

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 (Diirro 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

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 action³ (collective agency or “power with”), and can be framed in both positive and negative terms in

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 consciousness⁴ 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).

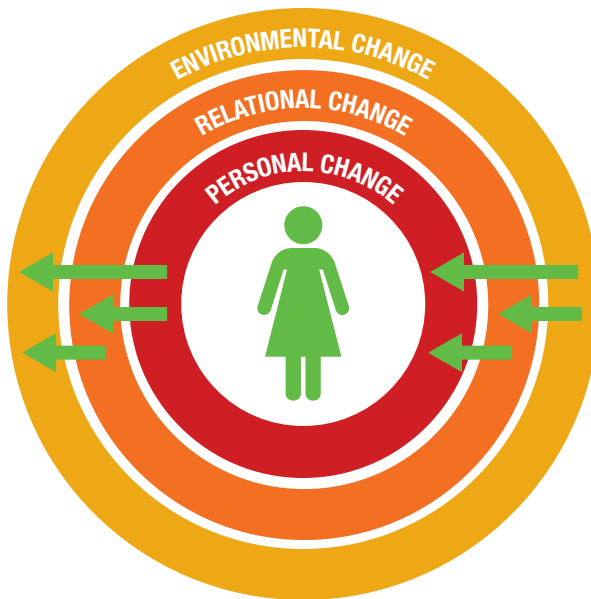
Empowerment is generally considered a process, although it is sometimes treated as both a process and an outcome or as an outcome (Carr 2003). As a process, it refers to the changes in institutional structures, access to resources, critical consciousness, and so on that facilitate people’s abilities 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).

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



Source: Lombardini et al. (2017, 6).

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 (proWEAI, 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

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

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

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 (Batiwala 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

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 ^s	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) (Galie 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) (Hartharan 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

continued

Tool name	Description	Empowerment dimension(s) focus ^s	Primary level(s) of inquiry*	Participant focus	Assessment of gender parity?	Measurement perspective
IRRI's Women's Empowerment Index (WEI) (Actandi 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 SDE, 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 or 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).

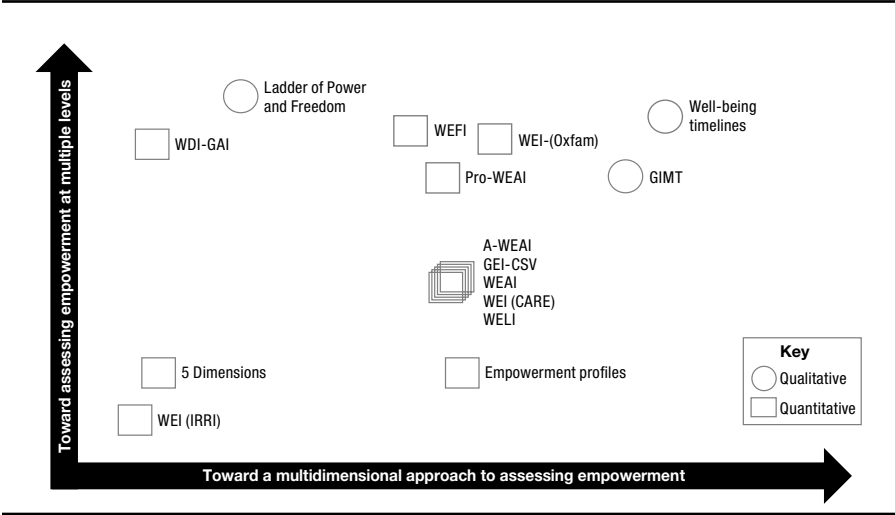
* Based on the framing of different empowerment levels by Lombardini et al. (2017).

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/sms>

FIGURE 9.2 Positioning tools based on their attention to dimensions and levels of empowerment



Note: Tool names are abbreviated here; refer to Table 9.1 for full names and descriptions of the tools.

the three levels of inquiry—personal, relational, and environmental—located in the upper right corner.

