ASSESSING WOMEN'S EMPOWERMENT IN AGRICULTURAL RESEARCH

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The concept of empowerment has steadily made its way onto the international development agenda. Batliwala (2007) traces its equivalents back several hundred years and across geographies in struggles for social justice. Feminists brought the concept of women's empowerment to the 1995 Fourth World Conference on Women in Beijing, where it gained traction, with the Beijing Declaration referring to "enhancing further the advancement and empowerment of women all over the world" (UN 1995, 7). Then, it was about collective struggles to challenge patriarchal structures, and intersecting structures of class, ethnicity, caste, and race, that shape women's (subordinate) position in society (Batliwala 2007). Twenty years later, "empowerment" animates the fifth Sustainable Development Goal (SDG5): "Achieve gender equality and empower all women and girls."

The field of agricultural research for development (AR4D) recognizes women's empowerment for its instrumental value and its links with several desirable outcomes related to health and nutrition (Sraboni et al. 2014, Galiè et al. 2018, Heckert et al. 2019),[1] productivity (Diiro et al. 2018), and resource management (for example Sodhi et al. 2010). Its intrinsic value is also increasingly acknowledged as a goal in itself (Cornwall and Edwards 2014). Yet a lack of conceptual clarity around the term as mobilized in the international development agenda, along with the subversion of the term in neoliberal political agendas, has diluted the concept that social activists brought to the table in Beijing (Batliwala 2007, Cornwall and Rivas 2015, Nazneen et al. 2019).

The complex, intangible, political, and context-specific nature of empowerment renders its assessment a formidable task. In 1999, Kabeer provided an in-depth discussion of the difficulties operationalizing the concept for measurement; today, the ethical, political, and epistemological debates that

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1   A systematic review urges caution regarding links between women's empowerment and child nutrition, however, as many studies reviewed demonstrate a lack of rigor (Santoso et al. 2019).

characterize such measurement continue to merit proper consideration (for example Newton et al. 2019). Despite these challenges, applied researchers and practitioners pursue their attempts at assessment, based on "the realization that we must devise ways of checking whether the policies, resources, and strategies applied toward building more equitable, sustainable, rights-affirming, inclusive and peaceful societies are working effectively or not—whether they are producing the changes we wish to see" (Batliwala and Pittman 2010, 3). On the global agenda and in AR4D initiatives, which increasingly define women's empowerment as a goal, such assessments—however imperfect—are important for advancing women's empowerment and gender equality.

In this chapter, we ask: "How is women's empowerment assessed in AR4D, and how can such assessments advance women's empowerment and gender equality?" In so doing, we challenge those working in the field of agriculture to return to the foundational concepts, to move from instrumental to more political and transformative engagements as implied in the original concept of empowerment. We further bring recent developments in assessing empowerment in agriculture into the fold of the broader literature on the concept. This is relevant not only to strengthen assessments but also for the framing of empowerment in AR4D and in the agriculture and natural resource management (NRM) sectors, as "what is measured—and not measured—influences discourse and confers legitimacy to certain categories of intervention or institutional change" (O'Hara and Clement 2018, 112).

We begin by defining the concept of women's empowerment as used in AR4D and how it relates to gender equality. We then argue that assessing women's empowerment in the context of AR4D can advance gender equality— although we highlight that tensions and challenges accompany such an effort. Next, we examine different methodologies, with a focus on tools, for assessing women's empowerment in agriculture and NRM in and beyond CGIAR. Finally, we raise critical questions related to assessing women's empowerment for a future AR4D agenda.

