

**Pluralistic Agricultural Extension in India: Evolving Models, Recent Developments, and Future Directions**

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**Abstract: -**

India's agricultural sector is navigating complex challenges from population growth, limited resource access, and climate change. This has catalyzed a shift from centralized agricultural advisory systems to pluralistic extension models. Pluralism in extension involves multiple stakeholders—government bodies, private enterprises, NGOs, and civil society—collaborating to enhance reach, specialization, and service delivery. This article examines India's evolving pluralistic extension landscape by tracing historical roots, highlighting innovations, and addressing ongoing challenges. Drawing insights from the latest review by Saha et al. (2025), it underscores the urgent need for coordinated, inclusive, and technology-enabled frameworks to ensure sustainable agricultural development.

**KEY WORDS:** Public-private partnership, NGO, Pluralism.

**Introduction:**

India's agricultural extension system has undergone a transformation due to growing population demands, limited public sector reach, and the emergence of diverse actors. A pluralistic extension approach, involving public, private, and civil society actors, has emerged as an effective model to

bridge advisory gaps and improve farmer access to information, technology, and markets. In 2023, nearly 44% of India's population depended on agriculture for livelihood, with the total population reaching 1.43 billion (Saha et al., 2025).

**Historical Overview of Extension Services in India**

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The development of extension services began pre-independence with community-led efforts like the Gurgaon and Marthandam projects. Post-independence, major initiatives included the Community Development Programme (1952), Intensive Agricultural District Programme (1960), and Training and Visit (T&V) system (1974), later followed by decentralised approaches like ATMA. However, these efforts faced challenges in reach, relevance, and flexibility (Meena et al., 2013).

### **Emergence and Importance of Pluralism**

Pluralism emerged as a response to the inefficiencies in centralised systems. The pluralistic model brings together multiple actors—government bodies, NGOs, farmer organizations, private input dealers, and academic institutions—offering specialized services, technical knowledge, and resource mobilisation. It enables demand-driven service delivery and leverages complementary strengths of stakeholders (Bitzer et al., 2016).

### **Key Stakeholders in Pluralistic Extension**

- ⇒ Department of Agriculture and Cooperation (DAC), which coordinates policies and training (Saha et al., 2025).
- ⇒ Indian Council of Agricultural Research (ICAR), overseeing 99 institutes and 53 agricultural universities (Saha et al., 2025).

⇒ NGOs like PRADAN and BAIF contribute to inclusive development.

⇒ Around 580,000 cooperatives, including 375,000 agriculture-focused ones, serve over 280 million farmers (Singh, 2024).

⇒ Input dealers trained under DAESI act as local advisors since 2003 (Handa & Khan, 2024).

### **Recent Innovations and Trends (Post-2020)**

Since 2020, digitization and climate-smart agriculture have reshaped extension models. The Kisan Sarathi platform launched in 2021 integrates expert advice through ICT (MoA&FW, 2022). KVKs have expanded into knowledge hubs, with 731 operational across India. In 2023, over 21 million farmers accessed digital platforms for extension information (PIB, 2023). The role of agri-startups, satellite advisory systems, and AI-powered diagnostics has grown notably (FAO, 2022).

### **Challenges and Opportunities**

While pluralism promotes innovation, it brings challenges of coordination, information quality, and overlapping services. Fragmented efforts, conflicting objectives, and unequal ICT access limit outreach. Strengthening monitoring, inter-agency linkages, farmer feedback loops, and gender-inclusive strategies are vital for effective pluralism (Saha et al., 2025).

## Conclusion

India's pluralistic extension system presents an opportunity to reach its 130 million farm households with tailored, inclusive, and sustainable services. Moving from hierarchical delivery to collaborative ecosystems that align research, markets, and farmer needs is key. Investment in digital tools, capacity building, and pluralism-friendly policy support will ensure long-term impact (Swanson & Rajalahti, 2010).

## References

1. Bitzer, V., Wongtschowski, M., Hani, M., Blum, M., & Flink, I. (2016). Towards inclusive pluralistic service systems. FAO.
2. FAO. (2022). Digital agriculture: Transforming extension in the 21st century.
3. Handa, T., & Khan, M. A. (2024). Impact of DAESI programme on skill development of Agri input dealers: A path analysis. IJAE&SD, 7(1), 245-248.
4. Meena, M., Singh, K. M., & Swanson, B. E. (2013). Pluralistic agricultural extension system in India: Innovations and constraints. <https://dx.doi.org/10.2139/ssrn.2293788>
5. MoA&FW. (2022). Annual report 2021–22. Government of India.
6. PIB. (2023). Over 21 million farmers use digital agri platforms in India. Press Information Bureau.
7. Saha, P., Prusty, A. K., & Nanda, C. (2025). An overview of pluralism in agricultural extension and advisory services. IRJMS, 6(1), 131–138.
8. Singh, G. (2024). Assessing the economic impacts of farmer producer organizations. Indian Journal of Agricultural Economics, 79(1), 1–15.
9. Swanson, B. E., & Rajalahti, R. (2010). Strengthening agricultural extension and advisory systems. The World Bank.