



Definitions, needs and success

The Syngenta Foundation's position on smallholder farmers

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syngenta foundation
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Our vision

A bright future for smallholder farming means that this profession becomes profitable, productive and resilient to climate change and other environmental threats. The Syngenta Foundation (SFSA) focuses on small-scale farmers, supporting their productivity and adaptation to changing agro-climatic conditions in order to improve incomes and livelihoods. Working with a wide range of partners, we take a science-driven approach to develop sustainable solutions specific to local conditions. We also help create, and link farmers to, markets for both inputs and outputs. Our efforts and investments in Africa and Asia strengthen agriculture as a source for development, youth entrepreneurship, women's empowerment, productive jobs and other benefits for rural communities.

The context in which we operate has changed substantially in recent years, and it continues to do so. The changes are described in more detail in a separate paper. Given this shifting context, it is critical for SFSA to (re-)define which smallholders we work with, and what characterizes them. This paper seeks to answer the following questions:

1. **WHO** are our ultimate beneficiaries and partners?

2. **HOW** do we characterize smallholder farmers, and what are their typical needs?

3. **WHAT** does success for SFSA look like?

The following text draws on internal discussions and builds on earlier research and position papers.

Who are our ultimate beneficiaries and partners?

SFSA aims to strengthen smallholder farming and food systems. We have several clearly defined target beneficiaries and partners.

Our (end) target beneficiaries are low-income smallholder farmers in Africa and Asia, whose livelihoods we seek to improve by helping them professionalize. This includes improving female and male smallholders' access to modern seeds, extending insurance solutions to manage weather and climate risks, and developing commercially viable, entrepreneurial business models to increase access to other quality inputs and services. Moving ahead, we look to develop innovations and programs specifically to support female smallholders and entrepreneurs. The following sections provide details.

To improve the livelihoods of smallholder farmers, we partner with a wide range of organizations that share our commitment and vision. Key partners include the private sector (both local and international), the public sector, research organizations, academia, philanthropic and public donors, social impact investors, and NGOs.

To ensure the benefits are enduring and can positively impact vast numbers of smallholders, we strive to impact agricultural stakeholders across the value chain. This includes efforts to:

1. mobilize public and private organizations for the scale-up of innovations. We do this by proving that tested solutions can benefit smallholders while being commercially viable, efficient and sustainable. We also support partner organizations to ensure that new models are sufficiently resourced, financially and programmatically.
2. improve the capacity of actors along the agricultural value chain, including the public sector and local businesses. For example, we work with local academic and government institutions on policy and research topics and on training, to help them better serve smallholders.
3. stimulate the wider agro-industry to develop business models fit for the smallholder context, including more sustainable and affordable products.



How do we characterize smallholder farmers, and what are their typical needs?

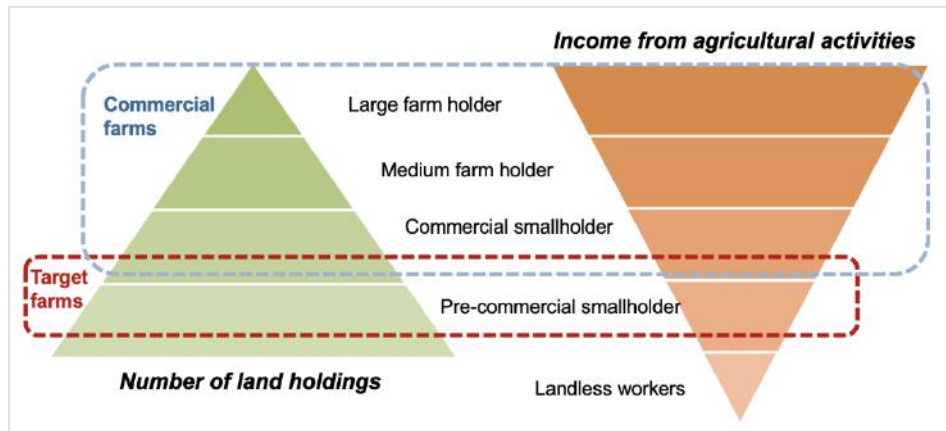
Criteria for characterizing smallholder farmers

Most of the world's more than 570 million farms are small, operated by families; more than 475 million farms cover two hectares or less (Lowder et al, 2014; Graeub et al, 2016; Wiggins 2020). No single definition of 'a small farm' exists, but the most common criterion is area, for example focusing on those with two, five or ten hectares. However, geographical, economic and social circumstances create considerable differences (Wiggins, 2020). Common criteria to differentiate smallholders include farm size (the most frequent), farm revenue, income reliance on agriculture, share of crops sold, share of labor contributed by the family, proximity to markets and vulnerability to natural hazards. Smallholders can further be differentiated as 'non-commercial' (subsistence), 'pre-commercial', or 'commercial', based on attributes such as land size, crop mix (staple vs cash), level of engagement with markets and access to financial services and technologies (Peck et al, 2013). See also the Annex, a typology by IFPRI of smallholder farms with matching strategies and interventions for development.