Conceptualizing empowerment

It is perhaps unsurprising that multiple definitions of empowerment exist in the literature, given the term's use by scholars and practitioners from different disciplines, theoretical-epistemological backgrounds (for example Narayan 2005), and regional contexts (Ibrahim and Alkire 2007). This multiplicity of definitions reveals healthy debates and evolving thinking about the concept. In AR4D, many studies (including this book, see Chapter 1) refer

to empowerment as "the processes by which those who have been denied the ability to make strategic life choices acquire such an ability" (Kabeer 1999, 435, 2017). This conceptualization draws from Sen's (1985, 1999) capability approach, and emphasizes people's freedom to define and lead the life they have reason to value. "Strategic" life choices are those that hold significance over one's life direction, such as those related to whether, who, and when to marry, family formation, or which type of livelihood strategy one will pursue. These defining choices set the parameters for practical, day-to-day decisions, with historical and structural conditions influencing the range of options people see before them and value (Kabeer 2005).

We can conceptualize the ability to exercise choice over strategic decisions along three interconnected dimensions: "resources (defined broadly to include not only access, but also future claims, to both material and human and social resources); agency (including processes of decision making, as well as less measurable manifestations of agency such as negotiation, deception and manipulation); and achievements (well-being outcomes)" (Kabeer 1999, 435). Resources are the preconditions that enhance people's abilities to exercise choice—although women's strengthened agency can also unlock access to resources (Farnworth et al. 2019). Formal and informal rules, including norms,[2] mediate access to these resources in different institutional domains of society (for example the household, community, or market). Achievements are realized when people have agency and access to resources that enable them to define and act upon their goals. Achievements cannot be predefined, as in any given context different people may value and seek different ways of being and doing (Sen 1985).

Agency—a person's ability to define and act upon one's goals—is at the heart of the concept of empowerment. It is often operationalized as decision-making but also takes the form of bargaining, negotiation, resistance, and critical reflection and analysis. Agency is exercised at individual and group levels, through collaborative relations and collective action[3] (collective agency or "power with"), and can be framed in both positive and negative terms in

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2   Norms are socially constituted rules that "govern social relations and establish expectations as to how we are to act in our everyday affairs" (Knight and Ensminger 1998, 105).

3   Collective action entails women "gaining solidarity and taking action collectively on their interests, to enhance their position and expand the realm of what is possible. It mobilises and strengthens women and girls' collective power, enabling them to have more influence than when they act individually and in isolation" (van Eerdewijk et al. 2017, 32). Collective action develops "power with" and is linked to "power within," as coming together can change women's perceptions of power inequalities and sense of self. It also influences "power to," "by amplifying voice and exercising choice in decision-making processes" (ibid., 32).

relation to power (as per Rowlands 1997). In positive terms, agency is when people recognize their self-worth and the purpose they bring to their actions (intrinsic agency, or "power within") and are able to act to realize their goals (instrumental agency, or "power to"), even when opposed by others or by social norms. In negative terms, it refers to actors superseding the agency of others, and exercising control or "power over" their lives and resources (Kabeer 1999). Empowerment, then, is about changes in these multiple manifestations of power, which interconnect and are mutually reinforcing to create unequal outcomes (Hillenbrand et al. 2015). Such changes in oppressive power relations can occur at the individual or group level (Eyben et al. 2008).

There are fundamental contestations as to whether the expansion of individual women's agency represents empowerment, or whether empowerment is about something more—a critical consciousness[4] of women's rights, women's solidarity, and the collective challenge to patriarchal structures and power relations that curtail their freedoms. Feminist scholars and activists adhere to the latter perspective (Kabeer 1994, Cornwall and Rivas 2015, Ewerling et al. 2017), and critique mainstream development practice for treating empowerment as an individual pursuit focused on entrepreneurship and self-reliance (Nazneen et al. 2014). This framing reflects a co-optation of the concept in the neoliberal international development agenda that divests the state of its responsibilities by "empowering" local women to look after themselves (for example Batliwala 2007, Nazneen et al. 2019).