As mentioned above, the two tools situated in the bottom left corner measure only one dimension of empowerment at one point in time. Both measure one aspect of agency—decision-making within the household—to examine relational aspects of women’s empowerment. The International Rice Research Institute (IRRI) **Women’s Empowerment Index** (WEI) scores women’s participation in significant decisions within their households along a five-point scale (Achandi et al. 2018). The two extremes indicate that either the husband (WEI = 1) or the wife (WEI = 5) makes all decisions in the household solely, whereas a score of 3 indicates that spouses have an equal say in intrahousehold decision-making. Similarly, the **Comparison of the Five Dimensions of Men’s and Women’s Empowerment** tool examines women’s and men’s perceived ability to make intrahousehold decisions in relation to five domains of empowerment drawn from the WEAI (Mayanja et al. 2018).

The tools located in the upper left corner remain focused on agency, and particularly on decision-making, but explore this dimension in relation to some of the structural (or “environmental”) dimensions of (dis)empowerment: the norms that underpin gender inequalities and constrain women’s abilities with regard to self-determination. The **Women’s Decision-Making Index and Gender Attitudes Index** (WDI–GAI) maintain emphasis on women’s

decision-making, and examine gender attitudes to bring some of the beliefs that underlie decision-making patterns to light (Kosec et al. 2018). The qualitative GENNOVATE **Ladder of Power and Freedom** explores women's and men's sense of freedom to decide on important matters in their lives (Petesch and Bullock 2018).¹¹ Participants, either individually or in a focus group discussion (FGD), score this capacity along a metaphorical 5-step ladder, and reflect on changes and reasons for these over the past 10 years. These factors may include changes in resources, in formal or informal structures, in critical consciousness, or more. In this sense, although the tool explicitly asks about changes in agency, the number of dimensions of empowerment the tool addresses depends on participants' reflections on their experiences—as does the number of levels at which it captures changes in women's empowerment.

Most of the tools reviewed, many of which relate closely to each other, sit in the central area of the figure, providing a more multidimensional and multilevel examination of women's empowerment. The WEAI (Alkire et al. 2013) and related measures focus primarily on agency, but also touch upon aspects related to resources. They explore empowerment at the personal and relational levels but are less suited to capturing the environmental level. The **project-level WEAI** (pro-WEAI) takes a mixed-methods approach to examine women's empowerment within project-specific contexts (Malapit et al. 2019, Meinzen-Dick et al. 2019, Yount et al. 2019). Compared with its precursors, it further unpacks agency by looking at three domains: intrinsic agency ("power within"), instrumental agency ("power to"), and collective agency ("power with"). It expands upon the WEAI, including with indicators related to intrahousehold harmony, attitudes toward intimate partner violence toward women, and mobility. The accompanying qualitative tools assess elements related to the environmental level. In the fisheries sector, the **Women's Empowerment in Fisheries Index** (WEFI) combines the WEAI and elements from the framework proposed by van Eerdewijk et al. (2017) with a gender attitudes scale (Cole et al. 2020). It assesses change in agency (in terms of decision-making about income) and in exercising choice to partake in livelihood opportunities (an expression of agency), resources (in terms of control over value chain assets), and institutional structures (attitudes toward inequitable gender norms). The gender attitudes scale captures additional elements of empowerment at the environmental level.

11 GENNOVATE is a comparative qualitative research initiative designed to examine the relationship between gender norms, agency, and agricultural innovation (see <https://gennovate.org/>).

In the upper right of Figure 9.2 sit two qualitative tools that explore the three empowerment dimensions at personal, relational, and environmental levels: the **well-being timelines** of the GENNOVATE methodology and CARE's **Gender Indicator Monitoring Tool (GIMT)**. The former explores occupational, economic, social, psychological, and cultural histories to identify and understand the most significant milestones in a person's life. The tool offers deep insights into diverse aspects of agency, resources, and achievements, and sheds light on how individual capacities, relations and interpersonal dynamics, and social institutions affect these. The GIMT, developed by CARE as part of its Pathways Program, uses participatory outcome mapping (Hillenbrand et al. 2015) to identify incremental indicators of behavior change that demonstrate progress toward a vision of gender equality outlined by community members. The tool evaluates behavior changes around household decision-making processes; men's engagement in projects and their personal changes; and community leaders' views and practices. It privileges women's own definitions of empowerment, as do the GENNOVATE well-being timelines.

