Evaluation *Insight* Note

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Integrating Resilience into Food Security Operations

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① Food security operations are increasingly focusing on resilience.

② Emergency operations designed to address acute crises can, and increasingly do, include resilience features.

③ Closed projects with resilience features achieved higher outcome ratings.

④ Food security projects with resilience features tend to have a longer time frame to tackle the drivers of food insecurity with five strategies: (i) pairing various interventions, (ii) providing emergency support and creating income opportunities (productive inclusion); (iii) using decentralized approaches, including community engagement; (iv) leveraging partners and donor coordination; and (v) strong analytics and design.

⑤ It is critical to adapt the pace and sequencing of short- and long-term reforms and measures to country capacity.

The work informing this Evaluation Insight Note consisted of a methodological approach including a rapid literature review, a portfolio review (112 active and 69 closed projects in fiscal years 2016–22, which were identified using food security nutrition theme codes, and document reviews.

Drawing from the Independent Evaluation Group's rich knowledge repository, Evaluation Insight Notes respond to the need for more rapid and focused evaluative evidence. These notes systematically analyze data from a range of evaluations, validations, and other studies to generate insights in a timely manner around important strategic and operational issues.

Addressing Food Insecurity in Responding to Global Food Crises

High food prices have triggered a global crisis that is driving millions into extreme poverty, magnifying hunger and malnutrition. The number of people who are experiencing acute food insecurity and need urgent assistance is estimated to climb to 222 million people in 53 countries and territories by the end of 2022 (World Bank 2022a). To respond to the crisis, the World Bank has made US$30 billion available over a 15-month period in areas such as agriculture, nutrition, social protection, water, and irrigation. The Independent Evaluation Group is contributing evaluation evidence on past and current efforts to address food insecurity as an input to the food crisis response.

In addition to food price increases, other shocks affect poor people and the most vulnerable communities and compromise their food security. These shocks include disasters caused by natural hazards, conflicts, disease and pandemics; financial and political crises; and the impacts of climate change. Poor and vulnerable people have fewer resources to meet such adversity.

The world is moving backward in its efforts to end hunger, food insecurity, and malnutrition, and reaching the Sustainable Development Goal 2, Zero Hunger, targets by 2030 is becoming more challenging each year. The intensification of major drivers behind the recent food insecurity and malnutrition trends and growing inequalities will continue to challenge food security and nutrition (FAO, IFAD, UNICEF, WFP, and WHO 2022). Therefore, broadening food security to better insulate the vulnerable from medium- and longer-term impacts is a useful adjunct to looking at immediate food assistance needs.

This Evaluation Insight Note (EIN) answers the question, "How has the World Bank integrated resilience into food security operations?" To do this, the Independent Evaluation Group conducted a portfolio review of 112 active projects and 69 closed projects that had a food security theme code (Food Security and Nutrition—Theme Code 68, Global Food Crisis Program—Theme Code 91, and the recent Food Security and Nutrition Theme Codes 671 and 672). The projects were all closed and evaluated between fiscal year (FY)16 and FY22. We categorized and assessed the portfolio using the four pillars of food security outlined by the Food and Agriculture Organization of the United Nations (FAO): availability, access, utilization,

and stability (box 1). Further details on the methods used are provided at the end of this EIN.

The Importance of Resilience in World Bank Food Security Interventions

A focus on resilience helps operations that seek to address food insecurity establish programs that bridge the gap between immediate crisis responses and longer-term sustainable development aims. The involvement of multiple sectors enables each sector to contribute unique and complementary sets of mechanisms to building resilience in food-insecure areas. At the country level, such programs can identify the ways in which these complementary skills can be applied to achieve resilience. The appropriate mix of mechanisms will vary by context, and metrics need to be developed on top of the individual sector activities to determine whether the mix is adequate to achieve food security aims.

What Are the Main Insights from This Synthesis?

