International Journal of Humanities and Social Science Invention (IJHSSI)
ISSN (Online): 2319 – 7722, ISSN (Print): 2319 – 7714
www.ijhssi.org ||Volume 9 Issue 9 Ser. III || September 2020 || PP 61-67

The Effects of Government Policies on Agricultural Productivity

Dr.Varsha Patel
Assistant professor
R.C.College of Commerce - Ahmedabad
Gujarat University

ABSTRACT
Nearly everyone in India makes at least some portion of their living from the agriculture industry in some capacity or another. The suicide rate among farmers accounts for 11.2% of the overall suicide rate in India. To explain why there have been so many suicides among farmers, academics and activists have proposed a number of explanations, some of which contradict one another. The failure of the monsoon, tremendous financial burdens, policies of the government, low mental health among the general population, personal anxieties, and problems within families are all potential contributing factors. The government has passed a variety of policies in order to lower the costs of production, increase farmers' incomes from product sales, and support the growth of the agricultural sector. Because of the efforts that they have put in, the overall quality of their lives has significantly improved. As of 2006, the Indian government has designated a total of 31 districts throughout the states of Andhra Pradesh, Maharashtra, Karnataka, and Kerala as having a high relative frequency of farmer suicides. These districts were spread across the country. These districts may be found in the Indian state of Kerala. The suffering of the farmers was intended to be alleviated by the implementation of a focused rehabilitation project.
Keywords*: agricultural, rural, development, farmers, government.*

I. INTRODUCTION

Because the vast majority of Indians still reside in rural areas (between 65 and 70 percent), the agriculture sector is directly or indirectly responsible for the employment of 48 percent of the country's labor force. Because it can be used to produce food, animal feed, fiber, and fuel, the Indian people regard it as a commodity that is absolutely necessary to their way of life. Increasing agricultural productivity is one of the most critical obstacles that farmers must overcome in order to achieve increased levels of output and profitability. Increased agricultural production in India may be ascribed, at least in part, to the country's higher genetic variety, which in turn came from the Green Revolution and the country's expanded institutional capability. This, in turn, resulted in increased agricultural production. Agriculture's purpose is to support and enhance human life by supplying non-manufacturable goods such as food, fiber, medicinal herbs, and other things that cannot be produced in a factory setting. Humans were able to dwell in urban areas because raising domesticated species produced food surpluses, which made it possible for humans to do so.

The dawn of agriculture marked a turning point in the progression of humankind toward the establishment of permanent settlements. "Agricultural science" is the name given to the academic field that is concerned with the investigation of farming practices and techniques. Long before any were domesticated, people began collecting wild grains at least 105,000 years ago, and cultivation of these plants began roughly 11,500 years ago. This was a significant amount of time before any were tamed. Pigs, sheep, and cattle were the first domesticated animals maintained by humans, and they did so around 10,000 years ago. At least eleven different geographic areas are responsible for the cultivation of different types of crops. Despite the fact that industrial agriculture, which is built on large-scale monoculture, has come to dominate agricultural production over the course of the preceding century, there are still around 2 billion people throughout the world who depend on agriculture for their primary source of food.

The use of modern agronomy, plant breeding, and agrochemicals like pesticides and fertilizers, along with other technological advancements, has led to a significant increase in the yields that can be obtained from agricultural practices. On the other hand, these same practices have led to extensive ecological and environmental harm. However, these practices have been met with criticism for their impacts on climate change, water scarcity, deforestation, antibiotic resistance, and the use of growth hormones in mass-produced meat. Similar increases in meat production have been the result of selective breeding and other modern animal husbandry practices. The use of genetically modified organisms (GMOs) is widespread despite the fact that their cultivation is illegal in a number of nations.

Consumables, textiles, fuels, and raw materials (including rubber) are the primary products that come

from agriculture. These four categories can be broken down further into subcategories. It is possible to classify food into a number of diverse categories, some of which include cereals (also known as grains), vegetables, fruits, oils, meat, milk, mushrooms, and eggs. Agriculture is the world's second-largest industry after the service sector, due to the fact that it employs more than a third of the world's total workforce. However, over the course of many centuries, the number of people working in agriculture in industrialized countries has fallen significantly. This trend can be seen in both developed and developing nations.