Several key points emerge from this analysis. First, most of the reviewed tools recognize the multidimensional and multilevel nature of empowerment in assessments, which bodes well for bringing some of the complexity of the concept into AR4D thinking and practice. In this regard, the tools offer potential to consider the interactions among changes across dimensions and levels. Yet, studies based on these tools rarely perform such an analysis and, in general, the tools offer little guidance for analysis, such as interpreting how deep and broad, and of what scale, are the changes taking place.

Second, many tools fall short of carefully exploring changes at the environmental level, and thus of shedding light on structural causes of gender inequality. Assessments that focus on the individual and relational levels reflect, and can reinforce, a programmatic and project focus on change at these levels. Such an emphasis on individual capacities risks ignoring power relations and structures that (re)produce gender inequalities and constrain women's capacities to make purposive choices (Kabeer 2005, Batliwala 2007, Woodall et al. 2012, Hillenbrand et al. 2015).

Third, although many AR4D interventions focus on enhancing rural women's (and men's) resources—tangible and “countable” areas of change, such as income and assets, which are market-driven values (Narayan 2005, Cornwall 2014)—the tools we reviewed focus less on this dimension of empowerment. This may be because they are often integrated in larger monitoring and evaluation strategies, which include surveys that ask about

changes in resources and (material) achievements. Within their focus on agency, most tools explore instrumental agency (“power to”) rather than changes in “power within” and “power with.” This may owe to the difficulty of assessing the multiple dimensions of agency. Interventions may also privilege efforts toward what they consider they can most directly affect, such as instrumental agency (as decision-making over resources), rather than intrinsic and collective agency. These latter are difficult to address with short-term projects and funding, and may be considered out of scope and of lower value in a neoliberal development agenda.

Placement of tools along the horizontal and vertical axes does not necessarily indicate the tools’ ability to reveal the breadth of the changes taking place. Nor does it reflect the quality of the tools or the data they elicit per se. Data interpretation, on which most of the tools offer limited guidance, is also key to the quality of the assessments. Moreover, single tools can be integrated as part of a broader methodology that addresses other dimensions or levels of empowerment. For example, the Ladder of Power and Freedom tool constitutes one part of the GENNOVATE methodology, which combines different tools to study normative change and women’s and men’s empowerment in agriculture and natural resource management. The United Nations Food and Agriculture Organization and WorldFish combined the Ladder of Power and Freedom tool with five others in qualitative case studies in Bangladesh; the other tools assessed village characteristics and wealth distribution, gendered divisions of labor, factors affecting participation in aquaculture value chains, intrahousehold decision-making processes, and access to resources and services (Choudhury et al. 2017). This combination offered insight into the informal institutional structures that influenced empowerment. Nonetheless, tools that adopt a narrow assessment focus risk reinforcing a limited and counterproductive understanding of empowerment. This calls for clarity on the scope and limitations of each tool, and on the need to implement them reflexively, considering their appropriateness and possible need for adaptation.

Participant focus: gender parity and intersectionality

While all tools focus their assessments of the agency dimension of empowerment mostly at the personal and/or relational level, the majority situate the analysis within the household, a formerly often neglected domain, and particularly looking at relations among spouses. Some tools rely on interviews of women only, whereas others rely on interviews with both women and men, often, but not exclusively, within the same household (Table 9.1).

The WEAI and many of its related measures explicitly measure gender parity in empowerment between a woman and man within a household to understand if or how these relate to each other. Such a comparison can contribute to understanding whether and which facets of women's disempowerment result from oppressive gender regimes, and which owe to poverty and contextual constraints that disempower both women and men. Measures such as the WELI and WEI (IRRI) focus only on women, likely because of specific targets for projects set by institutions, donors, or researchers. In few cases, tools are administered to actors outside the household (such as to community leaders, in CARE's GIMT) or ask participants to reflect on empowerment at the community level (such as the 5DE and the GENNOVATE Ladder of Power and Freedom tools). Even when empowerment is assessed at the environmental level, it is done from the perspective of individuals who experience the (dis)empowering effects of societal structures.