Empowerment is generally considered a process, although it is sometimes treated as both a process and an outcome or as an outcome (Carr 2003). As a process, it refers to the changes in institutional structures, access to resources, critical consciousness, and so on that facilitate people's abilities to make, act upon, and achieve their strategic life choices. As an outcome, it embodies the degree of freedom people have to control and have positive impacts on their lives and futures (van Eerdewijk et al. 2017). Empowerment is relative: people are empowered (or disempowered) in comparison with others or with themselves at another point in time (Mosedale 2005). Importantly, empowerment necessarily requires women to be the prime movers. As such, interventions may "be conceived not as empowering women but as clearing some of the obstacles from the path and providing sustenance for women as they do empowerment for themselves" (Cornwall and Rivas 2015, 405).

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4   Critical consciousness refers to a person's awareness of her or his ability to make life-changing choices, including by challenging oppressive socio-political structures (Freire 1970).

The plural definitions of empowerment imply the use of various frameworks to explain its multiple and interrelated dimensions. For example, van Eerdewijk et al. (2017) frame empowerment in terms of resources, agency, and institutional structures. Hillenbrand et al. (2015) argue that considering these three dimensions together is important to maintain a focus on collective responsibility and political engagement, rather than placing the burden of change on individual women. Narayan (2005) identifies key factors facilitating or constraining empowerment and broader development outcomes—namely, institutional climate, social and political structures, individual assets and capabilities, and collective assets and capabilities.

Lombardini et al. (2017) (see also Lombardini and McCollum 2018) focus on measuring changes in empowerment at the personal, relational, and environmental levels. Personal empowerment relates to changes taking place within the person—in a woman's beliefs about her own worth, capacities, and actions. The focus here is on the immaterial, related to power within, self-perception, and critical consciousness, rather than on individual-level material elements. Relational empowerment refers to changes taking place in a person's relationships and in the power relations within which she or he

FIGURE 9.1 Framework for assessing women's empowerment
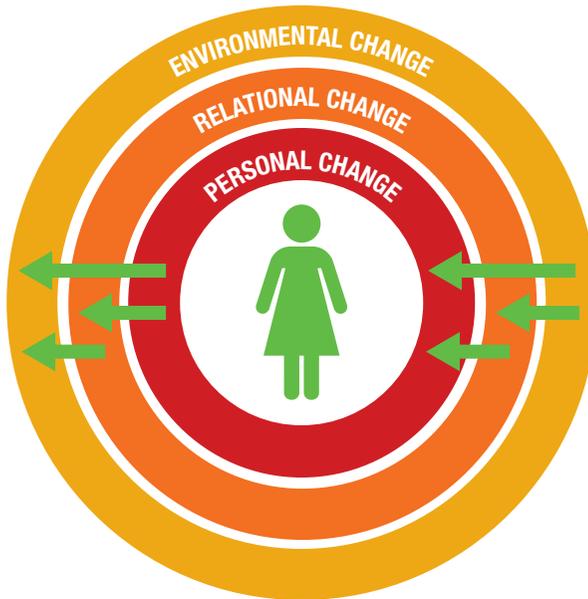
is embedded—in a woman's position relative to others, such as her partner, family, community, local authorities, or social networks. Changes at the environmental level occur in broader societal institutions and structures. These can be formal (such as in political and legislative frameworks) or informal (such as in social norms, attitudes,[5] and beliefs). Changes at one level will stimulate changes at others, although these changes do not necessarily move at the same pace or in the same direction (Figure 9.1).

We draw upon this framing to structure our analysis of tools for assessing women's empowerment; at the personal level, we also consider whether tools support an exploration of changes in material resources that can affect women's empowerment. The relational and environmental levels of the framework are of particular relevance for highlighting the power-laden and political nature of empowerment, and the fact that transformative change toward gender equality must go far beyond only "changing women."

Assessment to "move the needle" on women's empowerment and gender equality

Assessing empowerment in AR4D can play an important role in advancing women's empowerment and gender equality in at least four ways. First, quantitative and qualitative assessments of empowerment can **support holistic design of projects, programs, and policies**. Multidimensional measures can support the development and prioritization of interventions that address women's empowerment, gender equality, and other project objectives. For instance, the project-level Women's Empowerment in Agriculture Index (pro-WEAI, described below) allows projects to identify in which domains women are most disempowered, so they can develop and prioritize interventions that address these (Malapit et al. 2019). If no measures of empowerment are available, program implementers might concentrate on changes that can be measured and demonstrated, such as women's income, rather than less tangible changes that hold equal or greater importance for women's empowerment (Mosedale 2005).