Food security operations are increasingly focusing on resilience

The World Bank is increasingly integrating resilience-building features into its operations that include a specific food security aim as defined under the four FAO food security pillars. First, there is an increasing level of World Bank support for investment operations that include a food security focus (identified as projects that include a food security theme code). As a sign of this upward trend, there were 112 active versus 69 closed World Bank operations between FY16 and FY22 that had a food security focus. Total commitments were US$16.5 billion for the active portfolio versus US$4.3 billion for the closed portfolio. Second, of these, about two-thirds of the active portfolio versus just

over one-third of the closed portfolio (34.8 percent) included "stability building" resilience activities, a definition adapted from the FAO (see box 1). Stability building activities include support for the diversification of household income sources, market integration, and other medium- to longer-term value-chain development activities. Increasingly, the active portfolio also includes climate change adaptation measures. More than 40 percent of projects with a food security aim also include mechanisms to address climate change risks over time. Social protection projects continue to support the most vulnerable in insecure areas but have also been characterized more recently by longer-term objectives. Enhanced resilience building is characterized by increased efforts to support the integration of food-insecure households into social protection systems as they are developed and expanded.

Box 1. Resilience versus Nonresilience Projects

The Independent Evaluation Group used the four pillars of food security set out by the Food and Agriculture Organization of the United Nations to categorize and assess the various elements of operations with a food security focus.

Pillar 1: Availability. Food availability includes interventions that focus on crop production, inputs, extension, biofortification, and other activities designed to increase food availability.

Pillar 2: Access. Food access includes interventions related to government policy on increased access to food or focus on food prices or both. Interventions include efforts to increase income through cash-for-work or food-for-work programs, cash transfers, and school feeding programs. Access to food may also be increased though other means, such as the developing gardens or adding small livestock.

Pillar 3: Utilization. Utilization includes interventions supporting the provision of nutrition packages and training, health services (such as vaccinations), and access to clean water, sanitation, and hygiene services. In agriculture, projects that concentrate on food availability and access also focus on nutritional aspects.

Pillar 4: Stability. Stability includes interventions on income generation and income diversification; risk management systems, including insurance; access to land and finance; agricultural infrastructure development; and market integration. This pillar also includes support for climate adaptation activities, such as climate-smart agriculture (particularly in Agriculture and Food Global Practice projects) and social protection approaches that developor expand social safety net systems to include food-insecure households.

Source: CFS 2014.

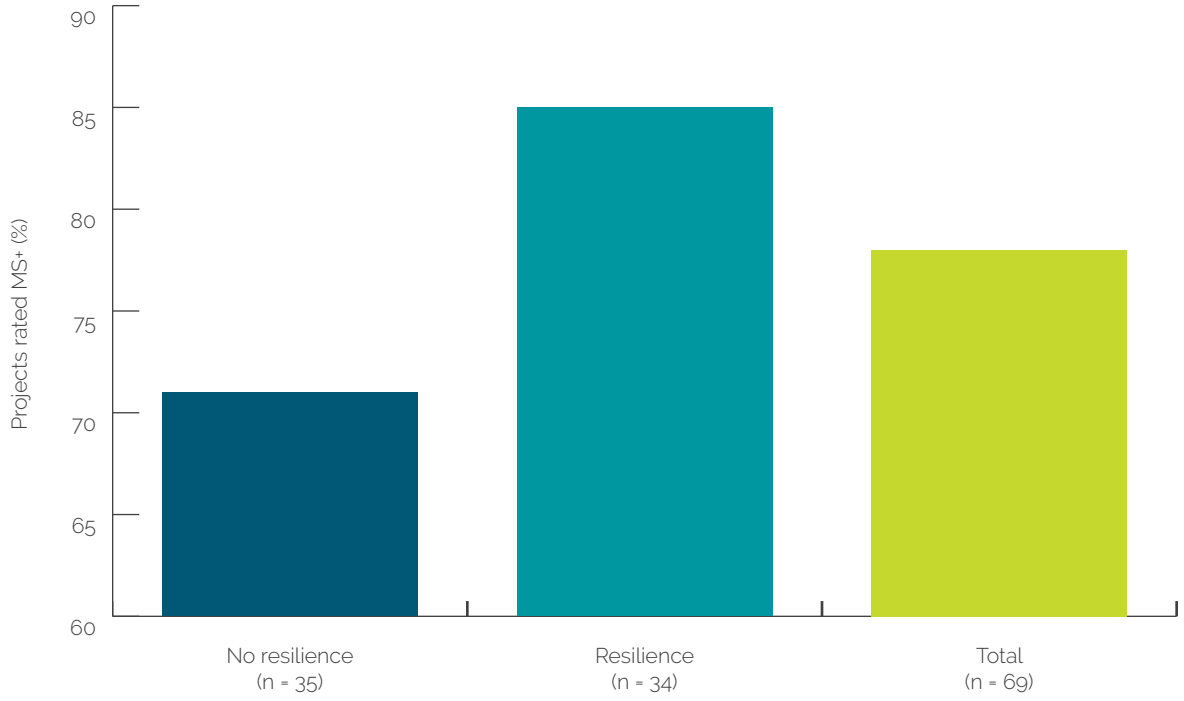
② Emergency operations designed to address acute crises can and do include resilience features