Most of the tools reviewed do not provide explicit guidance on sampling beyond the household level, as such decisions depend on the purpose of the study. Discussions of intersectionality in relation to measuring women's empowerment in AR4D are surprisingly limited in the literature and tools reviewed. Some studies provide insights into how the tools can surface how gender interacts with other axes of social discrimination to create disempowerment and marginalization. For instance, socioeconomic and demographic data collected for the WEAI and related measures enable analyses of correlations between degrees of empowerment and sex, age, marital status, and other variables.

Bourdier's (2019) analysis of WEAI data in Ghana takes into account polygyny and highlights the importance of looking at which wives are sampled within a household. In Nepal, O'Hara and Clement (2018) iterate between the WEAI and subjective measures of critical consciousness, highlighting the importance of household structure (extended versus nuclear families) in affecting women's empowerment. In India, Hariharan et al. (2018) calculate the **GEI-CSV** in two states (Haryana and Bihar) and highlight the geographical unevenness of, and constraints to supporting, women's empowerment in different cultural contexts. In turn, Najjar et al. (2018) use 27 variables to create empowerment profiles of Egyptian women and men farmers with different land entitlements, to investigate the link between empowerment, sex of the farmer, and land access and ownership. Applied with women and men of different age and wealth groups, GENNOVATE tools enable comparative analyses that link empowerment processes with life cycle and socioeconomic status.

Measurement perspective, holistic assessments, and mixing methods

The choice of approach, tools, and methods for assessing women's empowerment depends on the motives for the assessment, as well as its scale. Monitoring empowerment at a global level, for instance, often calls for measures that enable comparative analyses. Yet, as the concept of empowerment holds meanings only within the specific contexts it inhabits, balancing between the ability to measure across countries and assessments that capture the contextual nature of empowerment is important (Richardson 2018).

Qualitative methods are particularly apt at providing contextual information and eliciting context-specific attributes of empowerment, and at grounding definitions of empowerment in the experiences of women of different backgrounds (see for example Newton et al. 2019 on participatory approaches). They are also valuable for shedding light on *processes* of change, including on when or how transformative change occurs (Morgan 2014, Elias and Morgan 2016). Qualitative narratives foreground the complex, emergent, and non-linear nature of empowerment, and how advances in empowerment in one area of life may, or not, be accompanied by advances (or setbacks) in another. Yet, compared with quantitative tools, qualitative tools offer less comparability, information on trends, and numerical information, which donors and decision-makers are often seeking. Quantitative tools can also be designed to be context-sensitive and comparable, if consistent guidelines and protocols for adaptation are developed.

The quantitative tools reviewed here use an etic perspective when defining or conceptualizing empowerment, with some exceptions. The **Women's Empowerment in Livestock Index** (WELI) (Galiè et al. 2019) adapts the WEAI and pro-WEAI to assess empowerment of women in the livestock sector. Two rounds of qualitative research—pre- and post-application of the survey—complement the mainly quantitative tool. A formative qualitative and participatory study captures universal dimensions of empowerment that allow for comparison across settings, and local meanings of empowerment that can be used for in-depth monitoring and assessment. Likewise, Oxfam GB's **Women's Empowerment Index**¹²—based on Lombardini et al.'s (2017) framework (Figure 9.1)—comprises a range of indicators that represent the characteristics of an “empowered woman.” These indicators are adjusted to the socioeconomic context under analysis based on qualitative fieldwork on

12 This is not the same as the Women's Empowerment Index developed by Achandi et al. (2018) or that of CARE.

perceptions of what constitutes an empowered woman, thereby allowing context-specific signs of empowerment to surface.

The qualitative tools reviewed mostly, but not exclusively, use an emic perspective. The GENNOVATE Ladder of Power and Freedom tool takes an emic perspective in eliciting local understandings of what strategic decisions consist of and what influences ability to make them, but an etic perspective to analyzing the data. CARE's GIMT adopts a similar approach to defining empowerment using emic perspectives. The GENNOVATE methodology includes a module focused on life histories, which asks participants to identify, score, and explain the significance of key moments in different arenas of their life going back 10 years (Petesch et al. 2018). These well-being timelines reflect participants' emic understanding of the combinations, interactions, and sequencing of key events over their trajectories and their influence on subjective well-being. In general, open-ended, qualitative tools allow participants to express in their own words aspects related to resources, agency, and achievements; the different levels at which empowerment manifests itself; and their interrelationships. They also surface the relative importance of different factors in supporting or hindering empowerment.