Agriculture Policy:

The choices and actions taken by the government in relation to agriculture, both on the national level and in terms of the importation of agricultural products from other countries, are collectively referred to as "agricultural policy," which is a word that uses the term "agricultural policy" as a noun. Agricultural policies are almost always put into place by governments in an effort to exert some kind of control over the domestic agricultural product markets. The management and adjustment of risk (such as policies regarding climate change, food safety, and natural catastrophes), economic stability (including tax policies), natural resources and environmental sustainability (particularly water policy), research and development, and market access for local goods (including interactions with global organizations and agreements with other nations) are all important considerations. Natural resources and the long-term viability of the environment, particularly with regard to water management, are two more topics that have been considered. Agricultural policy has the potential to address a variety of concerns, including food quality (the process of ensuring that the food supply is of a constant and known quality), food security (the process of ensuring that the food supply satisfies the demands of the people), and conservation. The measures that are taken to ensure a supply of food that is dependable and consistent are referred to collectively as "food quality," and the phrase "food quality" characterizes those measures. One example of a program run by the government that encourages firms to voluntarily participate in quality assurance systems may take the form of programs offering subsidies and other types of incentives.

In the process of formulating agricultural policy, feedback is solicited from a diverse array of public policy sources via lobbying and financial contributions to political campaigns. There are other political action groups that concentrate on issues such as environmental preservation and labor unions, in addition to lobbying groups that represent particular agricultural commodities. People who fall into this category include politicians and activists. The Food and Agriculture Organization (FAO) of the United Nations serves as a platform for the debate and negotiation of international agricultural treaties and legislation. Additionally, the FAO is responsible for coordinating worldwide efforts to end world hunger. The director of the FAO section that deals with animal production and health claims that firms have been effective in their efforts to lobby against laws that would be beneficial to human health and the environment. By way of illustration, in 2010, suggestions for a voluntary code of behavior for the cattle sector were blocked as a result of lobbying from huge food firms. These are causing damage over a longer period of time. These schemes would have rewarded modifications to the regulations governing public health and the environment, such as the maximum number of cattle that are allowed to reside on a particular parcel of land.

OBJECTIVES

1. To Study the Government Programmes on Agriculture Sector.
2. To analyze the impact of government programs on the primary sector.

II. RESEARCH METHODOLOGY

Secondary data were acquired from a number of sources and used in the study. These sources included official government reports (Census data), the National Food and Agriculture Organization in New Delhi, Indian agricultural bulletins, and the Indian Ministry of Agriculture. For the sake of research and comparison, the study made use of core statistical variables such as average, percentage, and growth rate.

III. DATA ANALYSIS

Important government schemes and programs in agriculture:

The predicament that India's farmers are in is now starting to get the attention it deserves from the Indian government. A wide range of government assistance programs for farmers are currently being put into action in order to both stimulate growth in the agricultural industry and improve farmers' earnings. Because of this, the government has introduced a number of brand-new plans, initiatives, and tactics that every farmer who participates in them has the potential to gain from.

Soil Health Card Scheme:

The initiative was launched in 2015 with the intention of assisting state governments in their distribution of soil health certificates to all farmers across the country. This is the declared purpose of the program. The soil health cards give farmers information on the present nutrient status of their fields as well as recommendations on the amount of fertilizer that should be applied to enhance the soil quality.

National Mission for Sustainable Agriculture (NMSA):

The National Action Plan to Combat Climate Change (NAPCC) is comprised of a total of eight distinct programs, and one of those is the National Marine Sanctuaries and Aquariums (NMSA). The aims of this effort are to promote sustainable agriculture by utilizing ways for adapting to climate change, boost agricultural production, and focus on rainfed regions with an emphasis on integrated farming, soil health management, and synergistic resource conservation. All of these goals will be accomplished through the application of climate adaptation strategies.

Programmatically, NMSA supports the mission deliverables by developing integrated and composite farming systems in specified regions in order to boost agricultural output, sustainability, profitability, and climate resilience. These goals are all aimed at improving agricultural systems.