Emergency operations are investment projects designed as a rapid response to crises or emergencies. Representing 30 percent of the portfolio, they are characterized by rapid preparation, as well as streamlined financial management, procurement, and disbursement procedures. They often have shorter durations than regular development operations. Emergency operations are increasingly building resilience features into their design; the share of these operations with resilience features grew from 50 to 75 percent over the two study periods. The share of operations with resilience features in fragility, conflict, and violence situations, many of which are emergency operations, has increased almonst 10 percent..

③ Closed projects with resilience features achieved higher outcome ratings

Closed and evaluated projects with resilience features, particularly those that supported long-term stability, achieved higher development outcome ratings than projects without resilience features. For the closed and evaluated portfolio, 85 percent of projects with resilience features achieved an outcome rating of moderately satisfactory or above (MS+) compared with 71 percent of projects without resilience features (figure 1). Outcome ratings for emergency projects that built resilience did not differ from those that did not (the share of successful projects was the same, at 67 percent rated MS+). If emergency operations are excluded, then 95 percent of all projects with a food security aim that also included resilience building achieve MS+.

Figure 1. Projects with Outcome Rated Moderately Satisfactory or Above, by Inclusion of Resilience Features



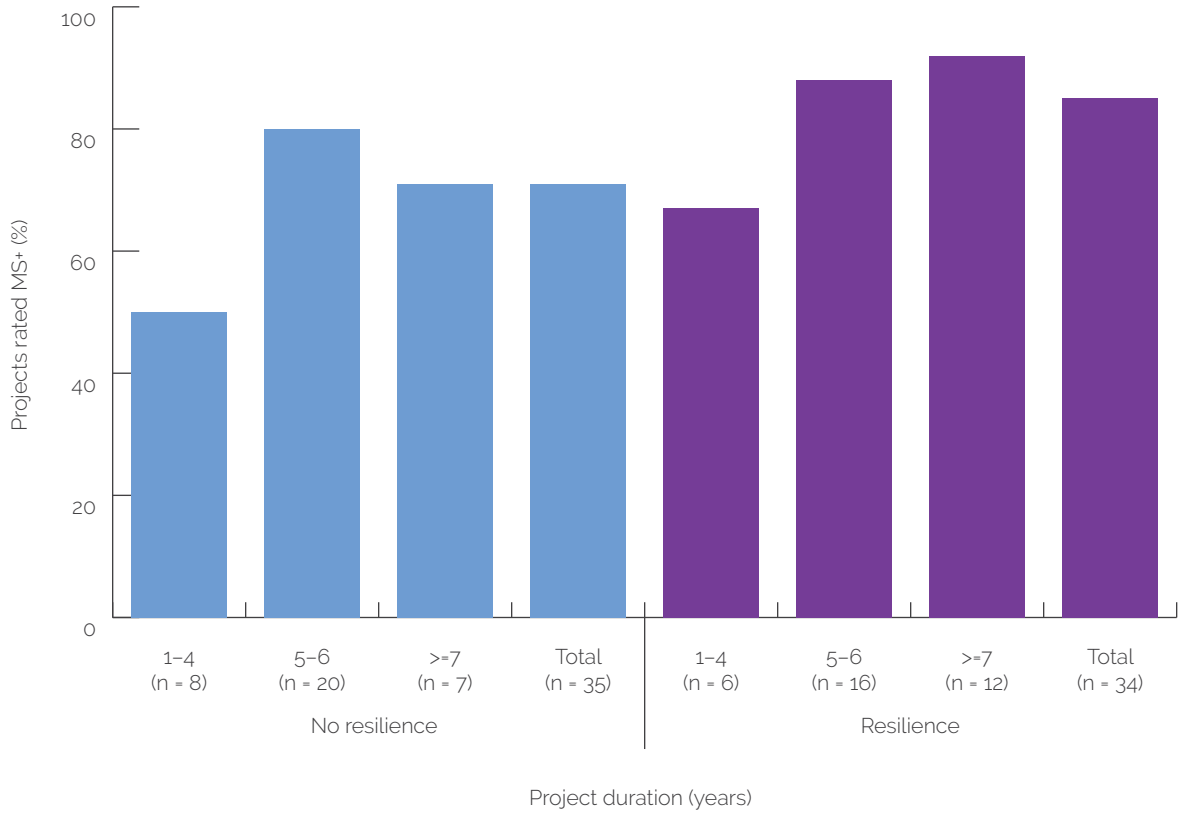
Source: Independent Evaluation Group.

