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Popular Article

Women in Extension: Gender Inclusivity and Empowerment through Tailored Training Programs

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Abstract

Women have an essential role in global agriculture, making important contributions to food production, household nutrition, and rural livelihood stability. However, gender inequities continue to impede their access to extension services, agricultural inputs, and decision-making platforms. The transition of extension systems from top-down approaches to participatory and inclusive models has created opportunity to empower female farmers. Tailored training programs that take into account women's specific requirements, time restrictions, and socio-cultural contexts have shown to be successful instruments for gender mainstreaming in agriculture. This article examines the significance of gender inclusion in extension, describes successful women-focused training projects, and demonstrates how digital innovations and community-based tactics may improve women's involvement and leadership in extension services. Promoting women's empowerment in extension is more than simply a social responsibility; it is critical to ensuring long-term agricultural growth and food security.

Keywords: Gender inclusivity, women empowerment, rural development, tailored training, agricultural extension, ICT for women, smallholder farmers.

Introduction

Agricultural extension has long been seen as an important driver of rural development and technology transmission. Traditionally, however, extension programs were predominantly male-oriented, focused on male farmers as "household heads," ignoring



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women's critical responsibilities in crop production, livestock care, and post-harvest management. Women make up about 43% of the global agricultural work force (FAO, 2021), but women get fewer than 15% of extension resources worldwide. This gender disparity impedes productivity, innovation uptake, and equitable growth in rural communities.

Recognizing this discrepancy, modern extension models prioritize gender inclusiveness and empowerment. Extension systems are transitioning from information transmission to colearning techniques that value women's views and experiences. Tailored training programs for women have demonstrated promising outcomes in upgrading skills, increasing confidence, and improving livelihoods throughout developing nations.

The Importance of Gender Inclusivity in Extension

Gender inclusion guarantees that men and women have equal access to agricultural knowledge, resources, and decision-making opportunities. When female farmers are empowered through training and assistance, agricultural production and household welfare improve significantly (World Bank, 2020).

Women frequently maintain small plots, household gardens, or cattle, which are critical for food and nutritional security. Traditional extension systems, however, continue to underserve them due to societal constraints, a lack of mobility, and insufficient education (Meinzen-Dick et al., 2019). Inclusive extension models guarantee that women participate not just as recipients of knowledge, but also as active agents of change and creativity.

Gender-responsive extension services bring multiple benefits:

- Improved access to modern technologies and farm inputs.
- Enhanced confidence and leadership among women.
- Increased family income and food security.
- Strengthened community networks and peer learning.

> Barriers Faced by Women in Extension Services

Despite advances, several hurdles remain to prevent women from fully participating in agricultural extension programs.

- 1. Cultural and social norms: In many civilizations, gender roles limit women's mobility and public involvement in training activities.
- **2. Time constraints:** Women combine numerous responsibilities—farming, children, and housework—leaving little time for training.
- **3. Limited Resources:** Women have fewer accesses to land, financing, and agricultural inputs, limiting their capacity to apply new information.



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- **4.** Low Representation: Few women work as extension agents or trainers, resulting in male-dominated communication channels.
- **5. Information Gap:** Extension messages are frequently not targeted to women's roles or businesses, such as home gardening or small-scale animal farming.

Addressing these problems demands careful planning and inclusive initiatives that prioritize women's needs and situations in extension delivery.

Providing tailored training programs for women farmers

Tailored training programs are created to fit the special requirements of female farmers by altering content, structure, scheduling, and delivery modalities. These projects have received international recognition for their capacity to promote gender equality and empower women in agriculture.

1. Participatory and Community-Based Training

Participatory techniques include women directly in issue identification and solution development. Farmer Field Schools (FFS) for women, for example, encourage experiential learning by having women watch, explore, and make choices together. Women-only FFS groups in Kenya and the Philippines have led to considerable improvements in pest management and agricultural output.

2. Flexible training schedules

Women-oriented training programs sometimes use flexible scheduling to meet home commitments. Short-term programs and community-based locations lessen travel constraints while increasing participation.

3. The use of female trainers and role models

The presence of female extension personnel fosters trust and involvement among women farmers. Peer-to-peer learning approaches, in which experienced female farmers teach others, are particularly effective in conservative areas (Manfre et al., 2013).

4. ICT-enabled learning

Mobile-based advice platforms, radio programs, and digital applications have emerged as game changers in women's training. For example, India's mKisan webpage and Kisan Call Centres offer women farmer's real-time agricultural guidance in local languages (Chand et al., 2021). Digital literacy initiatives guarantee that women have access to, analyze, and apply this knowledge successfully.



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5. Skill Development and Entrepreneurship Training

Tailored programs also encourage income-generating activities including mushroom growing, beekeeping, and food processing. These not only improve women's livelihoods, but also boost their confidence as entrepreneurs and community leaders.

Success Stories from the Field

Several global efforts highlight the transforming effect of gender-inclusive extension.

