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INDIA'S AGRI CRISIS: THE SILENT EROSION OF LIVELIHOODS & ECOSYSTEMS

Ramendra Pratap Singh[1], Himanshu Trivedi[2], Abhishek Tiwari[3], Khushi Singh[1]

Abstract: -

The Indian agrarian crisis is harming farmers and the environment. Farmers are facing problems such as drought, flooding and soil degradation due to the excessive use of chemicals. Water scarcity and the loss of soil health are making it difficult to grow crops. Many farmers are in debt, unable to make enough from their crops. Small parcels and volatile prices add to their problems. To remedy this, India needs better farming techniques, fair prices, and loan and training support for farmers. Protecting the soil and water is vital to their future.

Keywords: Agrarian crisis, Farmer's livelihood erosion, Ecosystem damage, Climate change impact, Debt and financial distress, Price fluctuation, Lack of mechanization, Policy failure.

Introduction:

India has a very old farming tradition. Long ago, farmers lived in harmony with nature. They used natural methods that kept the soil healthy, saved water, and protected different kinds of plants and animals. But with time—especially after the Green Revolution—farming started todepend more on chemical fertilizers, pesticides, and crops that need a lot of water. These changes helped increase food production, but they also created many problems.

Today, Indian farmers face many struggles. Their incomes are going down, debts are increasing, crops often fail, and the weather has become difficult to predict. At the same time, natural resources like soil and water are getting damaged quickly. This crisis is growing quietly and is harming both farmers

Ramendra Pratap Singh[1], Himanshu Trivedi[2], Abhishek Tiwari[3], Khushi Singh[1]

[1] M.sc.Ag. (hort.) Fruit Science, SAAST, Chhatrapati Sahuji Maharaj University, Kanpur.

[2]Associate Professor, Horticulture, SAAST, Chaatrapati Shahuji Maharaj University, Kanpur

[3] Assistant Professor, Soil Science and Agricultural Chemistry, SAAST, Chhatrapati Shahuji Maharaj University, Kanpur

lives and the environment. This article looks at how farming methods in India have changed over time and how these changes have created a serious problem that now needs urgent action and solutions.

Crisis and Change in India's Agricultural Sector

Farming Crisis - Today, India's agricultural crisis involves unpredictable weather, low crop prices, and high seed and fertilizer costs. Many farmers are struggling with debts and a lack of technology. This is hurting their incomes and food supplies. Urgent support, better policies and modern farming methods are needed to ensure that agriculture can have a stable future.

Farmer Livelihood - Farmers' lives are much harder today than they were in the past. Many face precarious incomes because of low crop prices and weather patterns such as drought and floods. The high cost of seeds, fertilizer, and machines adds to the financial strain. Most farmers have small farms, which limits their use of modern technologies and reduces productivity. They often rely on high-interest loans, which cause debt and stress. Poor market access and intermediaries reduce their profits. These challenges are threatening agriculture as a sustainable livelihood and need urgent support and better policies to improve it.

Environment Damage - The environmental damage from Indian agriculture goes back to ancient times, from land depletion and deforestation in early agriculture to the heavy use of chemicals in the green revolution, to present problems such as water depletion, pesticide pollution, and climate impacts. Historically, agriculture has changed landscapes and ecosystems, sometimes creating food security, but at the expense of the environment. In modern times, the excessive use of fertilizers and irrigation has reduced soil health, damaged groundwater and damaged biodiversity, while runoff pollution has affected rivers and wetlands. Policy reforms and sustainable practices are now essential to reduce damage and safeguard ecosystems for the future of agriculture.

Policy Effects - The crisis in the Indian agricultural sector is therefore driven by a combination of policy failures at central and state level, with the burden of responsibility shared between several actors.

Government policy gaps: inconsistent or delayed policy implementation often fails to address farmers' real needs, such as timely access to credit, fair market prices and infrastructure development.

Market reforms: Liberalization and insufficient regulation have exposed farmers to volatile prices and the exploitation of intermediaries and private purchasers, which

has damaged long-term sustainability of agriculture.

Subsidy and resource management: Policies promoting the excessive use of chemical fertilizers and water subsidies have led to environmental degradation and have exacerbated long-term sustainability of agriculture, which requires more farmer-oriented reforms and sustainable approaches to address the underlying problems.

Sustainable Situation - Farmers can adopt sustainable solutions to overcome crises. Using natural fertilizers and compost instead of chemicals helps keep soil healthy and fertile. Water-saving methods like drip irrigation reduce waste and protect water sources. Crop rotation and growing diverse plants improve soil nutrients and prevent pests without harmful pesticides. Organic farming and natural pest control protect the environment and reduce costs. Farmers should also use modern tools like AI and sensors to monitor crops and optimize resources. These methods support long-term farming success, protect nature, and improve farmers' incomes, ensuring a stable and eco-friendly future**.**

Government and Education: Reviving Farming:-

Access To Subsidies And Financial Support - Government agricultural subsidies help farmers by lowering their costs and boosting their incomes. These subsidies include financial support for the purchase of seeds, fertilizers and irrigation water at reduced prices. Farmers also receive direct cash through schemes such as PM KISAN, which provides income support to small and marginal farmers. Subsidies make agricultural inputs affordable, increase food production and help farmers to remain financially stable and productive.

