the country despite the continuous decline in the contribution of agriculture to the country's GDP.

#### **Research Methodology:**

While studying the impact on the Indian agriculture sector and the concept of sustainable development, the researcher has used several secondary constructs and completed the research using descriptive analysis method. In this the researcher has completed the research using many secondary sources like research paper articles journal news paper reference books serial books matches audio video images etc.

#### **Research Method:**

While studying the impact on the Indian agriculture sector and the concept of sustainable development, the researcher has used several secondary constructs and completed the research using descriptive analysis method. In this the researcher has completed the research using many secondary sources like research paper articles journal news paper reference books serial books matches audio video images etc.

#### **Results and Discussion:**

India's economy is agrarian. The pre-independence dependence on agriculture has now reduced. But the

Dr. Ashok Shamrao Patil

development of agriculture sector is important for the overall economy of the country. The development of agriculture sector is a help for the development of industry and service sectors of the country.

# Importance of Agriculture Sector in Indian Economy:

At the time of independence, the share of agriculture and allied sectors in the GDP was more than 50 percent and then it declined. A decline in the share of agriculture in GDP is indicative of a positive, structural change in the economy. In developed countries the share of agriculture sector is less than three to four percent. Most people in India are engaged At the in agriculture. time of independence, more than 70 percent of India's population was directly and indirectly dependent on agriculture and allied sectors. According to the 2001 census, the share of agriculture and allied sectors in employment in the country is 58.2 percent. As agriculture is the main occupation of the people of India, many types of agricultural products are exported. India is among the top 15 agricultural exporters in the world. Indian agriculture supplies the raw materials required for various industries through the agriculture sector. In this, products like sugarcane, cotton, oilseeds, rubber are supplied from the agricultural sector to the industrial

sectors. Indian Agriculture The task of supplying food to the growing population of India is carried out by the agricultural sector. The agricultural development policy of the Government of India is primarily designed to achieve selfsufficiency and self-reliance in food production.

# Indian Agriculture and Development of Agricultural Sector:

Looking at the historical background of Indian agriculture sector, it Indian seems that agriculture was traditional and subsistence type. This mainly focused on the production of food crops. Due to this, agriculture was not viewed from a commercial point of view. independence, After the Indian government has made efforts to develop the agricultural sector through economic planning. Food grain production includes the production of cereals and pulses. The agricultural cropping year in India is considered to be between July and June. In 1950-51, the area under food grains in India was only 97.32 million hectares. Productivity was 552 kg/ha. Foodgrain production was estimated at 264.4 million in 2013-14. Production tonnes and productivity in agriculture depends on the quality of the tools and techniques used. Therefore inputs are important in agriculture. Use of high quality seeds is

important for increasing agricultural production. The efficiency of other inputs is affected by seed quality. The National Seed Corporation and the State Farm Corporation of India are the national organizations with regard to Indian seeds. Maharashtra State Seed Corporation also known as Mahabeez, is functioning in the state of Maharashtra.. Fertilizers are used to artificially supply the nutrients required bv crops. These include chemical fertilizers, organic fertilizers, green manures and biological fertilizers. Chemical fertilizers have played an important role in Indian agriculture. The use of chemical fertilizers has increased the productivity of Indian agriculture. Most of the nitrogenous fertilizers are used in India.

#### **Irrigation and Finance:**

Irrigation coverage in India is 48.6 percent as per Agriculture Report 2017 as per 2014-15 data. National Water Policy 2002 was formulated for the development of water resources in the country. India's average annual water availability is 1869 billion cubic meters of which usable water resources are 1123 billion cubic meters. Programs like Benefit Area Development Programme, Dynamic Irrigation Benefit Programme, Micro Irrigation Scheme were implemented for the development of irrigation. The Indian agriculture sector is in dire need of finance to implement modern technology and effective practices. Efforts have made been through institutional and non-institutional sources to meet the need of finance in Indian agriculture. Commercial Banks. Cooperative Banks, Regional Rural Banks, are working for providing financing for various types of loans such as short-term, long-term and medium-term in agriculture.