Two key factors underly our focus on smallholders:

- 1. First, we target pre-commercial farmers in selected African and Asian countries.** While the farmers we work with typically lack a stable living income, they are not 'the poorest of the poor.' We focus on *smallholders* who have access to land and can therefore make decisions on their farms, e.g. choosing to test new innovations. The diagram below highlights our predominant focus on 'pre-commercial' smallholder farmers in Africa and Asia:



SFSA focuses on those smallholders who have not yet developed into professionalized commercial farms. While there is a small overlap with commercial specialized farmers, SFSA explicitly works outside the commercial activities of businesses such as Syngenta. Meanwhile, while purely subsistence farmers and landless workers are typically not the target group, they may be indirect beneficiaries of our work.



The pre-commercial farmers with whom we work typically have limited access to reliable markets or the resources to purchase agricultural inputs, technologies, and other services, except mobile phones. SFSA is not rigid about landholding size, but typically works with smallholders farming on less than two hectares. Smallholders differ considerably between the countries in which we work, notably in terms of landholding size, productivity and access to infrastructure and markets. Average farms in our target Asian countries are typically smaller than those in Africa, due to high rural population density and low availability of arable land per capita. Similarly, smallholder farmers across our target countries have varying access to agricultural extension, infrastructure and mobile phones. Farmer segmentation and context analysis are thus important elements of our work.

- 2. Second, we seek to work specifically with the next generation of men and women farmers.** Rather than targeting a specific age-group, we seek to work with people who expect to inherit land and continue farming in the next generation. Youth populations are increasing in our target countries, but the farming population is ageing. Many young people from low-income rural communities do not see attractive prospects in agriculture. SFSA believes that rural employment generation and entrepreneurship are key potential drivers of economic growth in developing countries, as well as vital for food security. We also view land and farmer aggregation as ways to improve farming and entrepreneurship opportunities.

SFSA seeks to integrate Diversity and Inclusion aspects into its work. SFSA strives to promote gender equality and empower women in agriculture. We are increasingly applying a 'gender lens' to our programs. This includes putting greater focus on addressing the specific needs of women farmers, through targeted innovations and programs. We also have a small but growing number of programs that specifically seek to engage people with disabilities.

Women make up nearly half (and in some cases much more) of the agricultural labor force in developing countries, but they are often heavily disadvantaged. Many are seen merely as laborers and have little decision-making power. Women farmers are often less able than men to access productive resources, such as inputs and training. Access to finance can be a particular challenge, because women frequently lack secure, documented land rights with which to secure loans. The FAO believes that improving women's access to productive resources would enable them to produce 20-30% more food. That would, for example, have a positive impact on children's nutrition, health and education (FAO, 2011).

The table below outlines characteristics of the smallholders we serve and target.

Criteria	SFSA Consideration and Relevance
1. Locality and farm-size	
Farm size and ownership	Typical plots are < 2ha; farmers have ownership of land (signifies greater commitment to innovation adoption)
Geographical location	Focus on Africa and Asia (existing SFSA target countries); additional countries depend on market size and fit, e.g. links to SFSA strategy, population, stability, etc.
2. Economic factors	
Smallholder income	Low and erratic income, often highly dependent on volatile climatic and market factors. We also use various benchmarks including national poverty lines.
Expenditure on farming inputs	Farmers can increase profitability / productivity of farm, e.g. with (limited) money for improved inputs & technologies
3. Social and demographic characteristics	
Social profile	Likelihood to remain in farming; includes youth and women
Receptivity to change & risk	Willingness to adopt new technologies; entrepreneurial spirit
Education and training	Typically have basic schooling, but able to read and write. Frequently under-served by extension agencies.
4. Risk profile	
Vulnerability to climate, pests and diseases	Low adaptation to climate change; potential need for climate-smart practices (mitigation, resilience, productivity)
Vulnerability to economic and market risks	Potential need for increased access and inclusion to insurance products, finance or social safety nets
5. Access to inputs, technologies and markets	
Access to input market	Limited access to quality inputs and modern technologies
Access to output market	Weak market linkages, lack market information, not fully integrated, limited post-harvest management capacity
Access to mobile technology	Some access to mobile phone/internet

2b. Typical needs of our target farmers

This section outlines the typical needs of SFSA's target farmers, focusing on access to inputs, output markets and risk management tools. Smallholders require technologies, services and market linkages.

