

Addressing Gender and Social Dynamics to Strengthen Resilience for All

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n the face of various social, economic, health, political, and environmental risks, resource-poor people and communities in rural Africa employ diverse livelihood strategies to avoid, cope with, and adapt to multiple shocks and stressors. The African continent faces severe challenges related to increasing temperatures, water stress, and environmental degradation (Niang et al. 2014), and climate change exacerbates the risks posed by other threats such as rapid population growth, haphazard urbanization, conflict, extreme poverty, food and nutrition insecurity, public health threats, and corruption. In recognition of this confluence of risks and the diverse strategies people use to manage risk, the concept of resilience has taken hold in humanitarian and development communities as a unifying framework for identifying and planning for multiple, simultaneous risks that threaten rural people's well-being. In addition, a resilience lens widens the time frame for considering risks. In so doing, it helps focus attention on the implications of humanitarian interventions on longer-term development and on safeguarding development gains against shocks, thereby helping to bridge the humanitarian and development sectors (Frankenberger et al. 2014; Béné et al. 2016).

Most definitions describe human resilience as the ability to draw upon a set of capacities to deal with disturbances (shocks and stressors) before, during, and after a disturbance, in a way that maintains or improves well-being outcomes (such as food security or adequate nutrition) (Frankenberger et al. 2014; Mercy Corps 2016; USAID 2017). The United States Agency for International Development (USAID), for example, 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" (USAID 2012, 5). Key elements for measuring the process of resilience include information on initial and subsequent states (well-being outcomes), disturbances (shocks and stressors), and capacities (Constas et al. 2014; Frankenberger et al. 2014).

For interventions to build on existing capacities, avoid displacing functioning risk management institutions, and support people and institutions in pursuing their preferred strategies, an emphasis on studying and understanding the local context is fundamental to the resilience approach (Tschakert 2007; Agrawal et al. 2010; Vaughan and Henly-Shepard 2018). Attention to the specific context refers to not only a particular time and place, but also the many social differences of

people living in a specific geography at a given time. In designing and evaluating resilience-oriented programs and policies, development actors consider questions such as which kinds of capacities are important for building resilience in a particular context for specific groups of people, and how best to support people in developing these capacities and responding to shocks and stressors in a way that protects well-being outcomes.

Preferences and needs related to resilience differ between groups of people (Adger 2009), especially along lines of gender and social difference (Frankenberger et al. 2013; Mercy Corps 2016; USAID 2017). An emerging body of practitioner guidance emphasizes that vulnerabilities and individual capacities differ by gender, pointing to the risks of gender-blind resilience programming (Mercy Corps 2014; Le Masson 2016; Tabaj et al. 2017; Anderson 2018). "One-size-fits-all" models risk inadvertently excluding vulnerable groups, or even increasing marginalization and vulnerability. In contrast, programs and policies that address gender-specific constraints and opportunities may be better able to build resilience by tapping into the skills and contributions of women and marginalized groups.

More research is needed to understand how the dynamics of resilience are shaped by gender and other social differences. Sex-disaggregated data are important, but they contribute to this research only to the extent that pertinent questions are asked. Because gender and resilience dynamics can be highly complex and context-specific, guidance is needed for how to investigate these issues in specific settings and, based on that information, take appropriate action for gender-responsive resilience programming.

The objective of this chapter is to synthesize evidence on how resilience is gendered, drawing on key approaches to assessing gender and social differences in resilience, and using a conceptual framework that has been developed for understanding the linkages between climate resilience, gender, and nutrition. This review is complemented with examples of the programmatic approaches of implementing organizations working in Africa. Based on this evidence and the elements of the conceptual framework, this chapter presents guidelines to support the integration of gender into resilience programming. These areas of inquiry can help guide the design, monitoring, evaluation, and improvement of resilience programs and policies that meet the diverse needs of the populations they are serving and contribute to processes of greater gender and social equity.

FIGURE 9.1—THE GENDER, CLIMATE CHANGE, AND NUTRITION INTEGRATION INITIATIVE (GCAN) FRAMEWORK DISTURBANCES Climate Shocks and Stressors **ENABLING ENVIRONMENT EXPOSURE ABSORPTIVE** ADAPTIVE CAPACITY CAPACITY RANGE OF RESPONSE OPTIONS **DECISION-MAKING CONTEXT RESPONSE** Resilience/vulnerability feedback loop GHG emissions/carbon sequestration Coping | Risk Management | Adaptation | Transformation **PATHWAYS** (\$ **OUTCOMES** Food and Nutrition Security Health Gender and Social Equity **Environmental Security** TRADE-OFFS AND SYNERGIES BETWEEN PEOPLE, SCALES, AND OUTCOMES **ELEMENTS INFLUENCED BY GENDER, AGE, AND OTHER SOCIAL DISTINCTIONS** Source: Bryan et al. (2017). Note: NRM = natural resource management.

Gender and Climate Resilience in the GCAN Framework

Drawing on a review of the academic literature, existing frameworks, stakeholder consultation, and feedback from USAID missions, we developed a conceptual framework to identify key relationships between gender, climate change, and nutrition (Bryan et al. 2017). The Gender, Climate Change, and Nutrition Integration Initiative (GCAN) framework (Figure 9.1) characterizes the relationships between climate resilience, gender, and nutrition by integrating gender and nutrition elements from other conceptual frameworks—including links between gender and climate change (Behrman, Bryan, and Goh 2014), links between climate change and nutrition (IFPRI 2015), and pathways from agriculture to nutrition (Kadiyala et al. 2014)—with the widely used resilience framework of Frankenberger and colleagues (2014).

