

# Empowering Rural Women in Food System Development

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# Ghana

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## ABSTRACT

Within the sustainable rural livelihood's framework, Agrisolve has designed the WESOLVE program that targets women and young women smallholder farmers' agriculture and financial inclusion ensuring easier access to resources for increased yield and livelihood improvements. Through WESOLVE, women are given access to arable land under in-grower schemes, input credit, good agronomic training and market access. The program also engages women in alternative livelihood programs on value addition during the 7-8 months of non-farming activities to improve incomes for sustainability.

The project components include technology adoption, product aggregation and markets, and mentorship programs for women. The mentorship program equips women entrepreneurs with the technical expertise to sustainably establish their own businesses thus generating reliable income. Women in the program are linked to market platforms to network with industry professionals and to also support women entrepreneurs to adapt existing credit unions to link with financial institutions to enable access to credit and savings as motivation to define activities under our entrepreneurial ventures which ensures lasting sustainability.

### **TAPedia Tags**

gender equality, agribusiness, farmer field schools, innovation systems, capacity development (CD)

### **Other keywords**

rural women, land access, agrifood system

# Context

In the last 8 years, Agrisolve has operated as an agriculture development and social impact organization that uses an integrated food system development approach to ensure productivity with farmers that increases its sustainable access to agriculture goods in maize, soybean and rice in the Northern and Middle-belt sectors to serve various consumers in food and feed industries. In ensuring efficient market access for these goods, Agrisolve provides integrated farm improvement programs in the form of input access through input credit, mechanization and extension services to farmer groups and smallholder farmers aimed at increasing yield and sustainability ensuring reliable crop products for our markets. Agrisolve operations are enabled through the Greenconnect infrastructure and technology which provides last mile access points services to farmers. It also provides access to inputs, technology and enables smallholder farmers easier access to structured markets in 20 centres and districts.

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cultivation

Agrisolve Ghana has been implementing the block farm initiative to remove land access barriers against women in the northern sector of Ghana. Agrisolve has provided 200 acres of land for 84 women farmers engaged in soya bean cultivations. Through the Agrisolve input credit model, the farmers have been supported with drought resistant seeds, fertilizer, and crop protection chemicals to enhance their production. Through farmer school innovations, Agrisolve in collaboration with District MOFA extension agents have introduced the women farmers to new farming techniques such as climate smart farming practices, conservation agriculture, contour farming which helps to retain water in their fields during limited rainfall and have improved knowledge on the best times to cultivate crops. The Greenconnect platform also provided equitable market access and introduced farmers to weather forecasts information. The women groups have formed informal saving groups to enable access to credit and peer to peer support. The women are also reached through integrated products and projects that improve their capacity to reduce food insecurity and sustainable livelihoods.



In the northern sector of Ghana, gender norms and traditional beliefs impede women's access to land. Traditionally, married women do not farm independently of their husbands; those who do may face challenges such as limited access to labour and capital. However, women play a critical role in economic growth and poverty reduction through their active engagement in agricultural activities.

Women are major agricultural producers, and often responsible for the production of food for local consumption. According to a FAO report, approximately 39 percent of the farm labour force in Ghana are women who are involved in all levels of farming activities. In particular, physically demanding activities include planting crops, weeding, fertilizer application, tree and crop harvesting, and others.

Women are adapting by forming farm cooperatives, making, selling and trading goods and taking on additional farming responsibilities traditionally performed by men. In addition, they carry out vital functions in caring for children, older people and the sick. Most women and marginalized groups live in rural areas and are heavily engaged in agriculture. However, little is known about the extent of their productive roles in agriculture. To highlight the contribution of rural women in agricultural roles, women must be empowered through policies and programs that allow them equal access to productive resources such as land.

# Innovative Solutions

## Inputs Access

The input access intervention seeks to ensure access to quality agriculture inputs, ensure all season availability of variety of input for farmers and increase the distribution channels for inputs and farmer essentials to farmers. The agricultural inputs provided include improved seeds, fertilizers, crop protection products and mechanization services to smallholder farmers who offset payments for these services with production gain after harvest. Agrisolve ensures that the excess produce after offsetting the cost of inputs is given guaranteed markets. Also, smallholder farmers have the option of requesting input and delivery services via the Greenconnect digital platform which reduces the stress of procuring and transporting of inputs by farmers to their remote communities. By 2023, a total of 10 000 farmers have been reached annually comprising of 15 major Outgrower Businesses and Farmer Based Organizations offering them different bundles of expanded input access.

## Market Access

Agrisolve has developed market systems that increase the capacity of smallholder farmers (women and youth) to access real-time community market at Greenconnect Centres. The centres provide a marketplace in last mile communities and warehousing and effective coordinated field presence to ensure traceable and responsible commodity sourcing and supplies as well as information and digital trading and services.