More specifically, they typically need access to:

- Improved and affordable seeds, including those resilient to climatic volatility and pests as well as those with traits specifically designed to improve 'cookability' and nutrition
- Fertilizers, soil micronutrients
- Adapted crop protection products
- Extension support on good agricultural practices including land, soil, water and pest management
- Rural education and training opportunities (e.g. e-learning)
- Strong linkages with markets, off-takers and reliable access to market information
- Financial services, including affordable credit, insurance, risk management solutions and other services; improving women's access to credit includes work on forms of collateral other than land title deeds
- Post-harvest management practices, technologies and facilities
- Increased opportunities and support to adapt to climate change, in terms of practices and technologies
- Digital technologies and platforms for data access and management, including for food safety and traceability
- Rural infrastructure (e.g. roads, irrigation, storage, internet, data).

In many developing countries, **women farmers face particular barriers to accessing**, owning or having unencumbered use of land. In addition, women often have less access than men to education, information, modern technologies such as mobile phones, and to markets. Women farmers need to be specifically empowered and supported. The root causes of the 'gender gap' in agricultural productivity (see Section 2a above) must be addressed.

Based on these needs, we support our target farmers following two main principles. Firstly, we focus on **demand-led, market-driven approaches**. Understanding farmers' needs, especially those of women, and market demand is fundamental for our interventions. We are committed to improving adoption of improved products and services through market systems, where possible, and improving the enabling environment. Aggregation centers can play a crucial role in helping farmers interact with the market. Secondly, we are committed to smallholders' **long-term development** and take a **context-specific approach**. Our engagement with farmers uses short-term projects to catalyze longer-term transformation, supported by local teams in the field. We adopt approaches specific to particular crops, localities, resources and cultures.



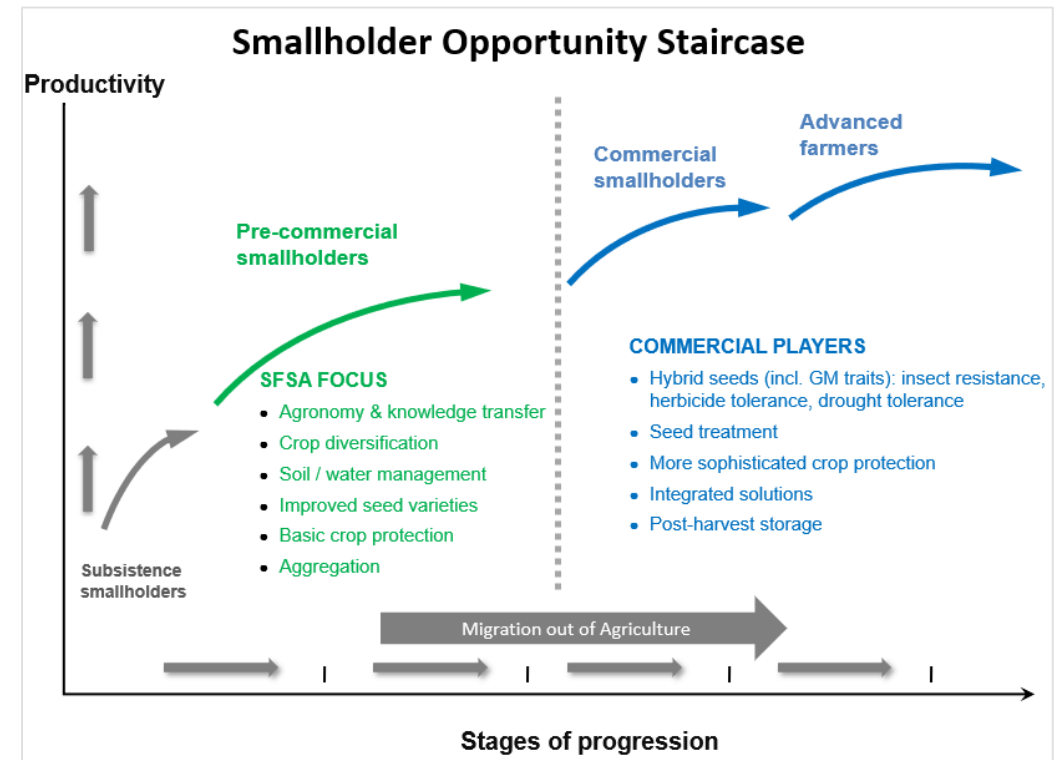
What does SFSA success look like?



