ISSUES AND PRIORITIES AREAS OF AGRICULTURE IN INDIA

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Abstract

Agriculture is the centerpiece of the Indian economy and the pivot of Indian life. Being the basis of economic life, the main source of employment and a means of earning foreign exchange, it would not be an exaggeration to call agriculture the foundation stone of the country. About 52 percent of the total labor force of the country is earning their livelihood from agriculture and agriculture related sectors. Therefore it would be fair to say that the development and prosperity of the country depends on the growth, prosperity and productivity of agriculture. The development and prosperity of agriculture is dependent on the increase in agricultural production as well as getting a fair price for the produce produced. Significantly, most of the small farmers of the country are trapped in the vicious cycle of poverty. Due to poverty and debt, farmers are forced to sell their produce to middlemen at low prices. To free the farmers from the trap of these middlemen and to improve the marketing system, the government has taken important steps like expansion of controlled mandis, grading and effect of agricultural products, arrangement of go-downs, market promotion and price information. Management of cooperative marketing system. Steps have been taken. Establishment of National Agricultural Marketing Institute is also an important step in this direction. The institute is playing a vital role in agricultural development by providing specialized education, training and research services in agricultural marketing. Due to the high development rates of the industrial and service sectors, agriculture's economic contribution to India's economy has decreased to less than 15%, but the sector's significance to the country's social and economic structure goes much beyond this metric. First, the rural economy provides income for approximately three-quarters of Indian households. Second, rural areas are home to the majority of India's impoverished (770 million people, or around 70%). Third, to fulfil the demands of a growing population with rising incomes, India's food security depends on the production of cereal crops as well as the production of fruits, vegetables, and milk. This will require a faster emergence of a productive, competitive, diverse, and sustainable agriculture industry.

Keywords: Agriculture, Indian economy, Employment, Agricultural marketing, Population.

Introduction

Although dependence on agriculture has increased, cultivable land is declining in size as well as in quality, with the average size of land holding reduced to 1.08 hectares. Along with dividing the arable land into small pieces, the rate of land degradation is increasing due to neglected soil management. Moreover, according to CSE, 30% of the land area in India is currently undergoing the process of desertification. World Bank. (2012).

In 2016, the Intergovernmental Panel on Climate Change stated in its report that "Land degradation is one of the main causes of climate change, along with emissions of greenhouse gases and low rates of carbon sequestration". This is a typical cycle as the socioeconomic effects of climate change accelerate land degradation. Unpredictable weather and natural hazards have also arisen due to climate change, which include drought, epidemics, cyclones, heavy rains or floods, etc. Increase in the uncertainty of humidity, temperature and rainfall affects the traditional agricultural calendar and has to bear the brunt of harsh weather. Mohan, R. (2006).

As a result of increased irrigation use, which has lowered water availability per person in India by 60% over the past 50 years and contributed to the deterioration of the land, water availability is continuously declining. We also export water in a sense (virtual water) in addition to agricultural exports because we are one of the top exporters of crops that require a lot of water, such as rice and sugarcane. This decrease in productivity not only quickens the pace of climate change but also slows down subsequent development cycles. Singh, T. (2017).

Estimates show that agricultural productivity is negatively impacted by climate change by 4-9% annually, resulting in a loss of 1.5% of GDP annually. India's agricultural productivity is lower than that of the majority of other nations. As an illustration, the productivity of maize, rice, groundnuts, and pulses is, respectively, 54%, 40%, 31%, and 33% below the global average. With only 2.4% of the world's landmass and 18% of the world's population, all these factors have made it difficult to guarantee food security. In order to mitigate the effects of climate change on agriculture and 145 million homes, we have a big and onerous task ahead of us. Gautam, M. (2016).

India is a world leader in agriculture. It boasts the largest cattle herd (buffalo), largest area planted to wheat, rice, and cotton, and is the largest producer of milk, pulses, and spices in the world. Rice, wheat, cotton, sugarcane, farmed fish, sheep and goat meat, fruits, vegetables, and tea are among the products it produces in second place. The country has a total area under cultivation of roughly 195 million hectares, with about 125 million hectares receiving rain-fed agriculture and 37% receiving irrigation. (70 million hectares). To improve the welfare of India's rural poor and advance the country's overall development, three agricultural sector issues must be overcome. Uppal, R. K. (2009).

1. Increasing agricultural productivity per unit of land: Since nearly all arable land is now under cultivation, this should be the primary driver of agricultural development. Water supplies are also scarce, and irrigation must compete with the expanding needs of industry and cities. All available tools must be used to boost production, including raising yields, switching to high-value crops, and creating value chains to cut down on marketing expenses.