## Mechanization Services

Agrisolve mechanization centres are resourced with topnotch and cutting-edge machinery, farm implements and technology. The end goal is to improve access to timely and demand driven mechanization services either on credit or pay as you go model. The mechanization services

include land preparation (ploughing, tilling, ripping), planting and harvesting (threshing and shelling). By 2023, mechanization services have reached over 80 000 smallholder farmers.

## Farmer Schools Innovation

The Farmer Schools provide comprehensive training and support to farmers, with specific attention to crops like maize and soybeans. It involves a multi-dimensional approach, encompassing access to quality inputs, field demonstrations, input consumption promotion, revenue enhancement, access to high quality fertilizers, storage facilitation, and training through a cascaded Training of Trainers (ToT) and step-down approach. The farmer school has become an additional channel that promotes sustainable and climate-smart farming practices among smallholder farmers and improve their understanding of market dynamics and create linkages with potential buyers and other market channels.

## Harvest Trade Forum

The Harvest Trade Forum is an annual and strategic initiative that brings farmers, buyers, processors, consumers and other stakeholders together to support harvest end activities. It is aimed at creating a sustainable and vibrant platform for smallholder farmers to access ready markets for their produce. It is designed to address market gaps for agricultural products while connecting farmers to potential buyers and consumers. It showcases harvest technologies, post-harvest handling, knowledge, infrastructure development, data aggregation and financial inclusion as tools to empower markets. The Harvest Forum reaches a total of 10 000 (80 percent F) participants annually and creates the platform for competitive and accessible market trades volumes of about 40 000m of grains valued at GHC160m on average basis.



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# CHALLENGES ENCOUNTERED

## High Input Cost

The sector is characterized by rising costs of inputs influenced by inflation and exchange rate fluctuations. The high cost of input is mitigated by competitive bulk purchases to obtain discounted prices and forging to increase productivity.

High lending rates with short-term facility tenure makes the cost of capital very expensive for agribusinesses. Agrisolve has prioritized grants and affordable financial opportunities over loan and equities to mitigate the financial shocks with preference for long-term loan facilities with flexible payment terms.

Agrisolve is committed to financial literacy training among farmers to help them apply for loans wisely and to ensure good recoveries and non-

defaults. Additional strategies include the strengthening of informal saving groups/VSLA groups and facilitating linkages with financial institutions to improve savings culture among the farmers.

## Climate Change Impacts

Variability in rainfall patterns coupled with high temperatures is causing changes in growing seasons for food crops resulting in lower agricultural yield and rapid price increases. In response, Agrisolve through farmer schools' innovation, support the farmers to adapt farming practices and use of climate resistant seeds. Other strategies include adopting climate resistant varieties and technologies in production processes to minimize the effects and impacts of climate change on productivity.

# Critical Capacities

## Monitoring and Evaluation Systems

The data management system monitors, traces and supports farmers' needs. For example, we need credit scoring data to support assumption on credit worthiness of farmers. We want to establish an input credit bureau, so we need information on farmers in various classifications and their credit payment history that can be used to support financial collaborations with credit institutions.

## Technology and Infrastructure

Within the context of scattered settlement patterns in the project communities, we could not enable the technology without infrastructure to become centres to receive and mobilize the offerings. Hence, the need to expand infrastructure around the system to bring it closer to the communities as a last mile model.

## Training and Capacity Development

Innovation is best utilized if the stakeholders receive the right orientation and knowledge to best apply it. Farmer school activities have been an integral part of the process. The farmers have improved their knowledge through participation which provided continuous moments of learning and sharing of new knowledge, practices and skills. Ultimately, the process of upgrading the skills and knowledge of the farmers was critical in driving the innovation.

“*Joining the Agrisolve in grower scheme has helped increased my income and empowered me economically*”

-SEIDU SARATU



“Like any other woman in the community, we cultivate on lands assigned to us by our husbands, which are either far or overused land with depleted nutrients”

-FEMALE FARMER

## Outcomes and Measurable Impacts

The program involved 84 women aged 25 to 60 years involved in the cultivation of soya beans. They were mostly smallholder farmers who lacked access to land and other productive resources for farming. These women are from marginalized households in rural areas and are exposed to all forms of economic, climatic and social vulnerabilities.

The WESOLVE intervention has reached 100 percent of the young women, women smallholders and women entrepreneurs operating in the agriculture space. The in-grower element has improved access to land by 4 000 acres and productive resources such as seeds, chemicals, and fertilizers to enhance their farm activities.

The intervention provided increased sustainable livelihood options with some of the women reporting that their participation have improved their access to credit and skill development.

Productivity has increased and post-harvest losses reduced, leading to improved food security.

About 60 percent of the women beneficiaries have gained agency over their livelihoods, and ultimately shifting gender roles in their communities. The gender training component has changed attitudes around traditional gender roles in the home as husbands support chores in their absence.