Evidence on *how* to advance women's empowerment and gender equality is also needed to shed light on the causal pathways that lead to empowerment, and on how women's empowerment correlates with other development goals. This can contribute to evidence-based interventions and policy-influencing

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5   In contrast with norms, which are held at the group level, attitudes refer to individual beliefs and emotions toward something, someone, or some occurrence (Ajzen 1991).

(Lombardini et al. 2017). Bangladesh's Agriculture, Nutrition, and Gender Linkages (ANGeL)[6] pilot project was designed based on results from the Women's Empowerment in Agriculture Index (WEAI), described below. Data from the WEAI demonstrated the extent of women's and men's disempowerment, the factors that contributed most to this, and the interrelationship between women's empowerment and household food security and dietary diversity of children (Sraboni et al. 2014).

Second, assessments are needed **to monitor whether and how initiatives such as projects, programs, policies, or social movements and efforts led by women's organizations are contributing—positively or negatively—to women's empowerment**. Nuanced assessments are important for adaptive learning, to identify areas of strength as well as weakness in the strategies they deploy (Carter et al. 2014). Galiè (2013) discusses how a participatory plant-breeding project in Syria actively sought to address the needs of women farmers. Efforts to assess effects on women's empowerment revealed the stigmatization a young woman experienced for having traveled alone to a conference. Thereafter, the project took steps to reduce the risk of social ostracism by involving a larger group of women. Having sound and concrete bearings with respect to empowerment can thus encourage efforts to broaden or deepen strategies within institutions and their programming.

Third, **measuring and/or assessing empowerment serves to build upward and downward accountability and credibility** (Batliwala and Pittman 2010).[7] For example, governments must be held downwardly accountable to their constituents, and in some cases upwardly accountable to international and regional organizations, for their commitments, such as reaching SDG targets. Most of the key strategic elements women's rights organizations advocated have been included as targets under SDG5 (Razavi 2016). Yet the SDG framework's weak accountability mechanisms, with no mandatory reporting requirements, essentially rely on the goodwill of governments to implement the agenda and track changes (Deere 2018). Close monitoring using adequate measures is needed to track progress and enable women's rights advocates and their allies to lobby for the agenda's proper implementation

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6   This pilot project was developed by IFPRI and implemented at scale by the Bangladeshi Ministry of Agriculture to identify actions and investments in agriculture that would help increase farm household income, improve nutrition, and empower women (see https://www. ifpri.org/project/agriculture-nutrition-and-gender-linkages-angel).

7   Upward accountability refers to accountability to higher-level structures or institutions, such as from senior managers to boards or projects to donors; downward accountability is accountability to lower levels, such as from governments to citizens or projects to the local communities with which they work.

(Razavi 2016, Deere 2018). This imperative has given rise to initiatives such as Data2X, which uses gender data to support global efforts to achieve gender equality.[8] Failing to track or using inadequate or narrow measures to monitor women's empowerment can augment the risk of selectivity and dilution of policies in the process of implementation.

At a programmatic and project level, governments and donors use indicators in monitoring, evaluation, and impact assessments as the basis for judging performance and allocating resources. Inevitably, the things we measure are those that receive attention and on which we focus for change. Although a growing number of projects claim to advance women's empowerment, many such projects do not, in fact, make conscious efforts to define what empowerment means in their context, or to diagnose or address constraints to women's agency (Mosedale 2005). Danielsen et al. (2018) found that, out of a portfolio of 18 projects funded by the Canadian International Food Security Research Fund, which advanced gender integration as a key feature of its program, only about one third achieved "women's empowerment sub-outcomes," including changes in gender norms, and increased women's recognition, control over decisions, and formal leadership. Likewise, reviewing 13 AR4D projects with the stated goal of empowering women, Johnson et al. (2018) found that many had neither strategies that would be expected to increase women's abilities to make strategic life choices nor ways of measuring whether such changes take place. Hence, the authors highlight that it is important to be clear about whether project objectives are to reach, benefit, or empower women; and about what women's empowerment may consist of in the context of AR4D.