2. Reducing rural poverty by integrating agricultural and non-farm work into a socially inclusive strategy: The underprivileged, the landless, women, scheduled castes, and tribes should also benefit from rural development. Strong regional disparities also exist; the majority of the poor in India reside in rain-fed regions or the eastern Indo-Gangetic plains. Reaching these groups is difficult. Although there has been progress—the percentage of rural residents who are considered poor has decreased from about 40% in the early 1990s to less than 30% by the mid-2000s—the quick reduction is clearly required. Therefore, reducing poverty is a key component of the government's and the World Bank's efforts to develop rural areas. Michael Dev, S. (2014).

3. Ensuring that agricultural development reflects the needs of food security: India's Green Revolution in the 1970s saw a sharp increase in food grain production, allowing the nation to become self-sufficient in food grains and end the threat of starvation. Due to agricultural intensification in the 1970s and 1980s, there was a rise in the demand for rural workers, which resulted in higher salaries and a decrease in rural poverty as food costs fell. Grain yields climbed by only 1.4% annually in the 2000s, and agricultural growth slowed to an average of 3.5% per year between the 1990s and 2000s. It is now quite concerning that agricultural growth is slowing down.

In comparison to China, Vietnam, and Indonesia, India produces about half as much rice. Most other agricultural commodities share the same characteristics. Maikhuri, R. (2013).

In order to move the industry away from the outdated institutional and policy governance and towards a more productive, globally competitive, and diversified agriculture sector, policymakers will need to start or end policy measures and public programmes.

Priority areas in Indian Agriculture

1. Enhancing Agricultural Productivity, Competitiveness and Rural Development

Advancing agricultural extension and research, and promoting new technologies: One of the top priorities for agricultural growth in India is a significant overhaul and strengthening of the country's agricultural research and extension infrastructure. Due to a persistent lack of operations and infrastructure, the replacement of ageing researchers, or widespread access to cutting-edge technologies, these services have gotten worse over time. Beyond the subpar packages of the past, research now offers little. Farmers receive little new information from public extension services, which are suffering. Between research and extension, or between these services and the commercial sector, there is little connection.

Improving water resources and irrigation/drainage management: In India, agriculture uses the most water. The necessity for water planning and management on a river basin and multi-sectoral basis has, however, been underscored by the growing rivalry for water among industry, home usage, and agriculture. It is anticipated that there will be less water available for irrigation as urban and other demands rise. There are ways to significantly boost irrigation productivity ("more crop per drop") that can be transported via pipe, better on-farm water management practices, and the adoption of more effective delivery systems like drip irrigation. Additionally, managing groundwater is necessary rather than overusing it. The use of electricity fees or community monitoring of use as incentives to reduce water pumping has not yet advanced past intermittent experiments. Other top priorities include: (i) modernising the irrigation and drainage sectors to incorporate farmers' and other organisations' involvement in the management of irrigation water; (ii) enhancing cost recovery; (iii) rationalising public spending by giving priority

to implementing initiatives that will yield the highest returns; and (iv) allocating enough funds for operation and maintenance to ensure the sustainability of the investment.. Tyagi, V. (2012).

Facilitating the diversification of agriculture for high-value commodities Encouragement of farmers to diversify into high-value commodities will be crucial for greater agricultural growth, particularly in rainfed regions with high levels of poverty. Agroprocessing expansion and the development of competitive value chains from producers to metropolitan centres and export markets also have a lot of promise. While farmers and business owners should be in charge of the diversification drive, the government can do the greatest good by removing restrictions on marketing, transportation, export, and processing. It may also act in a small regulatory capacity, taking care to avoid creating obstacles.

Promotion of high growth commodities: There is significant room for growth in some agricultural sub-sectors, particularly dairy. 70% of India's rural families, the most of which are impoverished and headed by women, depend on the livestock sector for income, which accounts for more than a quarter of the agricultural GDP and more than a third of the country's total revenue. Milk production has grown quickly, at a rate of roughly 4% annually, but future domestic demand is anticipated to rise by at least 5% annually. However, inadequate nutrition, unavailability of veterinary care, cows with poor genetic quality, and other factors reduce milk production. A focused programme to deal with these restrictions could increase output and reduce poverty. Venkatesh, P., & Zhang, Y. (2015).

Developing Markets, Agricultural Credit and Public Expenditure: Due to India's history of extensive government participation in agricultural marketing, both internal and external trade is restricted, which makes it difficult and expensive to market and transport agricultural commodities. Even so, private sector investment in agro-processing, value chains, and marketing is increasing, albeit much more slowly than it should. Although certain limitations are being removed, much more needs to be done to promote diversification and lower consumer prices. Another criterion is to make it easier for farmers to access rural finance because it might be challenging for them to obtain credit. Furthermore, government spending on the industry has been increasingly dominated by subsidies for irrigation, fertilizer, and power, which now outpace

investment spending by a factor of four and displace key objectives like agricultural research and extension. Devendra, C. (2012).