There are increases to household income as the women explained their source of income and well-being are linked to agriculture.



# Factors for Success

## Capacity Building through Farmer Schools

Within the framework of training and capacity development, Agrisolve has created 30 demonstration farms to support expanded extension services delivery within strategic objectives to promote sustainable, climate-smart farming practices among smallholder farmers, improve access to inputs such as seeds, fertilizers and pesticides and enhance farmers' knowledge on soil health, pest and disease control, and post-harvest handling techniques.

## Gender and Inclusion Programming

The organization aims to achieve 50 percent women inclusion in its operation. Special provisions and packages are being made for women, young persons and persons with disabilities to facilitate full participation. Some of the incentives include price discounts, priority for organized women groups to access affordable financing schemes, and introduction of in-grower schemes that gives women access to arable land. The organization has also designed a novel coaching and mentoring program for women and young entrepreneurs to enhance skills transfer and to build relationships with key stakeholders.

## Sustainable Partnerships

Agrisolve works in partnership with private actors and government agriculture agencies to deliver the farmer schools reaching 10 000 smallholder farmers. We intend to leverage this existing experience to scale this extension system to reach an additional 5 000 farmers. Over the last 8 years, Agrisolve has collaborated with seed companies such as Lake Agriculture, Agriseed west Africa, Calli Ghana, Antika and Nanam ventures to extend 2 500mt of quality hybrid certified seeds to farmers in the 5 northern project locations.

## AgriTech Innovation

Agrisolve launched Greenconnect technologies as a market driven digital platform for knowledge transfer and market access that facilitate online transactions of agriculture products to further improve efficiency and productivity. Greenconnect provides services such as digital advisory, procurement, e-commerce, credit scoring, weather information and smart farming skills for smallholder farmers.

## LESSONS LEARNED

Women are major agricultural producers and are often responsible for the production of food for local consumption. Thus, they have the potential for the development of agribusiness and agroindustries when given access to inputs, finances and markets. There is a need to empower women through policy formulation and enforcement to allow them equal access to productive resources such as land.

The Agrisolve women food system development in-grower scheme

demonstrates the importance of creating an enabling environment where women can benefit from the generation of decent rural employment and entrepreneurial opportunities through specific interventions. Efforts to transform agrifood systems will be influenced by investments in small-scale farmers, climate crisis adaptation, access to technology and finance to enhance food production, and supply of nutritious food to both rural and urban areas.

Agrisolve will continue to build on existing programs to enhance the engagement of rural women through inclusive investment that contributes to food security, generates decent jobs that leads to women economic development and rural transformation.

# Acknowledgements

Agrisolve leveraged public and private sector partnerships to marshal support for women farmers. In collaboration with District MOFA, extension agents have introduced female farmers to new farming techniques which have improved knowledge on the best times to cultivate crops. Partnerships with seed companies led to the distribution of quality certified seeds to the farmers in the program. Other partnerships involve registered women groups, farmer-based organizations and women led agribusinesses who act as a catalyst for the project implementation.

The Ministry of Food and Agriculture (MOFA) is the government partner on the intervention. The extension officers of MOFA at the district level provided technical support to the intervention which ensured that it aligned with broad government programs and strategies. The extension officers support in providing agronomic trainings and farm demonstration activities for the

women to adopt best practices such as conservation agriculture and climate smart practices in their approach.

The civil society partner with the intervention is Antika Agro Company which produces and distributes high quality seeds, supply fertilizers, agro-chemicals, and makes simple farm tools targeting the poor small-scale farmers. The Antika partnership ensures that the women have access to improved soya bean seeds at affordable prices.

Farmer Based Organizations (FBOs) represent the farmer groups and associations. They help in the selection of the women groups for the intervention such as peer referencing to ensure that the beneficiary selection is better targeted. The farmer groups also shared testimonials among the groups on benefits of new technologies and practices they have adopted as learning and motivation for new farmer groups that were onboarded.

## THE TROPICAL AGRICULTURE PLATFORM

*The Tropical Agriculture Platform (TAP) is a G-20 initiative launched in 2012 to promote agricultural innovation in the tropics. TAP has formed a coalition of more than 50 partners, led by the Food and Agriculture Organization of the United Nations (FAO) and generously supported by the European Union (EU). The main goal of TAP is to strengthen agricultural innovation systems (AIS) in developing countries through coordinated multi-stakeholder interventions.*



## CONTACTS

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## MORE INFORMATION

 [www.fao.org/in-action/tropical-agriculture-platform](http://www.fao.org/in-action/tropical-agriculture-platform)  
 [www.fao.org/in-action/tap-ais](http://www.fao.org/in-action/tap-ais)  
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## Global Call for Agrifood System Innovations and Stories of Capacity Development for Innovation

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