Note: MS+ = moderately satisfactory or above.

Food security projects with resilience features tend to have a longer time frame to tackle the drivers of food insecurity

By applying a resilience lens to operations that seek to address food insecurity, program design tends to have a line of sight beyond the immediate term, supported by multiple mechanisms that bridge the gap between immediate crisis responses and longer-term sustainable development aims. Figure 2 shows that for the portfolio of projects assessed, resilience building indeed takes time, and when resilience building is combined with longer project duration, project success increases.

Figure 2. Projects with Outcome Rated Moderately Satisfactory or Above, by Duration



Source: Independent Evaluation Group.

Note: MS+ = moderately satisfactory or above.

Many sectors are implicated, since each sector can contribute a unique and complementary set of mechanisms to building resilience in food-insecure areas. At the country level, programs can identify the ways that these complementary skills can be leveraged to achieve resilience. The mix of mechanisms will vary by context, and metrics need to be developed on top of the individual sector activities to determine whether the mix is adequate to achieve food security aims. We identified five sets of characteristics of projects across sectors that can help bridge shorter- and longer-term food security aims. These are summarized in the following paragraphs and expanded on in box 2.

» **Pairing activities:** The pairing of assistance includes increased food production, access to credit, and the development of essential value-chain infrastructure, as well as risk reduction activities such as training and support for nonfarm income-generating activities or the expansion of

rigorously targeted social protection programs that include food-insecure households. This combination of activities was found in an agricultural project—the Burkina Faso Agricultural Productivity and Food Security Project (P114236).

- **Productive inclusion:** Social protection approaches can address short-term household vulnerability through cash for work while diversifying risk by providing off-farm income-generating activities. This combination of activities was found in a social protection project—the Niger Safety Net Project (P123399).
- **Decentralized approaches:** The use of decentralized approaches, including community engagement, can deal with service delivery challenges while addressing longer-term nutritional issues, such as stunted growth of children. This combination of activities was found in a health project—the Benin Food, Health, and Nutrition Project (P143652). This decentralized approach, which relies on local government, nongovernmental organizations, and community leaders, fits well into contexts of fragility, conflict, and violence. For example, the Djibouti Crisis Response—Social Safety Net Project (P130328), designed under the International Development Association Crisis Response Window, used emergency measures to respond to drought and also focused on behavioral changes that could promote enhanced nutritional practices while laying the groundwork for a national safety net system.
- **Collaboration:** Leveraging partners and coordinating donors to address policy and capacity constraints works well to achieve food security aims. This was the case in the Mozambique Second Agriculture Development Policy Operation (P146930), which organized targeted technical assistance from donors to support the implementation of a suite of agriculture sector policy reforms enacted through the World Bank's development policy lending. These were essential for achieving longer-term food security.
- **Strong analytics and design:** Emergency operations are informed by strong diagnostic studies. Post-Disaster Needs Assessments conducted by partners, can provide a sound technical basis for priorities focused on livelihood support and medium- and longer-term recovery needs.

