



Photo by CRS Burkino Faso staff

Building more resilient pathways to prosperity in Tougouri, Manni, and Gayeri health districts in Burkina Faso

SYNOPSIS

While the Catholic Relief Services (CRS) Burkina Faso Families Achieving Sustainable Outcomes (FASO) Program was not designed to be a resilience-focused project, it nonetheless integrated the relevant factors to successfully contribute to well-being outcomes.¹ Within the FASO Program context, resilience takes the form of strengthening community and household abilities to respond

to climatic and environmental shocks that affect livelihoods, as well as strengthening community attitudes toward change, collaboration, organization, decision-making, and resource management. FASO interventions reinforce the community-level structures and processes that enable households and communities to mitigate, deal with, and recover from shocks and stresses in the health districts of Tougouri, Manni, and Gayeri.

¹ The FASO Title II development program implements integrated programming in the health districts of Tougouri in Namentenga Province in the Centre Nord Region; Manni in Gnagna Province; and Gayeri in Komondjari Province in the East Region. Resilience is a new approach, and few existing tools or frameworks exist to measure its impact. Resilience is highly contextual, and no set of indicators or activities sufficiently captures resilience on a global basis.

FASO strategy for building resilience capacity.

Resilience is the capacity to cope with stresses and shocks,² including the major stress of climate change. Natural shocks—including cyclical drought and seasonal floods—contribute to food insecurity in the health districts of Tougouri, Manni, and Gayeri. FASO households frequently identified five specific shocks, including:

- Loss of crops and livestock due to drought
- Loss of livestock due to illness
- Increase in food prices
- Increase in cost of inputs
- Vulnerability to droughts, floods, and storms

Resilience interventions integrate livelihoods, disaster risk reduction, and climate change reduction approaches across *recover, build, and grow* farmer segments of the Pathway to Prosperity.

CRS' Pathway to Prosperity (P2P) model (based on USAID's Pathway out of Poverty) presents households with a course from the vulnerable *recover* stage through *build* to *grow*, by delivering layered and sequenced packages of interventions to groups and households according to their economic status, systematically helping them move from vulnerability to economic prosperity and resilience.³

Within the FASO project area, the farmer segment is mostly very poor, and in the *recover* phase, interventions focus on ensuring that households can access, consolidate, and protect key productive assets. As they move from *very*

DEFINING RESILIENCE

USAID defines resilience as “the ability of people, households, communities, countries and systems to mitigate, adapt to and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth.”

Source: USAID's “Building Resilience to Recurrent Crisis,” (2012)

poor to poor (the *build* phase), farmers increase skill building in production systems; savings and loans; and linking production with markets. Table 1 demonstrates how FASO agricultural and livelihood activities align with the CRS Agriculture and Livelihood (AL) theory of change building blocks for P2P farmer segments.

Scaling financial education and services for vulnerable households to engage in agricultural market systems. Community-based groups such as savings and internal lending communities (SILCs) have proven successful in building the social and financial capital of *recover* farmer segment households in FASO areas. Through the SILCs, *recover* farmer segment households have learned to come together to pool financial resources, solve problems, and learn new financial literacy skills, all of which strengthen the social bonding so critical to vulnerable households. Strengthening household assets fosters confidence, especially in women, and empowers households to undertake riskier but more productive and diversified livelihoods (e.g., parboiled rice marketing and poultry production).

The SILC groups also provide an entry point for building awareness and changing the behavior of FASO communities with respect to nutrition behavior, coping strategies, and women's empowerment. Fostering community groups to develop relationships to other communities (e.g., vegetable marketing), organizations (e.g., tool committees), and service providers (e.g., agriculture input dealers) can further build community resilience by broadening social as well as business ties.

Social cohesion and strong inter-household bonds within FASO communities foster spontaneous cooperative acts, which ensure that struggling households do not drop below a normative level during a crisis. Numerous FASO communities and households reported instances of assisting families to recover after a crisis by providing food, labor, or chickens.

The effective use of livestock production and drought-resistant crop varieties or improved seed

² Capacity and coping capacity are often used as synonyms for *resilience*.

³ USAID 2011. Pathways out of Poverty: Applying key principles of the value chain approach to reach the very poor. Discussion paper. Microreport 173.