# Sustainable Agricultural Development through Co-operation:

Indian agriculture has a tradition. The social life and industry sector here has always been dependent on agriculture, so improvements in agriculture are definitely very helpful for the development of the society. Indian agriculture has undergone drastic changes in the last few years. Technology from agricultural universities and research centers is reaching farmers through research, education and extension channels. Indian farmers achieved selfsufficiency through Green Revolution and White Revolution; but like the changing times, the problems facing agriculture are also changing. The effects of globalization and climate change are beginning to be agricultural production and seen on economic development of farmers. Farmers are responsible for providing enough nutritious food to the growing population. In India, on the one hand, the

demand for food grains is increasing day by day, climate change is affecting the grain production, on the other hand, the problem of cultivable area, adequate water supply and labor are also looming. Israeli farmers are facing the same problems, so a joint effort of both countries can surely find a way out of the problems in the agricultural sector. In the past few years, exchanges between the agricultural universities and research institutes of both the countries have increased to find solutions to the problems in the agricultural sector. Agricultural experts from both the countries are visiting each other's countries and trying to find solutions to the problems.

# Agriculture Development and Indian Economy:

In 1992, diplomatic relations were established between the governments of India and Israel. Over the past 22 years, this relationship has been strengthened at various levels. In the last 21 years, agriculture sector development has been an important focus of cooperation. Various MoUs have been signed between the two countries to accelerate research, education and extension work, and will continue to be done in the future. Crop productivity enhancement, water management and energy are key components of these agreements. Innovation, research and

entrepreneurship development in the agricultural sector is being accelerated through coordination between the two countries. We have put the formula of development of agriculture sector by cooperating with each other without competing with each other. Through this, the trade between the two countries has million US reached six dollars. Discussions on 'Free Trade Agreement' are going on between the two countries, so there is no doubt that this trade will go beyond 15 million US dollars in the coming years.

#### **Conclusion:**

As India is an agrarian country, agriculture is recognized worldwide as the mainstay of India's economy. In the current scenario, it is considered very important to make the population of India happy and satisfied by sustainable development of agriculture in India. In India, modern agriculture is developing more than traditional agriculture. Every farm is seen using modern seeds, chemical fertilizers and pesticides at the right time. In agriculture, maximum vielding crops are being grown and modern technology is being used. As chemical fertilizers are used in a large scale, its side effects are large on agriculture and sustainable development needs a little slow pace. Fertility of farm land is lost and the

farmers should be trained in modern agriculture from time to time. This training should be imparted in the context of knowledge about modern technology and economical vision of low cost and low water crops. For the farmers, the important aspect of sustainable agriculture or natural agriculture is economic development, as well as sustainable agriculture increases economic development and production and the work of balance in the environment is done to a large extent. In the current situation, emphasis on sustainable development is needed not only to economic development, but also to environmental and social problems. Environmental conservation will create an atmosphere of trust in human life and will lead to sustainable development of entire India. Eastern kings should be made aware of agricultural development by increasing agricultural production and their efficiency and making use of agribusiness technologists and organic farming.

### **References:**

- 1. Kanchan Chopra (1993), Sustainability of Agriculture, pp.527-535.
- N.B.Shete, Agricultural Development: Some views, Indian Economics Panorama, December 1995, pp.31-38.

## IJAAR

# Vol.10 No.3

- Chellam Subramanian (2003), Sustainable Development Indian Agriculture, pp. 27-36.
- Narasimmalu (2006) Globalization and Agricultural sustainability In India, pp.11-26.
- CGWB, Annual Report (2003), Central Ground Water Board, Ministry of Water Resources, pp. 164-170.
- Van Cauwenbergh, (2007), A hierarchical framework for assessing the sustainability of agricultural systems, pp. 229-242.

- Rasul (2004), Sustainability of ecological and conventional agricultural systems in Bangladesh: an assessment based on environmental, pp. 327-351.
- Roy, (2012), An assessment of agricultural sustainability indicators in Bangladesh, pp. 99-110.
- 9. Rout Ray (2003), Operational indicators for measuring agricultural sustainability in developing countries, pp. 34-46.