This framework has been adapted for this chapter to reflect more broadly the interaction of gender and social dynamics with resilience. The framework and summary guiding questions provide a template to help policymakers and practitioners identify how groups of people experience key elements of resilience differently. The framework can be applied to different scales of analysis, including the intrahousehold level, to illustrate that members of the same household do not necessarily share the same capacities, vulnerabilities, preferences, and decision-making power. While introduced here briefly, the interactions between gender and resilience are discussed in more detail in relation to each element of the framework in the following sections of the chapter.

First, individuals are exposed to different disturbances (shocks and stressors), and they experience the same shocks and stressors differently. Second, people have different resilience capacities (absorptive, adaptive, transformative), subject to gender and other social distinctions as well as the intersection of these identities, including those related to age, class, caste, ethnicity, marital status, and sexual identity, among others (Carr and Thompson 2014; Djoudi et al. 2016; Ravera et al. 2016; USAID 2017; Tabaj et al. 2017; Anderson 2018) (Box 9.1). Not all women have the same set of resilience capacities, and men have important capacity constraints, too. Narratives that depict women as perpetually vulnerable and men as inevitably antagonistic ignore the ways in which women are agents of change and neglect the constraints faced by men as well as the available opportunities to mobilize men as allies for gender and social equity (Doss et al. 2018).

BOX 9.1—THE IMPORTANCE OF INTERSECTIONALITY: THE EXAMPLE OF GENDER AND MARITAL STATUS

One aspect of intersectionality that strongly differentiates women's options for adaptation is marital status. There is evidence that in many contexts, female heads of household face severe restrictions, including limited access to land, capital, social networks, and labor, which could affect their households' resilience outcomes (Van Aelst and Holvoet 2016; Mersha and Van Laerhoven 2018). Women in dual-headed households can in some cases benefit from access to these resources through male household members. However, these women may have less decisionmaking authority and often must negotiate with other household members over resource and labor allocation, and seek male approval to pursue opportunities such as initiating a small business, participating in training activities, accessing healthcare, or using contraception.

Source: Authors.

Third, within households, institutions, and communities, each response to a disturbance—even if that response is to do nothing—is the result of choice and negotiation, albeit among restricted options. Individuals within these social organizations do not all have the same preferences, knowledge, priorities, or power. The decision-making context, or an actor's ability to negotiate a preferred response option within a household or community, is a key element within the process of resilience that has strong differences by gender but is often overlooked (Behrman, Bryan, and Goh 2014).

Finally, responses to shocks and stressors can have differential impacts on the well-being outcomes of men, women, boys, and girls. Well-being outcomes measured at aggregated levels or in the short term may obscure the different ways in which responses to shocks and stressors affect individuals' well-being outcomes. Drawing attention to seven outcome pathways helps uncover some of the key mechanisms driving well-being outcomes and how these outcomes are distributed among different groups of people.

Gender Differences in Exposure and Sensitivity to Disturbances

Individuals are exposed to different shocks and stressors, and experience them differently given different levels of sensitivity (Figure 9.1). Individuals evaluate and prioritize risks differently according to their perceptions of the severity of the particular shock or stress and its likelihood of occurring. As a result, women and men often prepare for and manage different kinds of risks (Adger et al. 2009; Kristjanson et al. 2017).

As an example, due to social and biological factors, individuals' health risks vary over their lifetimes and by gender. Problems with growth generally occur during infancy and early childhood and are often gendered; during adolescence, girls face elevated risks of child marriage, early pregnancy, and sexually transmitted infections; and women of childbearing age face the risks of maternal morbidity and mortality.

Gender roles can influence risk prioritization and responses to shocks and stressors, such as the purchase of insurance (Msangi 2017). Gendered livelihood activities, including differences in cropping systems, livestock, and household responsibilities, are exposed to distinct risks. In a study in Senegal, women's perceptions of the threats from disease and poor infrastructure—such as the threat to survival during childbirth due to lack of medical equipment at health centers—were more severe than men's perceptions (Tschakert 2007). Perceptions of risk and experience with shocks and stressors, variant as they are between people, matter because they strongly influence choices of how to adapt (Bryan et al. 2013).

Finally, some people may be more sensitive to particular shocks and stressors than are other people. For example, the social and economic consequences of separation from or death of a partner are almost always more serious for women than they are for men because women risk losing access to land and other assets. These factors can provide strong incentives for women to conform to gender norms in efforts to secure relationships. Avoiding contentious negotiations, hiding or altogether forgoing personal investments or savings, and limiting one's mobility comprise what has been called the "patriarchal bargain" in exchange for security (Kandiyoti 1988). In addition, the threat of intimate partner violence at home or gender-based violence in the community can strongly discourage women from pursuing opportunities to build their own

resilience capacities (Le Masson et al. 2018). Other social distinctions, such as sexuality and gender identity, also affect sensitivity to shocks and stressors. LGBTQ people routinely face harassment, violence, and exclusion from services and institutions in many settings.

Resilience-informed policy and programming requires active investigation of how risk exposure differs within a population, how different groups of people perceive risks, and how secondary risks shape people's coping strategies. While a resilience lens promises a holistic approach to risk, ultimately those designing interventions need to select and prioritize certain risks. Ideally, priorities will be set through an inclusive process, as actors consider which groups of people are and are not represented by the selected risks.