SFSA is committed to a bright future for smallholder farming. This Vision translates into **four key areas** for progress:

1. **Next-generation smallholders sustainably increase their profitability.** Many young rural people see opportunities elsewhere and do not want to farm. SFSA does not aim to hold them back artificially, but rather supports those who seek to continue farming. We do so through diversification, aggregation, greater productivity and resilience. Smallholders receive support to engage with production opportunities for the food value chain. Improved opportunities will be available to farmers and the systems will be in place to support them. This includes access to technology, products and services; as well as access to off-taker markets. We encourage off-farm entrepreneurial opportunities for interested young rural people. We expect many young people to continue to leave rural areas, creating opportunities for consolidation of farms into viable commercial enterprises by those who stay.
2. **Vibrant rural economies and smallholders support each other.** SFSA seeks to link smallholders to local and global markets effectively and make those markets work better for them (e.g. through multi-stakeholder platforms such as India's Agri-Entrepreneur Growth Foundation and the Farm to Market Alliance in East Africa). We see our efforts to improve smallholder farming enterprises contributing to accelerated and sustainable rural economic growth. Our work supports local governments' endeavours to absorb rural youth into gainful employment on and off the farm. Stronger local economies, including in secondary towns and cities, in turn create enhanced local food markets for the farms.
3. **Resilience to climate and other environmental aspects.** This is described in a separate paper.
4. **Inclusive growth for women farmers and improved nutrition for all.** Female smallholders are targeted to benefit from opportunities for growth, especially via targeted technology innovation, training, skills development, financial services and market links. Improved incomes enable greater crop and dietary diversity, both for consumption and sale. Food, nutrition and agriculture systems are more efficient, diverse, inclusive and resilient, and can continuously improve.

The graph below depicts how SFSA views its work with smallholders, and places this in a broader context of opportunities and progress.



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Annex: IFPRI's Typology of smallholder farms and appropriate strategies and interventions

Type of farm		Characteristics	Strategies		
			Agriculture based	Transforming	Transformed
Subsistence farm	With profit potential	<p>Soft constraints to land size and agriculture production</p> <ol style="list-style-type: none"> Limited access to markets and information Limited financial capital Limited access to infrastructure Limited access to smallholder friendly technologies 	<ol style="list-style-type: none"> Productive social safety nets Investment in infrastructure, agriculture research and extension and smallholder-friendly and climate-smart technologies Access to innovative financial services 	<ol style="list-style-type: none"> Flexible arrangements for land transfer Risk reduction and management tools Access to market information (e.g. ICTs) Pro-smallholder, nutrition-sensitive value chains Social safety nets and improved access to housing, education, and health services for rural migrants Vertical and horizontal coordination to meet safety, quality and quantity standards Enhanced role for farmers' organizations, particularly for women farmers 	<ol style="list-style-type: none"> High-value production Reduced trade restrictions and subsidies Flexible arrangements for land transfer Efficiency- and quality-enhanced production system Vertical and horizontal coordination to meet safety, quality and quantity standards
	Without profit potential	<p>Soft constraints plus hard constraints to land size and agriculture production</p> <ol style="list-style-type: none"> High population density Low quality soil Low rainfall and high temperatures Remote location 	<ol style="list-style-type: none"> Social safety nets Nutrition-focused crop production for own consumption Education and training for nonfarm employment Migration to urban centres and other agriculture areas with greater profit potential 	<ol style="list-style-type: none"> Social safety nets Improved access to housing, education and health serviced for rural migrants Education and training for nonfarm employment Flexible arrangements for land transfer 	
Commercial smallholder farms		<ol style="list-style-type: none"> Soft-constraints Limited access to capital, insurance and other risk reduction tools 	<ol style="list-style-type: none"> Vertical and horizontal market coordination to meet safety, quality and quantity standards Smallholder-focused, climate-smart and nutrition-enhancing technologies Investment in infrastructure, agricultural R&D and extension 	<ol style="list-style-type: none"> High-value and nutrition sensitive food chains Flexible arrangements for land transfer Links to urban and global markets Vertical and horizontal market coordination Enhanced role of farmers' organizations particularly for women farmers 	<ol style="list-style-type: none"> High-value crops Flexible arrangements for land transfer Clear regulatory frameworks and intellectual property rights to link private sector with smallholders



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