Quantitative and qualitative methods for assessing empowerment both have their strengths and limitations. Combining and triangulating methods can be valuable in both measurement and analysis. Qualitative and quantitative methods can be combined to create measures, in the measures themselves, and in interpretation of results. Several tools have used qualitative methods to inform the development of quantitative measures. For instance, Oxfam uses FGD data to develop locally relevant thresholds and indicators for its Women's Empowerment Index (Lombardini and McCollum 2018). The pro-WEAI developed a suite of qualitative tools (including key informant interviews, FGDs, and life histories) to be used with the surveys. Together with past qualitative data from the project areas, these informed development of the domains, indicators, and thresholds of the index (Malapit et al. 2019, Meinzen-Dick et al. 2019). In particular, the negative views of women having "power over" others (notably men, but also over other women) informed the decision to exclude a domain on coercive power.

The qualitative data also revealed differences between societies depending on whether individual or joint asset ownership or decision-making was considered (more) empowering. Thus, these indicators in the index accepted both individual and joint as "empowered." Perhaps most importantly, the qualitative data reinforced the understanding that empowerment is relational and needs to be understood in the context of the entire family and

community (Meinzen-Dick et al. 2019). This underscores the importance of collecting pro-WEAI survey data from men and women or multiple members of extended families—that is, co-wives in polygynous households or mothers-and daughters-in-law in extended families in South Asia.

Combining qualitative and quantitative methods in the measures themselves is less common. One example, noted above, is CARE Pathways' use of FGD data on women's time use along with survey data on other indicators of women's empowerment. In CARE's GIMT, the assessment is qualitative in nature but the data collected can be quantified to demonstrate the direction of change in certain broad categories of indicators. Similarly, the GENNOVATE Ladder of Power and Freedom offers a qualitative assessment as well as a quantitative figure to show a direction and relative magnitude of change. However, combining qualitative and quantitative often entails converting qualitative to quantitative data, during which much of the nuance in and advantage of collecting qualitative data is lost.

Joint or iterative use of qualitative and quantitative data for interpretation is one of the most valuable uses of mixed methods. CARE assesses women's empowerment by combining tools, such as the GIMT; the Women's Empowerment Index (Miruka et al. 2015) (see Table 9.1); the **Women's Empowerment—Multidimensional Evaluation of Agency, Social Capital and Relations** (WeMEASR) scale; and the **Social Norms Analysis Plot** (SNAP). The quantitative and qualitative data may contradict each other, but this is not a drawback of this method (*ibid.*). Rather, the creative tension between qualitative and quantitative findings should be anticipated and appreciated, and can be used to add nuance to the understanding and interpretation of results. For instance, by combining the WEAI, their constructed measure of critical consciousness, and qualitative data, O'Hara and Clement (2018) could better capture local understandings of empowerment within a broader cultural context that shapes values, meanings, and identities.

Galiè et al. (2019) illustrate the value of integrating methods in interpretation. They combine data from the WELI and quantitative indicators of food security with FGD data from pastoralist households in Tanzania. They find no significant association between women's empowerment and household food security in the quantitative analysis; yet, in FGDs, women identified mechanisms through which changes in their time use and control over livestock and land resources had influenced their ability to provide sufficient nutritious food for their families. Further analysis points to gender differences in who is in charge of securing food versus nutrition at household level—men and women, respectively, in this context. Analysis of the qualitative data

associated with pro-WEAI also reveals interconnections among the quantitative indicators. For instance, burdens on women's time as well as relations with their husbands and in-laws limit women's mobilities and abilities to participate in groups (Meinzen-Dick et al. 2019). Projects that promote group membership should address such disempowering aspects, for instance by engaging with husbands and mothers-in-law.