Resilience Capacities

Subject to gender and other social constraints, individuals have varying abilities to develop and mobilize different resilience capacities: absorptive, adaptive, and transformative. These capacities "filter" the range of response options available to individuals for managing risk (Figure 9.1). Only a subset of all possible response options is available to individuals or communities, depending on their capacities and their ability to exercise these capacities (Béné, Frankenberger, and Nelson 2015; Bryan et al. 2017; Vaughan 2018). Individuals with greater resilience capacities have more choices of strategies to protect and improve their livelihoods and well-being over the long term.

Absorptive capacity (or coping capacity) is the ability to address, manage, or overcome

BOX 9.2—WHO HAS ACCESS TO CRITICAL INFORMATION FOR CLIMATE RESILIENCE?

Access to information is an essential determinant of resilience capacities and is especially important for resilience to climate shocks and stressors. However, information may not reach men and women equally, nor be equally comprehensible to them, relevant to their activities, and applicable. Resilience programs that provide information services need to consider gender differences in preferences for information content and channel of delivery, as well as in ability to use the information.

For both men and women, information must be relevant to recipients' livelihood activities and needs. A study in Senegal found that women preferred to receive weather forecasts on dry spells and rainfall cessation, rather than onset of rains, because they plant their millet and maize plots late in the season, only after the men have planted their fields and can help them plow—meaning that women's plots are vulnerable to the effects of early-season rain cessation (Tall et al. 2014). Combining climate with gender-specific information may attract more women and make it more acceptable for women to access this information (Crowley et al. 2017).

Information must also reach both men and women, through trusted and accessible sources that are likely to vary across contexts. Providing information on climate change and climate-smart agriculture practices to the husband does not mean that this information will necessarily be passed on to the wife (Tall et al. 2014; Twyman et al. 2014). Group membership may be an important avenue for increasing women's access to information about climate-smart agricultural practices in some contexts, such as Kenya (Bernier et al. 2015). In other contexts, community radio, church or mosque announcements, and extension agents are reliable sources of information (Jost et al. 2016). In contexts where women have less access to radio or cell phones, they may need to be reached through other channels, such as announcements posted in places where women gather or video messages shown to the entire community (Tall et al. 2014; Partey et al. 2018).

However, providing information to women may not suffice if women lack the bargaining power and resources to make desired changes. Ragasa, Aberman, and Alvarez Mingote (2017) found that in Malawi, despite participating in agricultural trainings, women were unable to apply what they learned because their husbands mistrusted their knowledge and did not allocate them resources for the new practices.

Communities can and should provide feedback on the accuracy and relevance of climate-related information they receive. Women's specific knowledge and needs should be considered in such dialogues.

Source: Authors.

shocks and stressors in the short to medium term. Adaptive capacity is the ability to make proactive and informed choices in livelihood strategies to avoid potential harm from shocks or stressors, seize opportunities to manage risk more effectively, or respond in ways that overcome the adverse impacts of shocks and stressors over the medium to long term. Transformative capacity is the ability to make changes at the system level to better manage risk and respond to shocks and stressors over the long term—for example, by removing discriminatory laws, improving infrastructure, changing harmful social norms, expanding basic service delivery, or strengthening social protection policies (Frankenberger et al. 2013).

Key constraints related to women's resilience capacities include limited access to information (Box 9.2) and financial services; more limited ability to hire labor; and lower levels of literacy, education, mobility, and available time.

Investing in resilience capacities can help people expand and improve their range of options for dealing with disturbances. When people have weak and limited resilience capacities, they may be forced to choose coping mechanisms that negatively influence their well-being or future adaptive capacity, such as reducing food consumption and consuming less of preferred foods, limiting household expenses, taking children out of school or sending them to live with better-off relatives, engaging in transactional sex, or drawing down assets (Box 9.3). Individuals with greater resilience capacities have more choices of strategies that protect and improve their livelihoods and well-being over the long term.

Gender differences in capacities lead to differing options to choose from and differing abilities to pursue desired response options. In Ethiopia, Mersha and Van Laerhoven (2018) found that male-headed households accessed a wider array of adaptation options in response to climate change and extreme events, including on-farm adaptation, temporary migration, storage, communal pooling, and diversification, whereas female-headed households were excluded from these options and primarily

BOX 9.3—THE ROLE OF ASSETS IN STRENGTHENING RESILIENCE CAPACITIES

Access to and control over assets is a key factor influencing resilience capacities (USAID 2017). Assets function as a store of value and can be used to generate food and income or facilitate investment in better livelihood strategies (Meinzen-Dick et al. 2011; Johnson et al. 2016). Assets also influence social status and bargaining power at home and in the community (Meinzen-Dick et al. 2011; Johnson et al. 2016). Yet gender disparities in access to and control over assets means that different approaches must be taken to effectively support women in building and safeguarding productive assets.

For example, the types of assets that can be acquired and the mode of accumulating them differ by gender. Women often receive assets through relationships—for example, a husband may allocate a lower-quality plot of land to his wife to cultivate seasonally (Perez et al. 2015).