Schemes under NMSA

- The RFS Division is responsible for the administration of the Rainfed Area Development (RAD) program.
- Soil Health Management (SHM) is now being put into action by the INM Department.
- The Submission on Agro-Forestry (SMAF) plan's implementation is the responsibility of the Natural Resources Management Department.
- The INM Division is in charge of putting the Paramparagat Krishi Vikas Yojana (PKVY) into action. This responsibility falls within their remit.
- The Soil and Land Use Survey of India (also known as SLUSI) is now being carried out by the RFS Section.
- It is the responsibility of the RFS Division of the National Rainfed Area Authority (NRAA), which is the organization in charge of carrying it out.
- The INM Division is responsible for a wide variety of endeavors, two of which are the Mission Organic Value Chain Development in the North Eastern Region (MOVCDNER) and the National Centre of Organic Farming (NCOF). Both of these initiatives are examples of operations that come under the division's scope.
- The INM Division is responsible for establishing the Central Fertilizer Quality Control and Training Institute, also known as the CFQC&TI.

Neem Coated Urea (NCU):

This tactic's objectives are to bring down the expense of fertilizer application, raise crop yields, and improve the crop's accessibility to nitrogen. Because NCU prevents fertilizer from being released too quickly, the substance is made more readily available to the plant in a manner that is more time-efficient. A protective neem coating has been applied on all of the urea that is now available on the market. This includes urea that was made in the United States as well as urea that was imported. It makes it easier for us to monitor the state of the soil and cuts down on the costs associated with agriculture.

PMKSY stands for Pradhan Mantri Krishi Sinchai Yojana:

It was launched on July 1, 2015 with the slogan "Har Khet Ko Paani" with the intention of delivering complete services across the entirety of the irrigation value chain, from water supply to distribution to farm-level applications. This was done with the intention of achieving the aim of giving "Har Khet Ko Paani." PMKSY is concerned not only with the creation of rainfall but also with the building of protective irrigation. This is accomplished by capturing rainwater on a modest scale with the assistance of 'Jal Sanchay' and 'Jal Sinchan'.

Micro-irrigation is anticipated to become increasingly popular as a means of achieving the goal of "per drop, more crop." As a result of the focus that PMKSY places on the planning and implementation of projects at the state level, it is now the responsibility of each state to develop and carry out its own irrigation infrastructure projects in line with district and state irrigation plans. Because of the state's adoption of PMKSY, which encompasses both planning and implementation, this is now a possibility.

Components:

- The Accelerated Irrigation Benefit Programme (AIBP) is now being carried out by the Ministry of Water Resources, as well as the RD and the GR.
- PMKSY (Har Khet ko Pani): The Ministry of Water Resources, the Royal Department of Agriculture, and the General Department are in charge of putting this program into action.

- The Department of Land Resources is in charge of directing efforts toward the PMKSY (Watershed) initiative.
- "Per Drop More Crop" (PMKSY) (PDMC) (Per Drop More Crop)

Krishi Vikas Yojana Paramparagat (PKVY))

The implementation of this strategy is designed to encourage organic agricultural practices all throughout the country. Both improving the soil's health and increasing the amount of organic matter it contains, as well as raising the farmer's net income, are necessary steps toward achieving premium pricing. The effort will begin in the 2015–16 school year and will continue through the 2017–18 school year with the goal of covering a target area of 5 lakh acres with 10,000 clusters of 50 acres each.

National Agriculture Market (e-NAM):

This prepares the way for countrywide e-marketing by providing a foundation for the industry and money for the construction of infrastructure. The achievement of this objective is dependent on this. By allowing for more accurate price discovery, this cutting-edge market technique is causing a revolution in the agricultural markets. This revolution is causing a revolution. The "One Nation, One Market" initiative is moving closer to being implemented, and this policy promotes transparency and healthy competition, both of which improve the price that farmers may earn for their products.

Micro Irrigation Fund (MIF):

It has been decided to establish a specialized MIF in collaboration with NABARD and to provide an initial capital of Rs. 5000 crores (Rs. 2000 crore for 2018-19 and Rs. 3000 crores for 2019-20) in order to encourage public and private investments in microirrigation. This decision was made following approval of the proposal. The primary purpose of the fund is to pool resources in order to assist state efforts that aim to expand the amount of land that is watered via micro-irrigation.