Box 2. Food Security Operations with Resilience Features that Tackle the Drivers of Food Insecurity

The Burkina Faso Agricultural Productivity and Food Security Project (P114236) dealt with longer-term structural deficiencies through investments in essential infrastructure. The project sought to improve the capacity of poor producers to increase food production while ensuring improved availability of food products in rural markets. The project included productivity-increasing technologies for farmers, including an innovative e-voucher system for input provision. The project supported resilience building via a warehouse receipt system that helped stabilize the supply of basic food in local markets while providing farmers with access to microfinance and guaranteed by cereal stocks. During project implementation, farmers used these secured loans to pay for vital family needs (for example, children's school fees and expenses) and to make investments in their farms and agricultural enterprises. In a Sahelian country like Burkina Faso, with only one rainy season, food storage was an important food security tool for managing climate shocks and building community resilience against climate change. Innovation platforms organized between the public and private sector for key food crops helped increase the availability of produce in the markets and improved coordination of the participants in the platform.

The Niger Safety Net Project (P123399) addressed short-term household vulnerability through a cash-for-work program while diversifying risk by providing off-farm income-generating activities. The project supported both short- and long-term human development goals by responding to acute food insecurity needs while putting in place mechanisms to increase incomes and build human capital in the long term. The project built a safety net system that supported a cash-for-work "plus" (cash-plus) program and provided cash transfers to vulnerable households. Cash-plus programs include provision of alternative livelihood training and grants for productive investments. Project evaluations showed that cash-plus programs can boost investments and diversify off-farm income-generating activities, leading to significant increases in revenues and profits compared with cash-only programs. At the same time, the project also supported measures to improve child health and nutrition, reproductive health, and early child stimulation by combining cash transfers with community meetings, group discussions, and home visits to provide information on these topics. Building on the disaster risk financing mechanism, the safety net system was also able to scale up the response to climate-related shocks.

The Benin Food, Health, and Nutrition Project (P143652) used decentralized approaches, including community engagement, to address service delivery challenges as well as longer-term nutritional issues. In this project, the World Bank helped build capacity for decentralized management of service delivery through consultative local committees as at the municipal level. It worked subnationally to develop community-based nutrition programs, by engaging local leaders and nongovernmental organizations, to raise awareness and implement programs steeped in the local context to address stunted growth of children—a longer-term resilience goal.

The Second Agriculture Development Policy Operation (DPO2) in Mozambique (P146930) and the Nepal Second Health, Nutrition, Population and HIV/AIDS project (P117417) leveraged partnerships and donor coordination to promulgate reforms and build capacities essential for addressing policy and institutional constraints for achieving long-term food security. Together with partners, the Agriculture DPO2 in Mozambique supported policy, legislative, and institutional reforms to lower the entry cost for private sector participation in the agricultural sector and to achieve speedier adoption of agricultural technologies including seed and fertilizer, while also supporting the adoption of food

(cont.)

Box 2. Food Security Operations with Resilience Features that Tackle the Drivers of Food Insecurity

quality standards for nutrient-fortified wheat flour and edible oil. Although the DPO2 supported key policy reforms, other donors provided critical technical assistance to support implementation.

The Malawi Flood Emergency Recovery Loan Project (P154803) conducted a comprehensive Post-Disaster Needs Assessment, in partnership with the United Nations Development Program and the European Union, that informed the project design. In addition, the design incorporated time-bound aspects in implementing the livelihood support activities (input for asset program), and other immediate and short-term interventions to facilitate the management of supervision resources, better structure delivery mechanisms, and increase the likelihood that resources will reach the intended beneficiaries on time.