Moreover, women's property rights are typically fewer and less robust, of shorter duration, and less likely to be formally recognized or documented than men's (Meinzen-Dick et al. 2017). This discrepancy has negative implications for women's resilience. For example, perceived or real weaker tenure security can discourage investment, such as tree planting or technology adoption, needed to prevent losses due to shocks and stressors but also essential for longer-term adaptation (Verma 2001, Jost et al. 2016; Quisumbing and Kumar 2014). In addition, assets that women nominally "own" may be sold without their consent, or the proceeds may be controlled by another household member (Theis et al. 2018).

In some cases, women's assets, such as jewelry, may be drawn down in response to shocks if the asset is less important for generating household income, the owner has weaker bargaining power within the household, or the asset is easier to sell (Quisumbing, Kumar, and Behrman 2018). Moreover, women who want to sell or exchange their assets into more liquid forms might face credit, information, mobility, and market discrimination barriers. Programs can protect women's assets from divestiture by providing and making accessible to different social groups alternatives to asset drawdown for the whole household, such as emergency loans, social transfers, and other means of providing liquidity as well as facilitating asset rebuilding after crises.

Source: Authors.

engaged in diversification through low-paying, unstable wage labor and self-employment.

Sexual and gender-based violence is a source of everyday insecurity that affects women's and girls' resilience capacities and well-being, and which can increase in times of distress. Violence against women and girls intersects with other resilience capacities by affecting their ability to secure and improve livelihoods, access information, and participate in decision-making at the household and community levels (Le Masson et al. 2018).

The gendered distribution of unpaid work within households draws heavily on girls' and women's time, and can limit their development or exercise of resilience capacities by hindering their ability to generate income or build and draw on social and human capital when shocks and stressors occur. In addition, their workload can be further exacerbated by shocks that lengthen the time required to collect water, fuel, wild foods, or fodder. The energy burden of these activities can also be detrimental to women's health and, at reproductive age, carry intergenerational implications (Owens et al. 2015; Rao et al. 2003). An excessively heavy agricultural workload can take away from time needed for adequate food preparation and care practices (Komatsu, Malapit, and Theis 2018). Women may avoid certain adaptation options and appear less proactive because the available options entail too heavy a workload (Jost et al. 2016).

Recognizing women's and girls' essential contributions to livelihoods, reducing their workload through labor-saving technologies, and redistributing chores among household members can reduce time poverty and free up time for other activities that build resilience capacities. For example, Ethiopia's Productive Safety Net Programme (PSNP) leverages community labor to build public works infrastructure such as water points and woodlots for fuel that relieve women's domestic work burden (Jones, Tafere, and Woldehanna 2010). Time poverty may make it difficult for women to participate in resilience-strengthening program activities. Flexible hours, childcare, and proximity to the home (or home-based work) can facilitate women's participation. The PSNP accounts for women's productive and reproductive roles by providing flexible work hours for women, although

BOX 9.4—SUPPORTING MORE INCLUSIVE RESILIENCE CAPACITIES THROUGH KNOWLEDGE SHARING AND EXCHANGE

Contributed by Jennifer Linkletter, Senior Technical Officer, FHI 360

Since 2017, FHI 360 has implemented the Feed the Future Catalyzing Partnerships for Scale/Community Resilience in Mali/Mopti (COREM) project, which provides technical and logistical assistance to the USAID/Mali mission to improve communication and collaboration among the USAID resilience platform partners and other resilience stakeholders in the Mopti region of Mali. The platform is composed of 20 local and international implementing partners who work on 21 different resilience projects in Mopti. COREM collects data on platform communication and collaboration; conducts bimonthly platform meetings; hosts large-scale learning events and stakeholder workshops; and disseminates good practices and lessons learned through an email newsletter, an online repository, and a WhatsApp community of practice.

In response to the demand for greater emphasis on women's empowerment in the resilience sector, COREM initiated gender-related roundtable discussions at its June 2018 workshop for USAID resilience partners in Mopti. Participants had a choice between two sessions: "Women in Resilience" or "Men as Allies to Women in Resilience." The roundtable sessions allowed participants to view their own project implementation and internal policies through a gender lens. In addition to promoting further discussion around gender equality through its communication channels, COREM also models women's empowerment by striving to achieve gender balance among participants in its workshops and meetings.

COREM's work on gender and resilience has resulted in the identification of specific areas of challenge to women's empowerment in resilience projects, such as unequal land laws, lack of access to credit, conflict and insecurity, and cultural barriers. Finally, although COREM sought to increase female participation at its meetings and workshops, additional female participants often came from administrative support positions due to a lack of women in technical roles. Nevertheless, an opening was generated to listen to women's perspectives and to consider hiring women in technical positions in the future.

it is unclear how consistently this principle is applied in practice (Jones, Tafere, and Woldehanna 2010).

Identifying ways in which different groups within a target population have differing resilience capacities is critical to determine how programs and policies can strengthen or diversify all groups' capacities. In addition, understanding existing constraints to building and exercising capacities is important so that policymakers can find new ways of helping people build capacities and ensure that services are accessible to and relevant for all groups. Building capacity among institutions operating at larger scales to integrate thinking about gender into resilience policies and programs is also essential so that these policies and programs meet the needs of the most vulnerable groups. The Catalyzing Partnerships for Scale/Community Resilience in Mali (COREM) project (Box 9.4) shows how a knowledge-sharing platform can provide a space for people to learn about the intersection of gender and resilience, and share strategies for implementing gender-sensitive resilience programs. The project also encourages organizations to model gender equity within their own ranks by seeking input from both men and women staffers and including women in important positions.