Assessments also hold programs and projects downwardly accountable. For example, in Galiè's (2013) study, women participants pushed to hold researchers accountable in supporting their empowerment, or in not pushing them too much if there was no support to be given.[9] Assuming that empowerment, as captured in certain measures, is necessarily what women want can be misleading, and highlights the importance of gathering perspectives from the women whose life experiences are being explored. In a normatively restrictive environment, women who are considered "empowered" can be frowned upon and socially shunned, and risk direct backlash in the form of intimate partner

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8   Data2X is a partnership to "improve the quality, availability, and use of gender data in order to make a practical difference in the lives of women and girls worldwide" (see https://data2x.org/).

9   One of the project's women participants asked, "Why do you make us dream, then, if you can't do anything about it" (Galiè 2013, 87).

violence (for example Basu 1995, Jewkes 2002)—a risk not all women are willing to take without any safeguards.

Fourth and finally, the **assessment process itself can challenge power relations** (Hillenbrand et al. 2015). For instance, engaging participants in deciding what, how, and when to measure, as well as who does the measuring, can be empowering (Morgan 2014, Newton et al. 2019). When we apply participatory approaches to measurement in a transformative way, and women drive the assessment process, they can facilitate critical reflection and action on norms and power relations that disempower women and cause gender inequalities (Kantor 2013, Cole et al. 2014, Cornwall and Sardenberg 2014, Newton et al. 2019). Privileging the voices of marginalized groups in the assessment process can validate their knowledge, shift power into their hands, and lead to locally demanded actionable change (Holland and Reudin 2012). Newton et al. (2019, 4) note that, "Because empowerment is both an outcome and a process of transformative change it requires the participation of those being empowered to explain changes, as these may not be observed by others." Exploring local visions of empowerment and priorities of women and men should also be a key step in informing programming and assessment (Hillenbrand et al. 2015).

Tensions and challenges with assessing women's empowerment

Yet assessing women's empowerment is not necessarily empowering or desirable. Critical scholars and feminists flag the need to reflect on which measurements are meaningful and useful, at which conjuncture, and to challenge assumptions that it is possible, or should be, to assess abstract and intangible processes of social change (Batliwala and Pittman 2010). Difficulties associated with capturing "power within," coupled with neoliberal biases, result in assessments privileging some dimensions of empowerment (such as economic) over others (such as psychological) (Narayan 2005). There are challenges with identifying appropriate methods to situate women's empowerment processes within their spatial, temporal, and historical contexts (Nazneen et al. 2014), and with defining global indicators of empowerment, given that forms of agency or achievements that indicate empowerment in some contexts may not be relevant in others (Mahmud et al. 2012). Different local understandings of empowerment pose difficulties with translating the concept itself into different languages (or cultural equivalents) (Tsikata and Darkwah 2014, Meinzen-Dick et al. 2019), and mean that externally determined indicators may not

correspond with what is valued by those whose empowerment is assessed (Kabeer 1999).

Measurement is a political process that privileges certain types of knowledge and knowing, and the priorities of some actors over others (Batliwala and Pittman 2010, Holland and Reudin 2012, Hillenbrand et al. 2015). There are thus ethical and epistemological issues related to why, and by whom, empowerment should be measured (Morgan 2014, Nazneen et al. 2014, Newton et al. 2019). The use of feminist methodologies to understand women's empowerment can flatten power hierarchies between researchers and participants, situate knowledge production within contexts and relationships, and foster the co-production of knowledge as part of a social change process (for example Cornwall and Sardenberg 2014). Yet current development and policy paradigms tend to favor quantifiable, "objective" indicators over qualitative analyses of trajectories of change in women's lives, expressed in their own words (Nazneen et al. 2014). Nonetheless, all methods make assumptions about what we can and cannot measure and the scale at which we can assess empowerment. For quantitative measures, this includes judgments about proxy indicators of empowerment, their validity, and their relative importance (weighting) (Box 9.1).

