

Role of Agricultural Extension in Attracting Rural Youth towards Agriculture

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INTRODUCTION

Agriculture is one of the most important sectors for economic development, employment generation, and food security, particularly in developing countries such as India. A significant proportion of the rural population depends on agriculture for their livelihood. Despite its importance, the interest of rural youth in agriculture has been declining steadily over the past few decades.

Many young people migrate to urban areas in search of better employment opportunities, leaving agriculture largely dependent on an aging farming population. This trend poses a serious challenge for the sustainability and future growth of the agricultural sector. Several factors contribute to the declining interest of rural youth in agriculture, including low farm income, high production risks, lack of access to land and credit, limited exposure to modern agricultural technologies, and inadequate market opportunities. In this context, agricultural extension services play a crucial role in attracting and retaining rural youth in agriculture. Extension agencies serve as a bridge between agricultural research institutions and farmers by disseminating modern agricultural technologies, organizing training programs, and promoting agricultural entrepreneurship among young people.



2. Importance of Youth Participation in Agriculture

Rural youth represent a dynamic and productive segment of the population that can significantly contribute to agricultural development. Their participation in agriculture is essential for ensuring long-term sustainability and modernization of the sector. The involvement of youth in agriculture can contribute to:

- ✓ Adoption of modern agricultural technologies
- ✓ Increased agricultural productivity and efficiency
- ✓ Development of innovative farming practices
- ✓ Promotion of agricultural entrepreneurship
- ✓ Strengthening rural economies
- ✓ Ensuring future food security

Young farmers are generally more open to innovation and technological advancements. They are also more likely to adopt digital technologies, mechanization, and improved management practices. Therefore, encouraging youth participation in agriculture is essential for accelerating agricultural transformation.

3. Role of Agricultural Extension in Engaging Rural Youth

Agricultural extension services play a significant role in motivating rural youth to participate in agriculture. Extension agencies facilitate knowledge dissemination, skill development, and access to resources that enable youth to adopt modern agricultural practices and develop agribusiness enterprises.

3.1 Awareness Creation about Opportunities in Agriculture

One of the primary roles of extension services is to create awareness among rural youth about the potential of agriculture as a profitable and innovative sector. Through seminars, workshops, awareness campaigns, and agricultural exhibitions, extension workers highlight various opportunities available in modern agriculture, including:

- ✓ Agribusiness development
- ✓ Protected cultivation
- ✓ Organic farming
- ✓ Precision agriculture

- ✓ Value addition and food processing
- ✓ Agricultural marketing and supply chains

These initiatives help change the perception of agriculture from traditional subsistence farming to a modern and profitable enterprise.

3.2 Skill Development and Training Programs

Skill development is essential for enabling rural youth to successfully engage in agricultural activities. Agricultural extension services organize training programs that provide technical knowledge and practical skills related to modern farming practices. Training programs may focus on areas such as:

- ✓ Improved crop production technologies
- ✓ Farm mechanization
- ✓ Post-harvest management
- ✓ Agribusiness management
- ✓ Food processing and value addition
- ✓ Agricultural marketing and entrepreneurship

Such skill development initiatives enhance the confidence and competence of rural youth, enabling them to pursue agriculture as a viable career.

3.3 Promotion of Agricultural Entrepreneurship

Agricultural extension services encourage rural youth to become agri-entrepreneurs by promoting innovative agricultural enterprises. Examples of youth-led agricultural enterprises include:

- ✓ Mushroom cultivation
- ✓ Beekeeping
- ✓ Floriculture
- ✓ Nursery management
- ✓ Poultry and dairy farming
- ✓ Hydroponics and vertical farming

These enterprises provide additional income opportunities and reduce dependence on traditional crop production systems.

By supporting agripreneurship, extension services help transform rural youth from job seekers into job creators.

3.4 Demonstration of Modern Agricultural Technologies

Field demonstrations are an effective extension method for motivating rural youth to adopt modern agricultural technologies. Through

demonstration plots and field days, extension workers showcase the benefits of scientific farming practices such as:

- ✓ Precision farming techniques
- ✓ Drip and sprinkler irrigation systems
- ✓ High-density planting systems
- ✓ Integrated nutrient management
- ✓ Integrated pest management

Exposure to modern agricultural technologies helps rural youth understand their economic and environmental benefits, thereby increasing their interest in agriculture.