The Decision-Making Context and Responses

Within households, institutions, and communities, each response to a shock or stressor is the result of choice and negotiation, albeit among restricted options. Choices include the intrahousehold allocation of food, goods, and labor; governance of shared natural resources such as pasture, water, forests, and agricultural land; community-led preparation and distribution of relief aid; and even input into resilience programming. The GCAN framework emphasizes that responses are embedded within a decision-making context, with the observed response that a group chooses often reflecting power dynamics within the institution, rather than all members' preferences. That is, individuals within households and other social organizations do not always share the same needs, preferences, knowledge, or power (Quisumbing and Maluccio 2003; Demetriades and Esplen 2010; Bernier et al. 2015). Some of the factors that influence these differences in preferences include risk tolerance, knowledge and perceptions of the options available, and expectations about impacts on individual well-being outcomes (including labor burden and future risks). Because interests are not homogeneous within

households, institutions, and communities, people need to be able to negotiate for their desired response. Although equitable decision-making can be classified as a transformative resilience capacity (Vaughan 2018), some degree of decisionmaking power is needed to exercise any resilience capacity—whether absorptive, adaptive, or transformative—for any preferred response.

At the community level, local institutions play multiple roles in building resilience to climate shocks and stressors, including mobilizing, pooling, or regulating the use of shared resources, including wealth, income, labor, and natural resources such as water and land (Agrawal 2010). When institutions that establish rules around the use and management of community resources—such as village councils or water user committees—do not represent the needs and priorities of the most marginal, they can serve to reinforce intracommunity inequality and curtail the response options of the most vulnerable groups.

At the same time, women and women's community-based organizations are often excluded from decision-making processes. This exclusion sidelines women's specific knowledge and ability to reach certain networks—for example, in determining where to situate a well, identifying vulnerable households, or sharing information with other women (Demetriades and Esplen 2010). Low participation by women and other groups in community-based decision-making bodies (due to disability or lack of literacy, for example) may be the result of explicit or implicit discrimination, including social norms about who can participate; the timing and location of meetings; and exclusive membership criteria, such as a requirement that members of a water user association own land or be literate (Pandolfelli, Meinzen-Dick, and Dohrn 2007). As a result, the resilience-building decisions of households, communities, institutions, and development projects often primarily represent the preferences of the powerful.

Even within a household, men and women often have different preferences regarding how to use resources, what risks to take, and how to respond to specific shocks and stressors (Ravera et al. 2016). In part, these differences are tied to the different roles men and women play in securing livelihoods (Bernier et al. 2015). Decisions such as a woman's choice to pursue an income-generating activity, be employed outside the household, or participate in a group or program activity, can be subject to a husband's (and sometimes in-laws') consent. Moreover, household budgeting often rests within the male domain, and women do not always know how pooled household income is earned or spent. In dual farming systems, men usually allocate land to women, choosing the quantity and quality

of land that they will farm. Furthermore, women's credit acquisition may require male approval, and the sale of a woman's own assets may not be her decision (Pradhan et al. 2018).

Women's greater involvement in household decision-making can help families better plan and prepare for shocks in a way that accounts for different household members' knowledge and needs. Women's increased bargaining power is associated with increases in households' expenditures on child health and education—human capital investments that can increase resilience in the long run (Quisumbing and Maluccio 2003). In Somalia, Mercy Corps (2014) found that women's involvement in household decision-making was strongly linked with household dietary diversity and a reduction in negative coping mechanisms. Women also played critical roles by interacting with and petitioning authorities and institutions for access to resources and services essential for household health, food and nutrition security, and well-being (Mercy Corps 2014).

Resilience programs can actively promote women's participation in decision-making at multiple scales from the household to the community level. The case study of Mercy Corps's BRIGE Program shows how household dialogue interventions can improve women's bargaining power within the household (Box 9.5). The Water Resources Integration Development Initiative (WARIDI) case study (Box 9.6) highlights how programs aimed at improving environmental resilience can also build resilience for vulnerable groups, including women and youth, by increasing their participation in community governance institutions, particularly to help ensure that decisions made in these spaces meet the needs and priorities that women have for more sustainable water management.

BOX 9.5—INTRAHOUSEHOLD DIALOGUES INCREASE WOMEN'S BARGAINING POWER IN NIGER

Contributed by Jenny Morgan, Senior Knowledge Management Advisor, Mercy Corps

Mercy Corps' 2015–2018 Building Resilience through the Integration of Gender and Empowerment (BRIGE) program aimed to strengthen gender-sensitive resilience programming within the organization by piloting a series of gender-based interventions within six resilience programs in Indonesia, Nepal, and Niger.

One BRIGE intervention in Niger was designed to increase women's equitable participation in household decision-making through a facilitated household dialogue (Mercy Corps 2018). A household dialogue curriculum was piloted in Tillaberi Region over four days, with gender-separated sessions held before couples were brought together for joint sessions. Well-trained facilitators presented couples with a chance to reflect on issues of gender equity and the gendered division of labor within their own households. Discussions followed, and couples jointly designed action plans for their households. The implementation of the plans sometimes involved other family members and was monitored by BRIGE staff through follow-up visits. In addition to the household dialogue, Mercy Corps also organized training for religious and traditional leaders in the communities to generate broader community awareness. An end-of-training celebration featured community leaders and recognized local role models to reinforce the gender messages. A complementary activity called "Husband Schools" also supported the transformation of gendered power dynamics by increasing men's awareness of issues related to gender equity, women's workload, and family planning, among other topics.