Lastly, assessing empowerment as a process is challenging because it is often attempted at one point in time but must capture forward and backward movements and trajectories. Ideally, assessments capture "different dimensions and sites of empowerment in a more holistic way, one that aims to understand the relational dynamics of power and positive change at a variety of levels, in different spaces and over time" (Cornwall 2016, 345). Many measures are cross-sectional snapshots and must be applied longitudinally to provide a sense of change over time. Others ask for retrospective data, which can yield faster results but entails limitations associated with recall. Panel data on empowerment outcomes are better suited for examining longitudinal trajectories of women's empowerment and can complement qualitative assessments that focus on trajectories.

Assessment approaches

Measuring empowerment requires a strong foundational understanding of the concept and its core dimensions, to guide the assessment, develop related indicators, and choose level(s) on which to focus (Narayan 2005, Ibrahim and Alkire 2007, Huis et al. 2017, Richardson 2018). Below, we review a selection of tools to measure empowerment in AR4D identified following a call to

BOX 9.1 Methodological choices in development of the WEAI

Most quantitative measures, recognizing the multidimensional nature of empowerment, use some form of aggregation to construct an empowerment scale or index. The WEAI measures women's empowerment across five domains in agriculture: 1) decisions about agricultural production; 2) access to and decision-making power over productive resources; 3) control over use of income; 4) leadership in the community; and 5) time use (Alkire et al. 2013). These domains, measured in 10 indicators, were based on the areas the United States Agency for International Development (USAID) Feed the Future Initiative could directly affect through its programming.

Two sections of the survey questionnaire proved difficult to administer in the field: the autonomy in production decisions module and the time use module. The desire to reduce survey administration time (and field costs) led to the development of the Abbreviated-WEAI (A-WEAI), with 6 instead of 10 indicators. Indicators that were controversial were removed, such as the "speaking in public" indicator, which was difficult to implement in areas that had experienced civil unrest.

The choice of cut-offs or thresholds for the WEAI and A-WEAI involved value judgments on what made sense for an individual to be considered "adequate" under that indicator, and in many cases was informed by qualitative research in the area. The 80 percent threshold in WEAI (to be empowered, a woman has to be "adequate" in 80 percent of the indicators) was chosen because too high a threshold meant that it would be very difficult to achieve and may not be sensitive to short-term policy changes; and too low a threshold would be too easy to achieve and may not work as a programmatic target (Alkire et al. 2013).

The WEAI co-developers opted for the use of fixed weights—an index rather than a scale—to facilitate comparability across a portfolio, as USAID wanted to compare countries in the Feed the Future Initiative. In WEAI, the five domains were equally weighted, but the indicators were not, as the domains did not have an equal number of indicators. This changed in pro-WEAI, which has 12 equally weighted indicators, equally distributed across the domains. Most agency indicators are instrumental (referring to "power to"), reflecting the areas that agricultural projects can affect directly. Collective agency indicators are few and in the early stages of development. Psychometric methods are being used for scale validation, including estimation of theoretically sound models that have good fit to the data (Yount et al. 2019).

CGIAR gender researchers and key partners and researchers. Some of these respondents also shared reflections on the strengths and limitations of their tools, and findings emerging through their use.

Our framework to analyze these tools comprises five components:

1. Dimensions of empowerment (resources, agency, and/or achievements);

2. Primary levels of inquiry (personal, relational, and/or environmental);

3. Participant focus (who participates in the assessment);

4. Attention (or lack thereof) to gender parity; and

5. Assessment perspective (etic versus emic).[10]

Table 9.1 presents a brief summary of our analysis of the tools across these components, with attention to the quantitative or qualitative nature of the tools. Oftentimes, tools cannot be exclusively labeled as quantitative or qualitative based on the way they are operationalized and on how the data collected are analyzed. Hence, we do not distinguish between quantitative and qualitative methods in a strict or binary way but rather surface some of the strengths and limitations that methods steeped in different epistemological traditions can offer for understanding and assessing empowerment, and the value of bringing these together for richer and more complete assessments.