Sources: Project Appraisal Documents, Implementation Completion and Results Reports, Implementation Completion and Results Report Reviews.

It is critical to adapt the pace and sequencing of short- and long-term reforms and measures to country capacity

The Madagascar Emergency Support to Critical Education, Health, and Nutrition Project (P131945) demonstrated how to effectively roll out a cross-sectoral program by using simple and flexible designs, setting a realistic objective, and shifting resources to those areas that were working best to achieve both short- and long-term Health, Nutrition, and Population goals. The project benefited from a strong implementation partnership that allowed *fungibility of resources* where they were most needed. Sound coordination and implementation arrangements are especially important for multisectoral projects. However, the Andhra Pradesh Rural Inclusive Growth Project (P152210)—a multisectoral project with numerous project interventions and several implementing agencies—was less effective in achieving longer-term growth and food security aims. The project design, which included livelihood support to increase farmers' income, social development, and social protection activities, exceeded the capacity of the implementing agencies. In this case,

the difficult navigation of multiple implementing agencies limited the potential impact of the combined activities to achieve short- to long-term food security aims in other projects and countries (as shown in box 2).

In summary, the concept of resilience offers promise in linking shor-term emergency responses with longer-term development activities to address the drivers of food insecurity. Although resilience is built by helping agricultural systems weather shocks, longer-term resilience building requires multidisciplinary actions that identify and address the longer-term drivers of food insecurity. This often requires cross–Global Practice collaboration and enhanced implementation support.

Methodology

This EIN draws lessons from recent World Bank investment operations with a food security focus to inform the ongoing World Bank response to the global food crisis. First, we conducted a portfolio identification review process, which found 139 closed and evaluated projects that had a food security theme code (Food Security and Nutrition—Theme Code 68, Global Food Crisis Program—Theme Code 91) from FY16 to FY22. We used a manual review on these projects, applying the framework from the literature review (availability, access, use, and stability) to identify 69 closed and evaluated projects that had interventions relevant to food security issues. Additionally, we identified an active portfolio of 139 projects using the same sector and theme codes, as well as the new theme codes on food security and nutrition (671 and 672), which were approved between FY16 and FY22. Applying the same inclusion and exclusion criteria resulted in 112 active projects. Furthermore, we mapped the countries using FAO indexes on "prevalence of moderate and severe food insecurity" and "prevalence of undernourishment."[1] Forty-four percent of the total portfolio review is mapped to the Agriculture and Food Global Practice; 32 percent to the Health, Nutrition, and Population Global Practice; and 14 percent to the Social Protection and Jobs Global Practice. The remaining portfolio is spread across the Global Practices for Education; Macroeconomics, Trade, and Investment; Urban, Disaster Risk Management, Resilience, and Land Transport; Water; and Poverty. We coded the projects using Implementation

[1] FAOSTAT. "'Suite of Food Security Indicators'. Indicators." https://www.fao.org/faostat/en/#data/FS

Completion and Results Report Reviews, Implementation Completion and Results Reports, and Project Appraisal Documents (for active projects) to answer questions about the characteristics of interventions, resilience aspects, and lessons. The portfolio was categorized and assessed using the FAO's four pillars of food security (box 1). Although many of the projects in the evaluated portfolio were designed to address country- or regional-level shocks, lessons from the design and implementation mechanisms of these projects were deemed to be relevant for this assessment developed in response to the ongoing food crisis.

Limitations. This EIN covers World Bank investment projects only. It does not cover aspects of trade-related policies (food and fertilizer trade restrictions) or other energy or food-related issues associated with the Russian invasion of Ukraine. The analysis is limited to a desk-based review of project features. It uses Project Appraisal Documents, Implementation Completion and Results Reports, and Implementation Completion and Results Report Reviews; it excludes interviews and field assessments.

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