2. Poverty alleviation and community work

The base for increasing the incomes of the 170 million or more rural residents who live in poverty will come from agricultural expansion alone, but additional steps are required to make this growth inclusive. For instance, it has been discovered that a rural livelihoods programme that enables communities to become self-sufficient is especially effective and open to scaling up. The programme encourages the creation of self-help groups, raises community savings, and supports neighbourhood projects to boost local income and employment. These impoverished people's organisations can negotiate better prices and market access for their goods by unionising to form larger groups. They can also exert political influence over local governments to get better technical and social services. Are. Women and low-income families are particularly well-served by these self-help organisations. A. O., & Rasheed, S. V. (2013)

3. Sustaining the environment and future agricultural productivity

Due to excessive water pumping for agricultural purposes, groundwater levels are declining in several areas of India. On the other hand, some irrigated areas' soil is becoming salted as a result of water logging. On the other hand, agricultural practises must be adopted in rain-fed regions, where the majority of the rural population lives, to prevent soil erosion and improve rainfall absorption. Measures for mitigating over-exploitation and forest land degradation are needed. Most of these issues have remedies that have been tested. The most common is through watershed management programs, in which localities engage in land planning and implement agricultural practises that protect soils, boost water absorption, and increase production through higher yields and crop variety. The problem, though, is how to expand such projects to reach more of the nation. It's important to take climate change into account. Rain-fed regions will be most affected by more extreme events, such as drought, floods, and irregular rainfall. The best agricultural programme for promoting novel crop varieties and enhanced farming methods may be watershed programs, which are related to agricultural research and extension projects. However, other trends, like livelihood initiatives and the growth of non-farm employment, might also be significant. G., & Welch, D. J. (2017).

World Bank Aid

The World Bank's Agriculture and Rural Development Program in India has 24 active projects and a total of nearly $5.5 billion in net commitments from IDA and IBRD, making it the programme's largest globally in terms of dollars. When investments in human development, rural finance, and rural roads are taken into account, the number is considerably larger. Even still, this sum is little in comparison to the cash provided by the federal and state governments for public programmes that promote agriculture. While part of the Bank's agricultural and rural development support is provided at the national level as well, much of it is focused on state-level aid. Yadav, M. (2017).

R&D in agricultural technology is carried out through two national-level programmes (National Agricultural Technology Project and National Agricultural Innovation Project) that are implemented over the entirety of India and are coordinated by the Indian Council of Agricultural Research (ICAR), Government of India. Technology transfer in agriculture: The Agricultural Technology Management Agency (ATMA) model is one of the new methods for disseminating agricultural technology that has helped Assam and Uttar Pradesh diversify their agricultural industries. This extension strategy is currently being expanded throughout India.

Improved irrigation water distribution is supported by the World Bank, from projects that encompass extensive irrigation infrastructure to small local tanks and ponds. Projects assist the improvement of groundwater management practises and the building of water institutions in many states (Andhra Pradesh, Karnataka, Maharashtra, Rajasthan, Tamil Nadu, and Uttar Pradesh). (for example, in the upcoming Rajasthan Agricultural Competitiveness Project).

Sustainable agricultural methods include the development of watersheds and rainfed agriculture (in Karnataka, Himachal Pradesh, and Uttarakhand), initiatives to improve soil quality (in Uttar Pradesh), and more recently, better groundwater management techniques. (for example, in the upcoming Rajasthan Agricultural Competitiveness Project). With increased bank backing for rural livelihood programmes started by several states (Andhra Pradesh, Bihar, Madhya Pradesh, Orissa, Rajasthan, and Tamil Nadu), India will soon have better access to rural finance, higher women engagement in rural economic activity, and both. utilising the National Rural Livelihoods Mission. Hoda, A., & Terway, P. (2015).

Conclusion

India was one of the first few emerging nations to priorities food security as a policy priority, and the Green Revolution helped India become self-sufficient in the production of food grains in the 1970s. Technology and innovation will be at the forefront of the next wave of changes in agriculture as we work to promote sustainable food production and mitigate the effects of climate change. It is necessary to develop appropriate agri-reforms and incentive systems to encourage farmers to adopt sustainable practices. Additionally, it is important to support organisations that can have an impact through sustainable solutions, educate consumers and farmers, and transform agriculture from subsistence to demand-driven.

By advising the Indian government on ways to improve the actuarial design and implementation of insurance programmes. (such as rating methodology and product design, index insurance, use of mobile and remote sensing techniques for yield measurement, etc.). Increasing farmers' access to agricultural markets through investments and legislative changes made as part of the Maharashtra Agricultural Competitiveness Project, which intends to restructure regulated wholesale markets and give farmers access to alternative markets. By providing non-lending technical support and analytical work in support of the Government of India's National Land Records Modernization Program, one can advance the land policy agenda.

Improved rural connection through IDA funding for the Prime Minister's National Rural Roads Program (PMGSY) and by collaborating with rural poor and small farmers through self-help groups (including SHG federations), water user associations, and farmer producer organisations. Via connections to public services. Recent approval of the National Rural Livelihoods Mission by the Bank's Executive Board supports the SHG strategy through a pan-Indian perspective.

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