

Building Resilience through Community-Based Farming Groups

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Agricultural resilience needs to be built collectively, particularly for smallholders who are exposed to climate variability, economic shocks, and resource limitations. Community-Based Farming Groups (CBFGs) empower farmers by promoting cooperation, sharing resources, and propagating climate-smart agriculture. CBFGs build adaptive capacity through joint marketing, access to finance, knowledge transfer, and social protection. Through reinforced economic, social, and environmental resilience, CBFGs minimize vulnerabilities and enhance livelihoods. Strong policy support, capacity development, and infrastructure development are essential in order to maintain these groups as drivers of resilient agricultural communities.

Introduction

Developing-country agriculture is increasingly threatened by climate variability, soil erosion, water scarcity, pest infestation, and volatile market conditions. These stresses disproportionately impact smallholder farmers, who constitute the majority of food producers but frequently remain deprived of access to innovative technology, institutional credit, and assured market information. Their exposure is also compounded by fragmented holdings and poor bargaining capacities. In turn, Community-Based Farming Groups (CBFGs) have been seen as a potent collective approach to developing resilience. Through shared resources, knowledge exchange, and sustainable agricultural management, these groups facilitate farmers in risk avoidance and increased adaptive capacity. In addition to productivity, CBFGs cultivate social solidarity, collective decision-making, and economic empowerment. The overall philosophy is straightforward but strong: "Together we are stronger"—converting vulnerabilities to collective strength for sustainable agricultural futures.

3. Concept of Community-Based Farming Groups

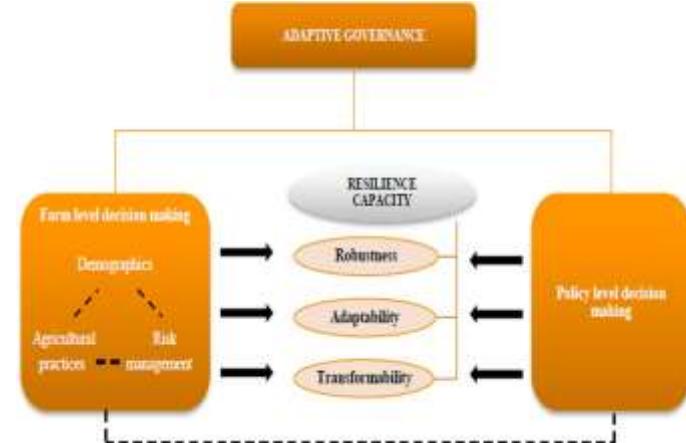
A Community-Based Farming Group (CBFG) is a group of farmers who come together voluntarily to tackle shared agricultural issues, maximize the utilization of available resources, and enhance their incomes. Such groups are avenues for convergence, allowing farmers to transcend limitations that they would find difficult to overcome as individuals. Through grouping, farmers improve their bargaining

power, access to inputs, credit facilities, markets, and technology.

The major principles underlying CBFGs are:

Mutual Cooperation and Trust: Members cooperate in a spirit of solidarity, ensuring equal participation and sharing of benefits.

Collective Decision-Making: Production, marketing, and management decisions are made collectively, ensuring inclusivity and fairness.



Source: frontiersin

Resource Pooling and Risk Sharing: Financial, physical, and natural resources are shared to save costs and share risks of climate shocks, pests, and price instability.

Sharing of Knowledge and Skill: Ancient knowledge, new practices, and advanced technology are shared among members to encourage learning and innovativeness.

Examples of CBFGs are the Farmer Producer Organizations (FPOs), which pool produce for improved access to markets; Self-Help Groups



(SHGs), traditionally mobilized by women, which enhance financial inclusion and group farming; Cooperatives, which provide backing to members in terms of input supply and marketing; and Water User Associations, which manage irrigation in common for sustainable use.

4. Contribution to Building Resilience

Community-Based Farming Groups (CBFGs) contribute significantly to building the resilience of smallholder farmers against climatic, economic, and social risks. Through cooperation and collective action, they convert vulnerable communities into adaptive and sustainable farming systems.

a. Climate Resilience

CBFGs enhance climate-resilient agriculture through drought-resistant crop varieties, mulching, diversification of crops, and farming systems. Natural resources are maintained by communities in a collective manner by building check dams, harvesting rainwater, and establishing common irrigation systems. Group involvement in early warning systems makes preparedness for floods, drought, and pest infestation more effective, mitigating risk and loss.

b. Economic Resilience

Resource pooling allows farmers to obtain credit based on group guarantees, minimizing reliance on informal moneylenders. Collective marketing enhances bargaining capacity, insulating farmers from middlemen exploitation. Additionally, CBFGs provide storage facilities, processing units, and value addition businesses, which enable members to receive increased returns and stabilize incomes even in times of fluctuating markets.



Source: foodtank.

c. Social Resilience

CBFGs act as social protection mechanisms, cushioning poor households through difficult times. Capacity development programs and skill development enhance confidence and leadership within membership. Notably, the groups empower women by offering them decision-making authority and promote youth participation in new farming techniques, thus leading to generational succession in agriculture.

d. Knowledge Resilience

Farmer-to-farmer extension allows innovative and sustainable approaches to be disseminated. CBFGs blend indigenous knowledge with new technologies, with ease of adaptation to local environments. ICT tool access, mobile advisory services, and digital networks enable farmers to make informed choices, thus enhancing resilience against uncertainties.