TABLE 1: FASO LINKAGE BETWEEN PATHWAY TO PROSPERITY AND BUILDING BLOCKS OF THE AGRICULTURE AND LIVELIHOOD THEORY OF CHANGE

Building Blocks⁴	Organization	Production	Finances	Market Access	Influence
Pathway to Prosperity—Farmer Segments Within FASO: Emergency Activities ⁵	Food/Cash for Work asset building	Disaster risk reduction through Food/Cash for Work NRM activities			Food Aid (support to vulnerable)
Pathway to Prosperity—Farmer Segments Within FASO: Recover Activities	Group organization: SILC, market gardening, tool management, lowland rice producer, and parboiled rice marketing groups	Soil and water management: zaï, demi-lune, mulch, compost, stone bunds, early mature varieties, agroforestry, and other land/soil reclamation.	SILC, financial education, marketing basics	Seeds fairs; PICS bags; agro-dealer and seed producer technical capacity building; and facilitated linkages with producers	Landscape regeneration; support to government agricultural extension and the National Institute for Agricultural Research (INERA)
Pathway to Prosperity—Farmer Segments Within FASO: Build Activities	Livestock and poultry vaccination and feed support	Diversified production systems on farm: livestock, poultry, value-added parboiled rice, dry-season garden marketing crops, and sesame	Links to micro-finance institutions (MFIs) or warrantage	IGAs with loans acquired with MFIs and SILCs	Climate-change work with INERA to test more drought-tolerant varieties for producers

varieties in providing higher yields and reducing downside risks. Since conventional rain-fed cropping is becoming unsustainable, many FASO recover farmer households attempt to improve resilience by diversifying their livelihoods through livestock. FASO recover households, especially women-headed households, find that livestock ownership is a more efficient means of farming in

non-arable areas. In FASO communities, livestock become primary assets and means of liquidity for poor and vulnerable households.

FASO recover farmer households are accessing and utilizing new or improved crop varieties that enable them to increase production and yields. This practice, in turn, improves households' resilience

4 The CRS Pathway to Prosperity (P2P) and Agriculture and Livelihoods (AL)- Signature Program Area (SPA) Theory of Change were developed after the FASO Program began; therefore, this table is meant to illustrate how they can be linked in the future. In addition, the current AL-SPA Theory of Change consists of seven total building blocks, including catalyzing behavioral change and strengthening seed and input systems.

5 The FASO Program has a set of trigger indicators, which help to inform program staff when to expand emergency activities to respond to shocks. The activities provided here are illustrative, since the actual trigger indicators have not yet noted an emergency within the FASO geographical area.

to cope with stresses. Within FASO, farmers can better cope with erratic rainfalls and participate in the market by using:

- Reliable irrigation water systems to improve crop yield
- Improved high-yielding crops, such as sorghum, cowpea, sesame, and rice varieties accessed from the National Institute for Agricultural Research (INERA) to increase production

Focus on capacity-building approaches (absorptive, adaptive, and transformative) that are mutually reinforcing and exist at multiple levels. Adaptive capacity refers to access to resources in order to cope with shocks and hazards as well as stresses and long-term changes. Adaptive capacity is higher near local rivers and streams and urban areas, which all provide opportunities for irrigation, transport, and marketing. Because adaptive capacity declines with increasing distance from major urban areas and waterways, the FASO households with the lowest relative adaptive capacity tend to be low-income, rural households located in remote areas.

Whether the shock takes the form of drought, floods, or price fluctuations, access to markets and services affect adaptive capacity. Thus, adaptive capacity tends to be highest near major urban centers where road, health, and market infrastructure are dense. The FASO Program found that, for recover farmer segments, few markets exist in the implementation zone. In fact, some villages are more than 30 kilometers from a major market center. Inaccessible markets, poor road infrastructure, and insufficient market information increase transportation costs. These factors limit recover farmers' ability to successfully negotiate fair prices and find adequate markets, especially for cash crop production. Training and market linkages significantly aided FASO farmer adoption of new technology and resulted in increased resilience.

However, results from the FASO Program showed that resilience also increased for those who had more diversified incomes. In most cases,

diversifying income means producing surplus food crops or producing higher-value products for sale, such as parboiled rice, sesame, onions, and livestock products. As farmers gain access to markets and can invest in production systems, they increase their ability to recover from shocks.

FASO community member focus-group discussions revealed that the ability to generate income during the dry season is one of the most important indicators of resilience, after livestock ownership and land access. Non-farming activities (e.g., the marketing of parboiled rice)—which are both a primary and secondary source of income—help poor households and vulnerable individuals, especially women, diversify incomes, smooth consumption, and cope with shocks and stresses. Off-farm income diversification bolsters resilience capacities by helping households fill gaps in seasonal agricultural incomes and adapt to changing conditions in the rural economy and environment. This diversification is important in communities where, according to FASO project documents, one-quarter of rural FASO households engage in at least one off-farm activity. Table 2 demonstrates how various FASO activities help link FASO farmers to markets as well as contribute to resilience capacity.