- Self-Employed Women's Association (SEWA), India: Through capacity-building workshops, SEWA has taught thousands of rural women in agribusiness and collective marketing, therefore increasing their economic resilience.
- African Women in Agricultural Research and Development (AWARD): This fellowship program helps African women in agriculture develop their scientific and leadership skills while also encouraging mentorship and creativity.
- **Digital Green Initiative:** Working with local extension agencies, Digital Green creates interactive films to disseminate best practices. Women farmers who see their colleagues on TV are more willing to adopt new technology.
- Nepal's Women Farmer Groups: Community-based training conducted by female facilitators enhanced vegetable output and reinforced women's decision-making responsibilities in cooperatives.

Role of ICT in Empowering Women through Extension

Information and communication technologies (ICTs) are transforming the extension landscape. For women, who frequently confront mobility and time restrictions, ICT-based solutions provide adaptable and inclusive learning options.

Mobile phones, interactive voice response (IVR) devices, and WhatsApp groups enable women to obtain agricultural information without leaving their homes. In East Africa, the E-Women Platform connects rural women farmers to specialists, markets, and peer networks. Similarly, Farm Radio International airs women-led agricultural programming that raise awareness about better farming techniques and climate-smart practices.

ICT products may be further adapted for women by including local languages, voice-based material (for low-literacy users), and gender-sensitive design that takes into account societal settings.

Empowerment beyond Training: Leadership and Policy Integration

Training programs are the first step toward empowerment, but true change happens when women take on leadership positions in agricultural governance. Encouraging women



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to act as farmer group leaders, cooperative managers, or extension agents establishes role models and ensures that women's viewpoints are considered in policy choices.

Governments and organizations must also implement gender mainstreaming strategies in agricultural extension. The FAO's Gender in Agriculture Policy Support Tool and India's National Policy for Farmers (2007) both emphasize gender inclusion and women's engagement in agricultural development projects.

Furthermore, financing agencies such as the World Bank and the International Fund for Agricultural Development (IFAD) are increasingly requiring gender-sensitive metrics in project design and assessment, fostering inclusive accountability.

Challenges and the Road Ahead

Although progress has been achieved, significant problems remain:

- Insufficient financing for gender-responsive programming.
- Insufficient gender-disaggregated data to develop effective treatments.
- Limited coordination between public and commercial sectors. Traditional institutions oppose women's leadership responsibilities.

To address these issues, governments, NGOs, and research institutions must collaborate to build gender-transformative extension systems. Integrating males as allies, encouraging co-education, and integrating adolescents can also lead to long-term behavioral change.

Conclusion

Women are the foundation of global agriculture, yet their contributions are frequently overlooked and disregarded. Gender-inclusive extension and training programs benefit women while simultaneously improving agricultural production, food security, and social equality. A gender-responsive extension system based on inclusion, participatory learning, and ICT innovation may help smallholder farming communities become more resilient and affluent.

Empowering women via targeted extension services is about more than simply fairness; it is also about efficiency, sustainability, and the future of agriculture. Investing in women's education and leadership will result in not just better harvests, but also stronger, more inclusive communities.

References

Chand, R., Srivastava, S. K., & Singh, J. (2021). ICT-enabled agricultural extension and advisory services: A case of mKisan in India. Journal of Agricultural Extension and Rural Development, 13(2), 45–56.



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- Davis, K., Nkonya, E., Kato, E., Mekonnen, D. A., Odendo, M., & Miiro, R. (2012). Impact of Farmer Field Schools on agricultural productivity and poverty in East Africa. World Development, 40(2), 402–413.
- FAO. (2021). The State of Food and Agriculture 2021: Making agri-food systems more resilient to shocks and stresses. Rome: Food and Agriculture Organization of the United Nations.
- Manfre, C., Rubin, D., Allen, A., Summerfield, G., Colverson, K., & Akeredolu, M. (2013). Reducing the gender gap in agricultural extension and advisory services: How to find the best fit for men and women farmers. MEAS Discussion Paper 2, USAID.
- Meinzen-Dick, R., Quisumbing, A., Behrman, J., Biermayr-Jenzano, P., Wilde, V., Noordeloos, M., & Beintema, N. (2019). Engendering agricultural research, development and extension. IFPRI Research Monograph.
- World Bank. (2020). Gender in Agriculture Sourcebook. Washington, DC: World Bank.
- Farnworth, C. R., & Colverson, K. E. (2015). Building a gender-transformative extension system: The case for women's empowerment. Journal of Gender, Agriculture and Food Security, 1(1), 20–39.
- Quisumbing, A. R., & Pandolfelli, L. (2010). Promising approaches to address the needs of poor female farmers: Resources, constraints, and interventions. World Development, 38(4), 581–592.
- Ragasa, C., Berhane, G., Tadesse, F., & Taffesse, A. S. (2013). Gender differences in access to extension services and agricultural productivity. The Journal of Agricultural Education and Extension, 19(5), 437–468.
- van den Berg, H., & Jiggins, J. (2007). Investing in farmers: The impacts of Farmer Field Schools in relation to integrated pest management. World Development, 35(4), 663–686.