5. Benefits of Community-Based Farming Groups

1. Lower Risk: Crop losses and financial risks are shared.
2. Economies of Scale: Joint procurement of inputs and shared machinery lowers costs.
3. Access to Finance: Banks and government schemes find them more appealing.
4. Market Linkages: Less difficulty in linking with buyers, exporters, and processors.
5. Policy Support: NGOs and governments find group-based interventions more appealing.

6. Case Studies / Best Practices

Actual life experiences show how Community-Based Farming Groups (CBFGs) have improved resilience and changed farm communities all over the world.

Case 1: Farmer Producer Organizations (India)

In India, Farmer Producer Organizations (FPOs) have been encouraged by the government and NABARD as a means to empower smallholders. Pooled resources enable farmers to collectively procure inputs and market produce like pulses, maize, and vegetables collectively. This minimizes costs with enhanced price realization. For example, one FPO in Maharashtra helped its members earn 20–



25% more returns through collective bargaining and direct marketing, demonstrating the potential of FPOs to enhance farm incomes.

Case 2: Women's Self-Help Groups (Kerala, India)

In Kerala, women Self-Help Groups (SHGs) have been able to adopt group vegetable farming on rented land. Not only did this improve food security at the household level, but it also provided supplementary incomes for the family. In addition to these economic advantages, engagement improved women's decision-making power, social standing, and self-confidence, leading SHGs to emerge as a significant model of gender empowerment in agriculture.

Case 3: Community Irrigation Groups (Africa)

Farmers in many African nations organized community irrigation groups to collectively manage small canals, dams, and water distribution. This helped improve water-use efficiency, minimized irrigation right conflicts, and provided fair access to limited water resources. Collective management of irrigation facilities minimized the cost of maintenance and ensured sustainability.

These illustrations highlight how CBFGs, be it in marketing, production, or the management of resources, play a major role in economic empowerment, social fairness, and resilience to climate, providing scalable models for sustainable agriculture.

7. Challenges Confronting Community-Based Farming Groups

Although Community-Based Farming Groups (CBFGs) have shown immense potential in enhancing resilience and livelihoods, a number of challenges constrain their capabilities and long-term sustainability.

One of the key problems is an absence of trust and intragroup conflict among members. Profits-sharing, decision-making, and unequal participation disagreements have a tendency to cause splits that disunite the group. Trust must be established and

sustained but may prove challenging in multicultural communities.

Limited managerial and leadership abilities are another hindrance. Most groups do not have trained leaders who can manage financial accounts, organize group activities, and negotiate with outside parties. Without effective governance, mismanagement and inefficiency can occur.

Inadequate storage, processing, and transportation infrastructure is also a limitation. Limited access to cold stores, warehouses, or value-addition units limits the group's potential to reduce post-harvest losses and maximize higher profits.

Most CBFGs also demonstrate reliance on external support and NGOs. Although external help is usually beneficial to set up the groups, excessive dependency can render them unsustainable upon termination of the donor programmes.

Lastly, inadequate policy support in specific areas impedes the development of CBFGs. Uncertainty in government schemes, no access to subsidies, and bureaucratic red tape discourage involvement and restrict their performance.

8. Strategies to Strengthen Community-Based Farming Groups

To ensure long-term sustainability and resilience for Community-Based Farming Groups (CBFGs), strategic interventions are required. These interventions should aim at empowering members, enhancing governance, and facilitating enabling environments for collective action.

1. Capacity Building:

Leadership training programs, financial literacy training, record-keeping training, and marketing training programs are necessary. Technical and managerial capacity building will enhance decision-making, accountability, and efficiency in groups. Exposure visits and farmer-to-farmer learning can further enhance practical experience.

2. Policy Support:

Favorable laws, subsidies, and credit facilities by governments must be made available for group farming. Tax incentives or price support schemes,



along with simplifying registration procedures, will attract greater participation. Institutional support will be increased by integrating CBFGs with national agricultural missions and rural development programs.

3. Infrastructure Development:

Investments in cold storage, warehouse facilities, processing units, and transport infrastructure are essential to minimize post-harvest losses and enhance access to markets. Common infrastructure guarantees economies of scale and facilitates value addition for better incomes.

4. Digital Tools:

Introduction of mobile applications, e-marketing platforms, and ICT-based advisory services will enable groups to access weather data, price information, and technical advice. Digital literacy initiatives will further empower members to engage productively in the digital economy.

5. Inclusion:

Ensuring active engagement of women, youth, and marginal groups promotes social sustainability and equity. Inclusive systems provide more solid social bonds and empower all segments of society.

9. Conclusion

Community-Based Farming Groups are a sustainable route to resilience in agriculture. Through sharing of resources, mitigation of risks, and establishment of robust social and market linkages, they enable farmers to bear impacts from climate, economy, and society. Improving these groups through training, policy assistance, and investing in infrastructure can be a transformative factor in constructing a resilient and autonomous farming community.

10. References

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