Dimensions and levels of empowerment

We combine the first two components of our framework—dimensions and levels—in a light mapping of the tools to represent their relative placement along two axes (Figure 9.2). The horizontal axis indicates the multidimensionality of the measure and the vertical axis its multilevel character. Moving from the bottom left toward the top right, tools explore more dimensions and levels of empowerment.

The tools cluster roughly into four groups. First, tools that use a unidimensional approach to assessing empowerment at one level are located in the bottom left corner. In contrast, tools that focus on one empowerment dimension but at multiple levels are located in the upper left corner. Third, a group of measures that use a multidimensional approach to assessing empowerment at one or more levels are located in the center of the figure. A fourth cluster consists of tools that explore the three dimensions of empowerment at

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10 Emic perspectives refer to perceptions of "insiders": people within a given social group. Etic perspectives are those of observers or "outsiders" to the given group.

TABLE 9.1 Tools to measure empowerment used in agricultural research for development

Tool name	Description	Empowerment dimension(s) focus$	Primary level(s) of inquiry*	Participant focus	Assessment of gender parity?	Measurement perspective
PRIMARILY QUANTITATIVE						
Women's Empowerment in Agriculture Index (WEAI) (Alkire et al. 2013)	Designed for implementation in population-based surveys, with a strong focus on women's productive roles. Comprises two sub-indices: 1) 5DE—women's empowerment across five domains in agriculture and 2) the Gender Parity Index—gender parity in empowerment within the household.	Agency, with some focus on resources	Personal and relational	Individual women and men within the same household	Yes	Etic
Abbreviated-WEAI (A-WEAI) (Malapit et al. 2017)	Shorter version of the WEAI for use in population-based surveys to measure women's empowerment.	Agency, with some focus on resources	Personal and relational	Individual women and men within the same household	Yes	Etic
Project level-WEAI (pro-WEAI) (Malapit et al. 2019, Meinzen-Dick et al. 2019)	Measures women's empowerment in project-specific contexts; includes optional modules tailored to livestock and/or nutrition and health programs.	Agency, with some focus on resources	Personal and relational, some focus on environmental	Individual women and men within the same household	Yes	Etic
Women's Empowerment in Livestock Index (WELI) (Galiè et al. 2018)	Adaptation of the WEAI to assess the empowerment of women in the livestock sector; complemented by two rounds of qualitative research pre- and post-application of the survey.	Agency, with some focus on resources	Personal and relational	Individual women from livestock-producing household	No	Etic and emic
Women's Empowerment in Fisheries Index (WEFI) (Cole et al. 2020)	Adaptation of the A-WEAI; includes a scale to assess gender attitudes, from which a score is created.	Agency, with some focus on resources	Personal and relational, some focus on environmental	Individual women and men value chain actors	Yes	Etic
Gender Empowerment Index for Climate-Smart Villages (GEI–CSV) (Hariharan et al. 2018)	Based on the Global Gender Gap Index1 and the WEAI. Constructed across four domains (political, economic, social, agricultural), each with a different weight, based on insights from focus group discussions (FGDs) conducted before the survey to inform design of the tool.	Agency, with some focus on resources	Personal and relational	Individual women and men within the same household	Yes	Etic