Research conducted following the Niger intervention revealed that it increased men's respect for women and their opinions, as well as increasing women's confidence, leading to greater women's participation in household and community decision-making. Women's opinions regarding household food management, including balancing the nutritional value of food items, were more valued, and husbands began to inform their wives about their intention to buy certain foodstuffs, reinforcing women's faith in men's ability to prioritize food purchases for the household. The household dialogue also increased men's trust in women to travel outside the home, thereby improving women's mobility and access to mobile phones, information, and financial services, all of which have the potential to increase their resilience. The household dialogue also increased men's participation in household chores, such as collecting water, thereby reducing women's time burden, enabling them to participate in other activities, such as preparing more nutritious food and attending Quranic schools.

BOX 9.6—INCREASING DECISION-MAKING BY WOMEN AND YOUTH IN NATURAL RESOURCE MANAGEMENT

Contributed by Hannah F. G. Taukobong, Vice President, Iris Group; Christina G. Sudi, Gender Integration and Youth Inclusion Advisor, USAID WARIDI; and Erneus Kaijage, Climate Change Specialist, USAID WARIDI

The USAID Water Resources Integration Development Initiative (WARIDI) in Tanzania promotes integrated water resources management and service delivery across multiple sectors, with the goal of improving the management of water resources and access to services. Specifically, in selected districts of the Rufiji and Wami-Ruvu river basins, the project (1) increases access to sustainable multiple-use water, sanitation, and hygiene (WASH) services; (2) strengthens governance for sustainable and resilient management of water resources and services under a changing climate; and (3) improves livelihoods through supporting private-sector opportunities in sustainable WASH services, agriculture, and natural resources management.

From its inception, WARIDI has intentionally focused on gender integration and youth inclusion (GIYI) in pursuit of better project outcomes and gender equality. In its first year, the WARIDI gender team conducted a rapid project-level GIYI assessment. Based on these findings, the initiative wrote a GIYI strategy identifying shortand long-term actions for GIYI through project activities and management systems.

The GIYI assessment found limited women's participation in community-based governance institutions, despite the fact that women and girls in rural Tanzania are more affected by water scarcity and inadequate sanitation and hygiene, problems that are expected to be aggravated by climate change through prolonged and recurrent droughts and flood-induced waterborne diseases. National policies mandating that women hold one-third of leadership positions in village and water governance institutions have done little to encourage their meaningful participation, given existing social norms that sanction women who speak up. To address this problem, WARIDI piloted the UPWARD (Uplifting Women's Participation in Water-Related Decision Making) intervention in Kanolo in Kilombero and Lulanzi in Kilolo, designed to shift gendered social norms regarding women's participation in water decisions by working with community leaders and women's groups. In addition, local government authorities (LGAs) and WASH governance institutions were trained on the importance of including women's voices in order to directly empower women with water resources management capabilities and further encourage their participation in decision-making. By adopting a more inclusive approach, WARIDI expects to improve the capacity of institutions to manage water resources, provide access to drinking water from improved sources, expand opportunities for income-generating activities, and ultimately increase the resilience of families and communities.

Results emerging from UPWARD show that community-based sessions for leaders and women's groups generate interest across the community about gender roles and gendered social norms. Intervention staff report greater discussion of and support for women's participation in public decision-making among community members. These preliminary findings suggest the beginnings of a shift in gendered social norms and concurrent changes in women's participation. UPWARD has also documented shifts in water-related tasks, such as an increase in men's and boys' fetching water, following the intervention. Following the LGA and WASH governance trainings, project staff documented instances of community leaders' noting the importance of women's involvement in these decision-making spaces. Project staff will continue to track whether these changing attitudes lead to further shifts in leadership and membership in water governance institutions.

Changing gendered social norms is a challenging and slow process that requires significant resources and sustained involvement and interactions with participating communities. Altering behaviors and institutional practices through trainings is also challenging, particularly given turnover in staffing, which can undermine monitoring and evaluation efforts, as well as require ongoing training for new staff. However, experience from the UPWARD intervention shows that programs can support shifts in social norms, leading to greater participation of women in decision-making.

Well-Being Pathways and Outcomes

Responses to shocks and stressors can have differential impacts on men's and women's well-being outcomes, especially when the decision-making context is characterized by large power differentials or exclusion and lack of representation.

The GCAN framework highlights seven pathways through which response trajectories can have differential effects on well-being outcomes such as food and nutrition security, gender equality, health, and environmental security (Figure 9.1, "Pathways" panel; Table 9.1). These pathways show the impact

mechanisms from responses to well-being outcomes, revealing ways in which outcomes may diverge among different social groups and even among members of the same household.