Critical questions in a future research agenda

The growing number of tools and methods for assessing women's empowerment in agriculture and beyond reflects significant efforts to advance this field. Yet urgent political and ethical questions as well as substantive challenges remain. First, women's empowerment remains framed predominantly as a pathway for enhanced agricultural outcomes (for example FAO 2011, World Bank 2012). In this regard, women farmers are expected to adopt technologies to increase productivity and food and nutrition security, without questioning their roles and responsibilities. Accordingly, tools designed to assess such processes focus on individual women's access to material resources or visible forms of agency, such as decision-making. This reinforces flawed assumptions about how empowerment may be achieved through agriculture. Yet caution is needed: "Such forms of agency might not lead to social change and to collective action that would allow women to challenge oppressive economic, social and political structures, as long as women do not critically reflect on gender inequalities and its structural causes" (O'Hara and Clement 2018, 121). A renewed focus is thus necessary on critical consciousness and women's collective action, and their key role in empowerment and gender equality—and, more generally, meaningful social change.

Challenging apolitical and instrumentalist views of empowerment in AR4D will require refocusing methodologies to explore women's collective and intrinsic agency ("power with" and "power within") and identify the power relations and structures—the environmental-level elements and the "power over"—that underpin women's disempowerment and gender inequalities. The pro-WEAI takes an important step in this direction by incorporating domains related to intrinsic and collective agency. So, too, does the emerging body of research on gender transformative approaches (see Chapter 10, this volume) that builds on efforts to assess normative change in the field of AR4D (CARE 2017) and beyond (BMGF 2018).

Second, a focus on women's empowerment *in agriculture* should not lose sight of the possibility that agriculture itself is not always empowering for

women (or men). The prospects agriculture can offer as a pathway toward empowerment depend on women's aspirations; and empowerment will ultimately require that women have the resources and agency to choose to pursue meaningful livelihoods within or beyond the sector. The agricultural focus of several tools presented offers important insights but may divert attention from other areas of rural women's lives that are at least as relevant for empowerment. More holistic measures that capture empowerment outside agriculture are needed, to avoid the risk of misclassifying women who have left agriculture as disempowered.

Third and related, there is a need to systematically document *how* shifts in empowerment and transformative change occur within agriculture and NRM and beyond, at what level(s), and for whom. Qualitative or mixed methods approaches can help us focus on the change mechanisms and trajectories that enable women to empower themselves. These methodologies will also be highly valuable for incorporating a meaningful intersectional perspective. Representative samples that are comparable across social groups can also add to capturing the diverse, lived realities of marginalized groups (Yount et al. 2018).

Fourth, measures of empowerment must be able to detect situations in which advances lead to backlash and setbacks in a change trajectory. Positive change in some dimensions can engender impediments in others. Women's economic empowerment does not necessarily correlate with familial, psychological, legal, political, and socio-cultural dimensions of empowerment (Bayissa et al. 2018). In fact, it can be a double-edged sword, leading to regressive change in certain dimensions. Serious challenges to social power structures can create resistance, which may be misinterpreted as a lack of effectiveness if assessments are not sensitive to this process. This potential backlash has implications from a programmatic perspective and has not yet been adequately resolved in measures of women's empowerment (for example Batliwala and Pittman 2010).

Fifth, measures must grapple with the nuances and complexities of decision-making and agency. The WEAI and related measures have made progress in recognizing different degrees of "jointness" in decision-making among spouses or household members, and preferences for joint decision-making in some conditions and cultures (Acharya et al. 2010, Belcher et al. 2011, Farnworth et al. 2019). It is equally relevant to recognize that, in some situations, women may not wish to be involved in certain types of decisions (Nazneen et al. 2014). An ideal measure of empowerment should be able to discern such scenarios of "choosing not to choose" (Kabeer 1999) as a sign of agency rather than lack thereof. Measures and interpretations should also be sensitive to how heightened self-awareness and critical consciousness can give rise to a decreased