Agriculture Contingency Plan:

The Central Research Institute for Dryland Agriculture (CRIDA), ICAR, in collaboration with state agricultural universities, has developed a standardized template for district-level agricultural contingency plans in order to deal with abnormal monsoon conditions that can cause drought and floods, extreme events (heat waves, cold waves, frost, hailstorms, cyclones), and other natural disasters that can have a negative effect on agricultural products such as crops, livestock, and fisheries. This template was developed in order to These plans have been established by our team. Within the "farmer portal" section of the website, there are a total of 614 distinct agriculture emergency plans for specific districts.

Program for Rainfed Area Development (RADP):

The Rainfed Area Development Programme, sometimes known as RADP, was a component of this overarching strategy.

Rainfed Areas: The National Watershed Development Project (NWDPRA):

The National Watershed Development Project for Rainfed Areas (NWDPRA) was initiated in 1990-1991 with the purpose of encouraging integrated watershed management and sustainable agricultural practices. This project was funded by the United States Department of Agriculture.

Yojana Pradhan Mantri Fasal Bima (PMFBY):

According to the PMFBY's actuarial premium system, the maximum premium that may be paid for Kharif crops is 2%, the highest premium that can be charged for Rabi food and oilseed crops is 1.5%, and the maximum premium that can be charged for annual commercial and horticulture crops is 5%. The leftover actuarial or biddable premium is split evenly between the federal government and the state governments. The process of making payments on claims is going to be streamlined and sped up as part of this program, which is one of its goals. Claims have to be settled within two months of the harvest, provided that the relevant state government immediately supplies yield figures and its portion of the premium subsidy.

Livestock insurance Scheme:

Farmers and cattle ranchers are the populations most likely to gain from the principal purpose of the product, which is to provide financial stability in the event of a catastrophic loss of animals, hence they are the populations that are meant to make use of the product. The primary objective of the plan is to improve the quality of livestock and goods produced from livestock. One of the ways in which the plan strives to accomplish this objective is through educating and enlightening stakeholders about the advantages of livestock insurance.

National Scheme on Welfare of Fishermen:
The initiative's objective is to provide financial assistance to fishermen so that they may build homes and community centers where they can congregate with one another and share resources. In addition, as a component of the life-saving cum relief effort, it intends to drill tube wells with the purpose of supplying water and help during times of famine.

Scheme on Fisheries Training and Extension:
Through the provision of training for the fishing industry, it was founded to allow the efficient implementation of fishing industry extension programs in order to meet the needs of the fishing industry.

Gramin Bhandaran Yojna:
The following is the goal of this Plan:

- Help farmers store agricultural inputs, processed agricultural inputs, and raw agricultural products by building scientific storage capacity in partnership with linked facilities in more remote locations.
- This will allow farmers to better manage their agricultural inputs.
- Encourage the grading, standardization, and quality control of agricultural goods in order to raise their marketability.

It is possible to lessen the possibility that farmers would be compelled to sell their crops at a loss so soon after harvest if we give them access to marketing credit and pledge financing and strive to improve the country's agricultural marketing infrastructure.

Impact of Government programmes on Primary Sector:

To start off the Green Revolution, high-yield plant varieties were distributed, new irrigation systems were constructed, and a torrent of inputs including fertilizers, insecticides, agricultural machinery, financing, and other types of rural infrastructure were made available. The green revolution was helped along with the assistance of price subsidies. It did wonders for the economy of the cities, raised people's standards of life, and contributed to the growth of the rural areas. India used to be a net importer of food; but, as a consequence of significant growth in agricultural production and the country's overall land usage, India is now starting to become a net exporter of its own food. Since the beginning of the green revolution, both the agricultural production and general productivity of India have increased at an astounding rate. (See Table 1.1)

Table 1 Growth in food grain production (kg/ha) in India

Year	Food grain production (million tons)	Food grain productivity (kg/ha)
1960-61	82.02	710
1970-71	108.42	872
1980-81	129.59	1023
1990-91	176.39	1380
2000-01	196.81	1626
2010-11	244.49	1930
2015-16	251.57	2042
2016-17	275.11	2129