Tool name	Description	Empowerment dimension(s) focus$	Primary level(s) of inquiry*	Participant focus	Assessment of gender parity?	Measurement perspective
IRRI's Women's Empowerment Index (WEI) (Achandi et al. 2018)	Index calculated on a scale from 1 to 5 based on the level of participation of women in decision-making within the household; adapted to rice farming systems.	Agency	Relational	Individual women	No	Etic
Empowerment profiles (Najjar et al. 2018)	Comprise 27 variables drawing from the WEAI's 5DE, and covering socioeconomic characteristics and asset ownership. Use of multivariate cluster analysis to identify homogenous groups of women and men (empowerment typology).	Resources, with some focus on agency	Personal and relational	Individual women and men from a stratified sample to cover diversity in land access, ownership, and use	No	Etic
Women's Decision-Making Index and Gender Attitudes Index (WDI–GAI) (Kosec et al. 2018)	Women's empowerment indices focused on decision-making and gender attitudes, constructed using Principal Component Analysis (PCA) and Anderson indices. Survey instruments are adapted to national contexts.	Agency	Relational, and some focus on environmental	Applied with all adult household members or with household head and spouse	No	Etic
CARE's Women's Empowerment Index (WEI) (CARE 2015)	Adaptation of the WEAI combined with other measures. Questions on mobility and use of FGDs to gather data on time use. Composite score with country-specific thresholds.	Agency, with some focus on resources	Personal and relational	Individual women and men in the same household	Yes	Etic
Oxfam's Women's Empowerment Index (WEI) (Lombardini and McCollum 2018)	Indicators of an "empowered woman" adapted to context. Questions derived mainly from Demographic and Health Survey toolkit questionnaires (USAID),2 WEAI, and Living Standards Measurement Survey (World Bank),3 Explicitly considers social norms or policies and laws at the environmental level that contribute to women's (dis)empowerment.	Agency, with some focus on resources	Personal, relational, and environmental	Individual women	No	Etic
Comparison of the Five Dimensions of Men's and Women's Empowerment (5 Dimensions) (Mayanja et al. 2018)	Indicators of empowerment in five domains, based on WEAI. In FGDs, respondents are asked about their own ability to make decisions within each particular domain, and about the ability of women and men in their community to make decisions in these domains.	Agency	Relational	Individual women and men, not necessarily from the same household	No	Etic

Tool name	Description	Empowerment dimension(s) focus$	Primary level(s) of inquiry*	Participant focus	Assessment of gender parity?	Measurement perspective
PRIMARILY QUALITATIVE						
Ladder of Power and Freedom (Petesch and Bullock 2018)	Uses scores and narrative data to understand women's and men's sense of their capacity to make strategic life decisions, or those of other women or men in their community; and to shed light on processes underpinning changes in their sense of agency over time.	Agency, but can capture changes in other dimensions	Relational, and some focus on environmental	Women and men, not necessarily from the same household	Possible; depends on the analysis	Etic and emic
Life histories and well-being timelines (Petesch et al. 2018)	Explores a person's occupational, economic, and social, psychological, and cultural histories. Participants identify key moments along their life trajectories in these spheres going back 10 years. They score significant moments and explain the reasons for their scores. An overall "well-being" trend line is developed based on the consolidated data.	Resources, agency, and achievements	Personal, relational, and environmental	Women and men, not necessarily from the same household	No	Etic and emic
Gender Indicator Monitoring Tool (GIMT) (CARE 2015, Hillenbrand et al. 2015)	Participatory outcome mapping to identify incremental indicators of behavior change toward the vision of gender equality outlined by community members. Through FGDs, evaluates behavior changes on a six-monthly basis around 1) household decision-making processes; 2) men's engagement and personal changes; and 3) community leaders' views and practices; as well as ascertaining women's own definitions of empowerment.	Agency and achievements, with some focus on resources	Personal, relational, and environmental	Women's group members, men's group members or spouses, community leaders	No	Etic and emic

Notes: $ Empowerment conceptualized along three interconnected dimensions: resources, agency, and achievements (well-being outcomes) (Kabeer 1999, 435).

* Based on the framing of different empowerment levels by Lombardini et al. (2017).

[1] See https://www.weforum.org/reports/the-global-gender-gap-report-2018

[2] See https://www.k4health.org/toolkits/dhs

[3] See http://surveys.worldbank.org/lsms