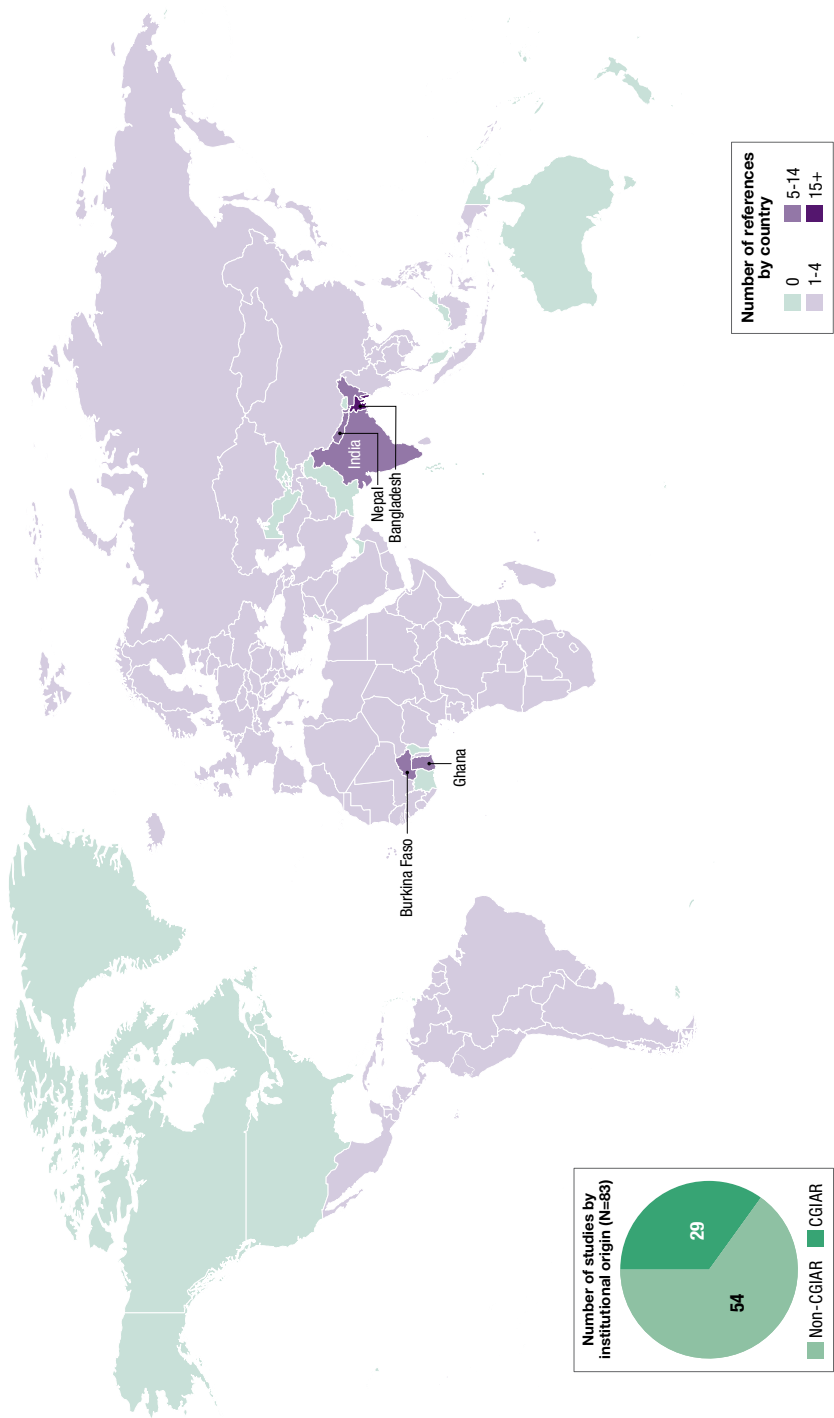
sense of agency (Freire 1970). Women's exposure to new spaces, information, and critical reflections on their lives can lead them to (downwardly) reassess their own knowledge and sense of empowerment (for example Galiè 2013).

The refocusing of methodologies, as outlined above, calls for significant changes within AR4D. Action-oriented research with multiple actors (such as researchers, diverse local groups, non-governmental organizations, local authorities, government, etc.) can be particularly well suited to understand and address some of the underlying causes of women's disempowerment and gender inequalities (see also Cornwall 2016). Such research, which engages with social hierarchies, is complex and messy, and can push AR4D researchers outside of their comfort zone. Yet it can also help unearth the structural barriers that create privilege and opportunity for some, and constraints, exclusions, and disempowerment for others.