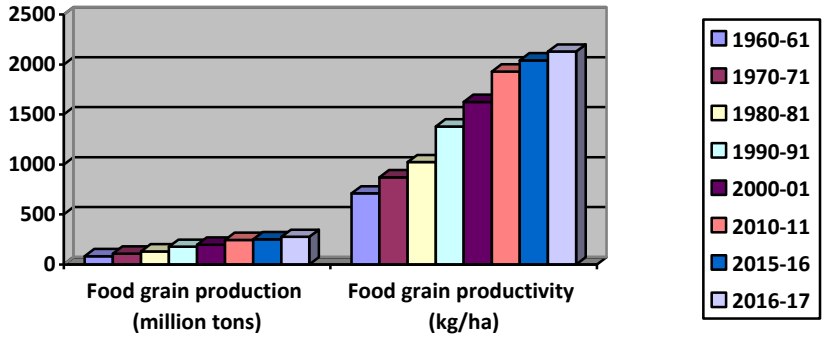

Fig 1: Growth in food grain production (kg/ha) in India

Table 2: Food grain productivity

Food grain productivity (million tons)	25
Food grain productivity (kg/ha)	75

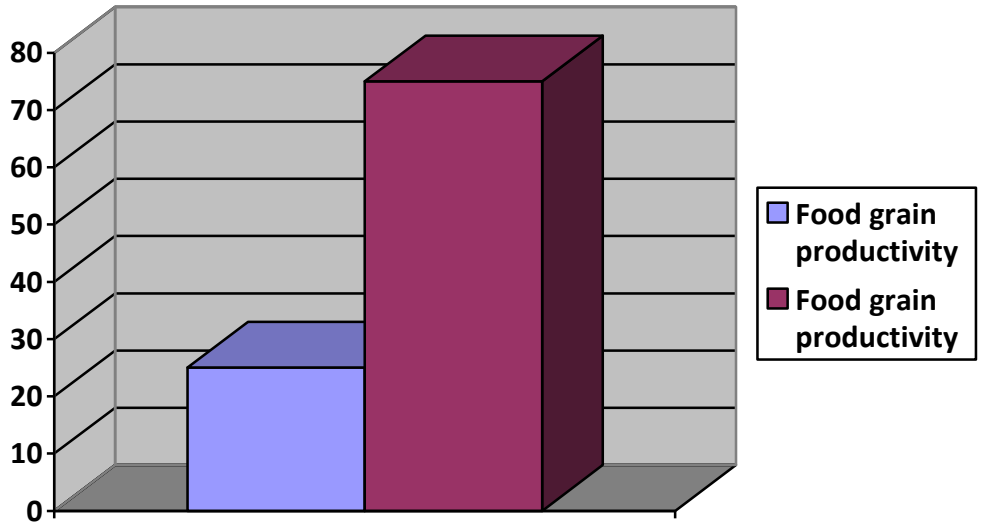

Fig 2: Food grain productivity

The quantity of many various sorts of agricultural products has seen a significant rise in recent years. Since 1951, the horticultural crop industry will have increased by a factor of 9.5 by the year 2017, the fish industry will have increased by 12.5 times, milk production will have climbed by 7.8 times, and egg production will have increased by 39 times. In spite of the significant rise in population, a sizable safety net has been put in place. Grain crops took up around 59% of the total gross cropped area (GCA) in the country. Rice took up twenty-two percent of India's total net cultivable land, whereas wheat only took up fifteen percent of that area. India is currently in second place worldwide in terms of its total rice output. During the kharif season (June–October), the vast majority of arable land is used for the cultivation of rice. On the other hand, during the rabi season (November–March), the vast majority of arable land is used for the cultivation of wheat. Both of these seasons are defined by the various planting and harvesting patterns that they each bring.

During the 2009-2010 growing season in India, approximately 5%, 4%, and 4% of the country's total agricultural land was devoted to the cultivation of pearl millet, maize, and sorghum, respectively. While the cultivation of maize increased from 3% in 1990-1991 to 4% in 2009-2010, the cultivation of pearl millet (a reduction of 6%) and sorghum (a reduction of 8%) had considerable drops during the same time period. Even though more maize was planted, there was a decrease in the amount of land that was planted with pearl millet and sorghum. According to the data from the 2016-2017 academic year, we find that pearl millet was responsible for 3.84 percent of GCA and 9.73 million metric tons of annual total output. On the other hand, maize was responsible for 4.95 percent of GCA and 25.90 million metric tons of annual total output, and sorghum was responsible for 2.89 percent of GCA and 4.57 million metric tons of annual total output.