The pathways can result in different well-being outcomes even for individuals in the same household, especially when there are large power differentials and primary decision-makers undervalue others' well-being or are not aware of how a chosen response can affect others. For example, taking children out of school may save cash for the household's immediate subsistence needs but can

Pathway	Factors influencing gender-differentiated outcomes	Examples
1. Food production	Who influences production decisions and controls outputs of production (such as whether crops are sold or consumed)?	Women decide to grow vegetables for home consumption and sale on plots they manage
		 Food stored in a granary or warehouse is inaccessible to women Men shift into cash crops or livestock that women previously controlled, displacing an important
		source of revenue for women
2. Incomes and expenditures	Whose finances and control over expenditures are affected? How do consumption patterns change?	 New off-farm employment opportunities for women increase their control over income Men and women are able to access emergency loans
		Women take on debt in their names to sponsor husbands' migration
		Women and girls reduce their consumption during shortages
3. Asset dynamics	Whose asset holdings are affected (whose assets are sold, who acquires new assets, whose assets are invested in)?	Women's assets are sold without women's input
		 Women acquire small livestock to improve nutrition and increase income from the sale of livestock products
4. Labor	Whose time use and energy expenditure changes?	Conservation agriculture techniques (such as composting and no-till practices) increase women's labor requirements
		Drought increases the amount of time women spend collecting water and fuelwood for domestic use, reducing their time for other economic activities, other household duties, and leisure
		New agricultural technologies adopted in response to climate shocks free women's time in the field
5. Natural resources	Whose access and rights to natural resources change? How does the quality and supply of natural resources change?	New water rationing rules for livestock exclude women's small livestock
		 New rules on forest management reduce women's access to firewood and nontimber forest products, which are important for food security
		New water harvesting schemes reduce women's time burden in collecting domestic water
6. Human capital	How do investments in human capital (such as education and training) change?	Children are removed from school and sent to live with relatives to reduce household costs
		Women get training in entrepreneurship to diversify household livelihood sources
7. Cooperation	How do relationships, social capital and networks, gender norms, gender-based violence, and participation in collective action change?	Women's groups foster collective action in a time of scarcity
		 Reduced mobility, greater isolation, security concerns, and displacement decrease social capital of both bonding and bridging types
		Shifts in gender-based violence can occur as men's and women's livelihoods change

hamper children's long-term human capital development (the human capital pathway). Women's personal assets such as small livestock or jewelry may be sold for household liquidity, which can reduce women's intrahousehold bargaining power and economic independence (asset dynamics and income pathways). Many agricultural technologies that can assist in building resilience also redistribute family labor and control over income (labor and income pathways).

At the community level, trade-offs also exist between different groups of people; for example, women who manage land may benefit from labor-saving agricultural technology in the form of increased free time, but women who rely on wage labor may be displaced, losing a valuable source of income (labor and income pathways). Resource governance rules about who can use water, pasture, or forests for what purposes can also benefit some and exclude others. For example, Agarwal (2001) noted that in a forest in India, men preferred to maximize income generation by planting quick-growing eucalyptus, whereas women preferred to plant other species that produce nontimber forest products useful for fuel and household needs (natural resource management, income, and cooperation pathways).

Potential synergies also exist between well-being outcomes. Households with both male and female economic activity can spread risk across different livelihood activities and reduce exposure to idiosyncratic risks related to the primary breadwinner, such as falling sick, becoming injured, or migrating for work (Eriksen et al. 2005). Decreases in drudgery and time burden, especially for women, can open opportunities to pursue economic or community activities, as well as increase time for education, health access, and care work, all of which can benefit household well-being.

In the longer term, unequal well-being outcomes exacerbate inequality by affecting future resilience trajectories and the ability to maintain and build resilience capacities. For example, even short-term shocks can have long-term, and even intergenerational, implications. Short maternal stature (a consequence of poor nutrition in childhood) is associated with low birth weight and child stunting, which in turn has implications for adolescent nutritional status, thus perpetuating the cycle of undernutrition.

In order to identify how well-being impacts may differ across social groups, it is important to examine how different response options affect these groups. Every response option carries some degree of trade-off among people and across outcomes and spatial scales. For example, responses may improve economic outcomes for certain groups of people in the short term at the expense of

outcomes for other groups or the environment over the long term. To illustrate, imagine that farmers begin supplemental irrigation from the river to stabilize their livelihoods and food security in response to increasing drought. Urban water users downstream may experience an increase in water insecurity as a result of reduced downstream water flows.

Even resilience projects that directly target women to reduce gender gaps in resilience capacities may face challenges. Research has shown that even when women's empowerment is a program objective, such an outcome can be difficult to achieve (Johnson et al. 2016). Supporting women's empowerment requires understanding how alternative interventions affect men and women differently. A project by ACDI/VOCA, aimed at increasing resilience by facilitating market participation for male and female traders and pastoralists in northern Kenya, illustrates an approach to tracking the differential outcomes of men and women involved in the project (Box 9.7).

Integrating Gender and Resilience into Policy and **Practice**

Investigating the gender and social dynamics of resilience—exposure and sensitivity to disturbances, resilience capacities, decision-making context and responses, and well-being outcomes—reveals differences in the target populations' needs, priorities, and constraints related to building resilience. This information can provide the foundation for designing more tailored, locally accepted, and sustainable interventions to increase livelihood resilience to multiple shocks and stressors. To facilitate integrating the elements of the framework into program and policy design, monitoring, and evaluation, and to guide research on these topics, Table 9.2 presents summary guiding questions structured according to the components of the GCAN framework, which can be summarized as follows:

• Evidence on distinct exposure and sensitivity to disturbances can show programs how to reduce risk exposure and sensitivity to shocks and stressors for all by identifying the risks people consider to be critical, supporting their risk management and prevention strategies, and ensuring that the risk management strategies being promoted do not exacerbate other risks. Programs can bring stakeholders together to understand the risks that different groups face, come to consensus on the prioritization of risks through multistakeholder dialogues, and partner with other service providers to broaden risk coverage.