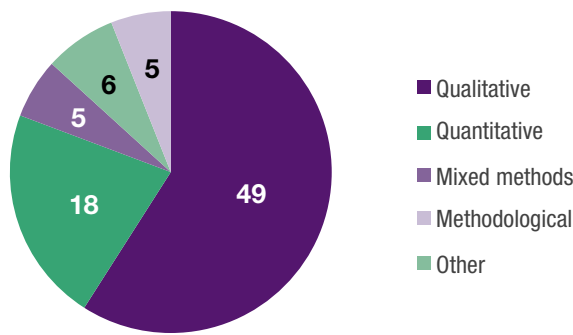
There is also large potential in "using unconventional tools, creative use of conventional methods, and thinking outside the box for capturing the less researched aspects or developing a deeper understanding of women's empowerment" (Nazneen et al. 2014, 59). These include participatory photography (Cornwall and Sardenberg 2014), storytelling and creative writing (Ali 2014), intergenerational life history narratives (Tsikata and Darkwah 2014), and other methods informed by feminist ethics and epistemological considerations (Cornwall and Sardenberg 2014). Visual methods have shown their worth for exploring relational agency and aspirations, and surfacing emotions and feelings that are difficult to express verbally (Eger et al. 2018), but are used only marginally in AR4D.

Embracing less conventional and mixed-methods approaches to assessing empowerment will require new commitments from the AR4D community. It will mean learning to respect and dialogue across disciplines rooted in different epistemological traditions, and also adequate investment in strengthening capacities in (qualitative) research that demands a specific set of skills that is often in shorter supply in the sector. The AR4D ecosystem will need to move beyond a preference for quantitative data and experimental designs; reconsider assumptions that change follows a linear trajectory; open itself up to exploring unanticipated and negative outcomes; value changes in relationships that are often less visible, tangible, and thus measurable; and allow (and budget) for assessments (and changes) to take place well beyond short project cycles, considering that empowerment and social change can be lengthy processes (Morgan 2014). These efforts can bring us closer to the changes needed for women to empower themselves and advance gender equality through and beyond agriculture.

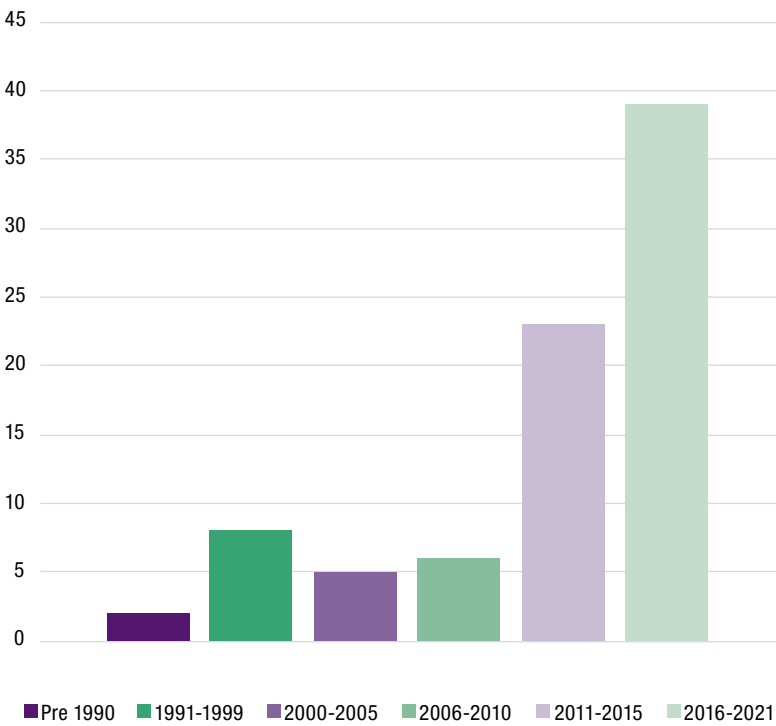
Geography of study sites for publications cited in Chapter 9



Number of cited studies by research methodology (N=83)



Timeline for references cited



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