3.5 Use of Digital Extension Services

Digital technologies have created new opportunities for engaging rural youth in agriculture. Young people are generally more comfortable using smartphones, social media, and online platforms.

Agricultural extension systems increasingly use digital tools to reach rural youth through:

- ✓ Mobile-based advisory services
- ✓ Agricultural mobile applications
- ✓ Online training programs and webinars
- ✓ Digital marketplaces for agricultural products
- ✓ Social media platforms for knowledge sharing

Digital extension services make agricultural information more accessible, interactive, and appealing to young farmers.

3.6 Promotion of Youth Organizations and Farmer Groups

Agricultural extension agencies encourage the formation of youth groups, farmer clubs, and cooperatives. These organizations provide platforms for young farmers to collaborate, share experiences, and access financial and technical resources. Youth organizations facilitate:

- ✓ Collective learning and knowledge sharing
- ✓ Group-based agricultural enterprises
- ✓ Collective marketing of agricultural products
- ✓ Improved bargaining power in markets

Participation in such organizations strengthens leadership skills and promotes community-based agricultural development.

4. Government Initiatives for Youth in Agriculture

Several government programs and policies aim to promote youth participation in agriculture by

providing training, financial support, and entrepreneurial opportunities.

Some important initiatives include:

- ✓ Attracting and Retaining Youth in Agriculture (ARYA)
- ✓ Skill India Mission
- ✓ Pradhan Mantri Krishi Sinchai Yojana (PMKSY)
- ✓ National Skill Development Mission
- ✓ Start-up India Scheme for agribusiness ventures

These initiatives support rural youth through capacity building, financial assistance, and promotion of innovative agricultural enterprises.

5. Challenges in Attracting Rural Youth to Agriculture

Despite the efforts of extension services and government programs, several challenges continue to limit youth participation in agriculture.

5.1 Low Farm Profitability

Low and unstable agricultural income discourages many young people from choosing agriculture as a career.

5.2 Limited Access to Land and Credit

Many rural youth lack ownership of land and face difficulties in accessing financial resources needed to establish agricultural enterprises.

5.3 Lack of Modern Infrastructure

Inadequate infrastructure such as storage facilities, cold chains, transportation systems, and processing units reduces the profitability of agricultural activities.

5.4 Negative Social Perception of Agriculture

In many rural communities, agriculture is perceived as a low-status occupation compared to salaried employment, which discourages youth participation.

6. Strategies to Strengthen Extension Efforts

To effectively attract rural youth toward agriculture, extension systems should adopt several strategic interventions. Key strategies include:

- ✓ Strengthening agricultural extension services and training programs
- ✓ Promoting agripreneurship and agricultural start-ups

- ✓ Expanding digital agricultural advisory platforms
- ✓ Improving access to agricultural credit and financial support
- ✓ Encouraging value addition and agro-processing industries
- ✓ Enhancing rural infrastructure and market linkages
- ✓ Integrating agricultural education with practical training

These strategies can help create a favorable environment for youth engagement in agriculture.

7. Future Prospects

The future of agriculture will increasingly depend on innovation, technology, and entrepreneurship. Emerging technologies such as artificial intelligence, drones, remote sensing, precision agriculture, and digital marketing platforms are creating new opportunities for young farmers. Agricultural extension systems must focus on integrating these technologies into training programs and promoting youth-led agricultural enterprises.

With proper institutional support, improved infrastructure, and access to modern technologies, rural youth can become key drivers of agricultural transformation and rural development.

CONCLUSION

Agricultural extension plays a vital role in attracting rural youth toward agriculture by providing knowledge, training, and entrepreneurial opportunities. Through awareness programs, skill development initiatives, and digital extension services, extension agencies can make agriculture more profitable, innovative, and appealing to young people.

Encouraging youth participation in agriculture is essential for ensuring the sustainability and modernization of the agricultural sector. Strengthening extension systems and promoting innovative agricultural enterprises will help create a new generation of skilled and motivated young farmers capable of driving future agricultural development.

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