Not only has India's agricultural sector grown its overall production during the past 60 years, but it has also raised its average agricultural output per hectare. This is a significant achievement. The data pertaining to agricultural production in India are compiled in the following table, which covers a span of three harvesting times. During the last four decades, India has grown its agricultural output by ranging from 40 percent to 500 percent thanks to various reforms and advancements in both knowledge and infrastructure. Despite recent achievements in agricultural production, India still only accounts for 30–60% of the best crop yields that are feasible on farms in both rich and developing nations. This is the case even though India has been a leader in agricultural output in recent years. Despite significant leaps in agricultural output, India still suffers from among of the worst rates of food loss in the world. This is a result of the country's inadequate infrastructure as well as its retail industry's lack of organization.

Table 3: India's agricultural output from 1970 to 2010–11 as indicated by the growth in average yields

Crop	Average YIELD, 1970-1971	Average YIELD, 1990-1991	Average YIELD, 2010-2011
	kilogram per hectare	kilogram per hectare	kilogram per hectare
Rice	1123	1740	2240
Wheat	1307	2281	2938
Pulses	524	578	689
Oilseeds	579	771	1325
Sugarcane	48322	65395	68596
Tea	1182	1652	1669
Cotton	106	225	510

The countries of India and China are currently competing against one another to see which one can harvest the most rice in a predetermined amount of time. Yuan Longping, who works at the China National Hybrid Rice Research and Development Centre, has established a new record for the amount of rice that can be grown in a demonstration plot. After it was all said and done, he had a yield of 19 tons per acre. This record was broken in 2011 by an Indian farmer by the name of Sumant Kumar who achieved a yield of 22.4 tons per hectare from a demonstration plot located in the state of Bihar. These farmers claim that not only have they applied the system of rice intensification (SRI), but they have also implemented newly produced kinds of rice. It has been stated that yields have been achieved in China and India, but these yields have not yet been shown on farm lots measuring 7 hectares or proved to be repeatable over the course of two years on the same farm.

IV. CONCLUSION

As of the year 2006, the Indian government has designated a total of These districts were spread across the country. These districts may be found in the Indian state of Kerala. The pain of the farmers was intended to be reduced thanks to the implementation of this particular rehabilitation scheme. Farmers were provided debt relief, the availability of institutional credit was increased, irrigation infrastructure was upgraded, experts and workers from social service organizations were hired to provide farming support services, and new revenue streams were opened up in the areas of horticulture, livestock, dairy, and fisheries. All of these measures were taken to assist farmers. Farmers in India have been assured that they would get no-interest financial assistance from the Prime Minister's National Relief Fund as part of the Indian government's relief efforts. In addition, the government of India made a statement, among other things, about the situation.

REFERENCES:

[1]. Akintola, A (2011): Nigeria: A New Perspective Being a paper presented by the Minister of Agriculture onthe Neglect of Agricultural Sector 18th September, Kano.

[2]. Jahagirdar, D.V., 1991, Manoli watershed project - A study of some growth parameters. Indian Journal ofAgricultural Economics, 46: 304.

[3]. Mary Ahearn (2002): The Impact of Government Policies on Agricultural Productivity and Structure:Preliminary Results

[4]. Oriola, E.O. (2009): A Framework for Food Security and Poverty Reduction in Nigeria. European Journalof Social Science . 8(1), 132-139.

[5]. Rasmussen, W. "The Structure of Farming and American History." Chapter 1 in Farm Structure: A Historical Perspective on Changes in the Number and Sizes of Farms, Committee on Agriculture, Nutrition, and Forestry, U.S. Senate, 96th Congress, 2nd Session, Wash., D.C., April 1980.

[6]. Report of the Committee on Doubling Farmers' Income Volume XII "Science for Doubling Farmers' Income" Focusing Scientific Development and Technological Applications on Doubling Farmers' February2018.