BOX 9.7—TRACKING HOW WELL-BEING OUTCOMES DIFFER FOR WOMEN AND MEN

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ACDI/VOCA's Feed the Future Resilience and Economic Growth in the Arid Lands–Accelerated Growth (REGAL-AG) project aims to improve the resilience of male and female market actors, including pastoralists, traders, and agrovets, in northern Kenya by expanding their access to markets and economic opportunities. The REGAL-AG project is a two-pronged approach to facilitating market systems. One targeted approach built livestock markets in northern Kenya by developing market infrastructure and building the capacity of livestock market associations. The second approach involved investing in value-added livestock enterprises by building business infrastructure and management skills, and promoting an enabling business environment for livestock enterprises.

In order to assess the impact of the project and to discern differential impacts on men and women, in 2018, the project used Outcome Harvesting, a monitoring and evaluation tool, to elicit insights into project outcomes and lessons learned. ACDI/VOCA staff developed qualitative questionnaires tailored to each target group/individual, with gender-sensitive questions and probes intentionally integrated to identify differential impacts on male and female market actors.

Outcome Harvesting revealed a number of outcomes that were specific to female actors in livestock value chains. The enhanced security, organization, and frequency of livestock markets generally increased women's participation in livestock-trading livelihoods—specifically in shoat (sheep and goat) trading. Some women formed groups, aggregating shoats from others to do proxy trading on market day.

In addition, REGAL-AG's development of a poultry processing plant as well as other value-added livestock enterprises that aggregate and sell poultry products (such as eggs and chicken meat), incited entrepreneur training of livestock product suppliers, and created a reliable end market for poultry producers, who are primarily women. Subsequently, poultry production has taken off in northern Kenya, with more women adopting this livelihood as a means of supplementing their income. Other outcomes benefited both men and women, including more diversified livelihoods, increased income, and an increase in the amount, variety, and affordability of nutrient-rich foods in the community, all due to the expansion of different livestock markets.

- Knowledge about differential resilience capacities can point to key social and gender-based constraints that need to be addressed to help all groups build and exercise resilience capacities, close gender gaps in these capacities, and design appropriate strategies to do so.
- Information on the decision-making context and response preferences can reveal household, community, and institutional power dynamics and ways to improve inclusion, representation, and accountability. Programs can build support for equitable gender norms in communities, households, and institutions; remove barriers to and promote women's participation in community organizations; and invite input from different social groups concerning resilience assessments and program design processes. Understanding the response preferences of different social groups will ensure that programs and projects promote response options that meet the needs of different groups of people, particularly those that are more vulnerable and lack influence in decision-making processes.
- Measuring different aspects of well-being at disaggregated levels can indicate trade-offs and synergies across outcomes and people. Programs can use this information to adapt programming if it reveals that some groups are being negatively affected (through, for example, gender-based violence), and to create accessible accountability mechanisms.

The questions in Table 9.2 can guide the assessment, monitoring, evaluation, and study of gender and resilience dynamics in a given setting. They can be adapted and expanded upon to examine certain aspects of gender and resilience dynamics in more detail based on program objectives. Following project development, the

Domain of resilience	Key questions
Exposure and sensitivity to disturbances	 To what risks are women and men, and other relevant differential groups, exposed? How do different groups perceive, prioritize, and experience different risks, shocks, and stressors? How do different risks, shocks, and stressors interact?
Resilience capacities	 How do resilience capacities vary among different groups of people, and why? What factors influence the resilience capacities of different groups of people in a particular context? How do an individual's resilience capacities enable or restrict his or her range of possible options for responding to and managing risk?
Decision-making context and responses	 How do needs and preferences about how to respond to a disturbance vary? What are current response strategies for different groups of people? Whose priorities do the current response strategies represent? Are there differences in decision-making authority within households, community organizations, and projects?
Well-being outcomes and pathways	 In what ways do responses to climate shocks and stressors have different impacts on men's and women's (and other relevant differential groups') well-being outcomes? What are the pathways that mediate these outcomes? What are the trade-offs and synergies across different outcomes and time scales?

questions can be used to reflect on a program's theory of change, risk mitigation strategies, and monitoring and evaluation frameworks, and to identify topics that require further investigation at different points in the project cycle. These themes can be studied throughout the project cycle to produce learning on how to strengthen gender and social equity at points including program design, risk mitigation planning, implementation, and evaluation.

To some extent, responses to shocks and stressors always redistribute power, risks, and rewards. Recognizing these dynamics can help development actors design resilience programs that increase people's capacity to respond to shocks and stressors, improve the range of response choices, and facilitate equitable decision-making among these choices, so that more positive well-being outcomes are possible for all. In this way, resilience-building initiatives represent significant opportunities to advance gender and social equity in a way that leverages the contributions of different groups and strengthens everyone's ability to thrive despite inevitable shocks and stressors.

Gender and social equity in resilience programming starts but does not end with a gender-sensitive resilience assessment. It is important that programs apply principles of inclusion in program planning and implementation, and form teams that serve as a model for gender and social parity. For example, programs should take proactive measures to hire and retain women and marginalized groups at all levels of program staff and to train staff on principles of gender equality as they manifest in both the program implementation context and the workplace. Program activities themselves should promote women's leadership, active participation, and inclusion, with accessible opportunities for women and men to provide input and feedback on program design and implementation.