Build resilience of individuals, households, communities, or higher-level systems to deal with shocks and stresses. The FASO Program continues to implement activities, but has already made remarkable progress in impacting food production and revenue generation for more than 80,000 direct beneficiaries (58 percent of whom are women) in the health districts of Tougouri, Manni, and Gayeri. The adoption of climate-smart technologies (including zaï, adapted seed varieties, and the improvement of lowland and degraded land) enabled FASO Program adopters to harvest during years of drought and erratic rainfall, when other households that did not adopt these technologies experienced failed harvests.

FASO's direct beneficiaries saw an improvement in average yield, from 1.2MT/ha before the program

TABLE 2: FASO MARKET SYSTEMS RESILIENCE INTERVENTIONS

Type of Intervention	Absorptive Capacity	Adaptive Capacity	Transformative Capacity
Linking to social protection	Food and input transfer to meet immediate needs and build assets	Savings groups to smooth consumption and provide capital for households' agricultural and IGA business activities; parboiled rice equipment transfers to enable women's participation in rice value chain and upgrading	
Facilitating access to end-markets	Linking rice and vegetable market garden producers to multiple input suppliers and buyers	Diversifying economic activities to offset risk	Promoting investment in marketing infrastructure such as irrigation and transportation
Catalyzing changes in market systems	Increasing crop and livestock productivity; increasing value addition to rice and vegetables; storage through PIC bags; warrantage	Promoting value-chain coordination and adaptive management with private sector (horticulture and input providers)	Increasing efficiency of sorghum, millet, and rice chains
Fostering improved relationships and system norms	Diversifying household market opportunities to increase and smooth income throughout the year	Increasing access to financial services, including MFIs and warrantage	Building trust: bonding, bridging, and linking social capital between village development, market gardening, tool, and water user committees
Strengthening value-chain governance	Engaging vulnerable populations in market systems to increase incomes; engaging women in market systems, and strengthening leadership to empower women and increase their participation in household decision making		Disaster risk reduction action increases resilience to shocks and decreases the risk to the market system.

to 3.7MT/ha after the program; this represents an estimated total production of 2,347 MT of paddy per year.⁶ FASO has improved livelihoods in the targeted communities by emphasizing value chains in the selection of crops, promoting proven climate-adaptive technologies, and facilitating access to credit. Table 3 provides an overview of FASO's results to-date, and demonstrates the scope and range of agriculture and livelihood intervention packages to groups and households according to their economic status. FASO beneficiaries also observed how the establishment of irrigated gardens reduces emigration from the villages for work, and demonstrates that villagers will stay in the village if work opportunities exist.

Learning to-date: Building resilience requires the integration of multiple components, such as community involvement, access to finance, market integration, and asset strategies, as well as long-term commitment to minimizing exposure and speeding recovery to shocks.

FASO continuously refines its approach and methodologies to improve upon prior experiences and ensure that its activities generate the desired outcomes. The learning to-date underscores the importance of treating resilience capacity development as a long-term, systemic process rather than a singular event.

TABLE 3: OVERVIEW OF FASO RESULTS IN HEALTH DISTRICTS OF TOUGOURI, MANNI, AND GAYERI

- **31% of households** reported improved access to agricultural input.
- **39% of men and women** used intercropping for cowpea.
- **18,612 farmers** applied new technologies or management practices.
- **Community members** made SILC contributions to a social fund of more than \$42,500 to support each other during shocks or stresses.
- **16% of beneficiaries** accessed SILC during the last cropping season.
- **6,551 farmers** adopted and used climate-smart technologies: zaï and/or demi-lune (593), stone bunds (506), warrantage (187), and poultry breeding (344).
- **6,551 people** implemented risk-reducing practices to improve resilience to climate change.
- **3,519 ha** are under improved technologies or management practices.
- **269 ha** are under stone bund.
- **31 ha** are in market gardening.
- **FASO has supported** the establishment of 537 ha of rice.
- **Average yield improved** from 1.2MT/ha before the program to 3.7MT/ha after the program; this represents an estimated total production of 2,347 MT of paddy per year.

Source: FASO Monitoring and Evaluation Indicator Tracking Table data for FY2015.

⁶ FASO Monitoring and Evaluation Indicator Tracking Table data for FY2015.