Infrastructure Development - Modernization of infrastructure helps farmers by building better storage, roads, irrigation, and markets. These devices reduce losses, reduce costs and facilitate the sale of the product. They allow for early delivery, reduce spoilage and promote new farming practices. Strong infrastructure boosts productivity, incomes and the resilience of rural communities**.**

Affording Credit and Loan Facilities - Affordable credit and loan options assist farmers by giving them straightforward access to funds for their agricultural needs. The Kisan Credit Card (KCC) scheme enables farmers to obtain timely loans of up to Rs3 lakh for purchasing seeds, fertilizers, equipment, and other necessary expenses. It provides flexible repayment terms, low interest rates (approximately 7%), and no collateral is required for loans up to Rs1.6 lakh. Additionally, the scheme includes insurance coverage for farmers. This support allows

farmers to invest in improved farming practices, alleviating financial pressures and enhancing productivity. KCC can be accessed through banks and cooperatives, ensuring that it is widely available to farmers.

Training And Capacity Building - Training and capacity development in modern agriculture equips farmers with new techniques and enhances their skills. Initiatives from organizations like UPL Centre for Agriculture Excellence provide complimentary hands-on training in scientific farming practices. Research stations offer residential programs focused on value-added products and agricultural business skills. Farmers gain knowledge on soil health, irrigation, crop management, and innovative technologies to boost crop yields. These training opportunities enhance productivity, increase income, and make farming more appealing to younger generations. They also foster sustainable farming through expert presentations and practical sessions, effectively preparing farmers for upcoming challenges.

Why many farmers quit farming:-

Many farmers give up farming for a variety of reasons. Firstly, farming frequently yields little to no return after expenses for labor, seeds, and fertilizer. In addition to agricultural losses due to pests and harsh weather, many farmers are in debt. Their productivity is reduced by their limited access to sophisticated machinery on small landholdings. Furthermore, inadequate infrastructure and inadequate irrigation make farming more difficult. Because city employment are more stable and pay more, many young people choose them. Frustration arises when government programs don't always reach all farmers or take into account local requirements. Since not all commodities are covered by the Minimum Support Price (MSP) system, many farmers are left without fair pricing. These issues force farmers to relocate to cities or quit farming in search of other employment.

Solution : To ensure that farmers do not leave the farming profession, it is imperative for the government to amend fundamental policy flaws. The Minimum Support Price (MSP) should be expanded to include all crops at fair market prices. Crop insurance must be improved to allow for swift claims and broader coverage options. Access to affordable credit should be made straightforward to prevent farmers from falling into debt traps. There is an urgent need for upgrades in infrastructure, including roads, irrigation, and storage facilities. Supporting farmer producer organizations can enhance market access and increase income. The current government targets often fail to address the actual needs of small farmers, focusing excessively on broad objectives. It is

essential to implement farmer-centered, transparent, and localized policies with better execution to keep farmers engaged in agriculture**.**

Conclusion

The agricultural crisis in India is quietly wreaking havoc on the lives of farmers and the environment. Small farmers are struggling with low incomes, debts, and unpredictable weather, which drives many to abandon farming altogether. At the same time, harmful practices such as excessive chemical usage and over-extraction of water are damaging soil, water resources, and biodiversity. This dual crisis poses a serious threat to food security and rural life. To safeguard both farmers and the environment, it is imperative to advocate for fair prices, implement eco-friendly farming practices, and promote sustainable water usage. By caring for both people and the earth, India's agriculture can thrive once more, ensuring a healthy future for all.

Reference

1. Gordon, J.C., Bentley, W.R., 1990. A Handbook on the Management of Agroforestry Research. Winrock Institute, New Delhi.
2. Chand, R (2017), 'Doubling Farmer's Income: Rationale, Strategy, Prospects and Action Plan', NITI Policy Paper No. 1/ 2017, NITI Aayog.
3. Chadha, V. and Kaur, S. (2019). Agrarian Crisis in India: Genesis and Dimensions. In Agricultural Crisisand Rural Industrialization in Punjab (pp. 55-66), New Delhi Publishers, New Delhi.
4. Shiva, V. and Jalees, K. (2006). Farmers' Suicide in India. Research Foundation for Science, Technologyand Ecology, New Delhi.
5. Kiran K. (2012). Agricultural Unemployment in India. International Journal of Multidisciplinary EducationalResearch, 1 (3), 263-265.
6. Kumar, E. N. (2012). Agrarian Crisis: Farmers' Suicides in Warangal District. United Kingdom: Cambridge Scholars Publishing.