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Women's empowerment and the will to change: Evidence from Nepal

Marie-Charlotte Buisson [a,*], Floriane Clement [b], Stephanie Leder [c]

[a] International Water Management Institute (IWMI), CGIAR, Sri Lanka
[b] Université de Toulouse, INRAE, UMR DYNAFOR, Castanet-Tolosan, France
[c] Swedish University of Agricultural Sciences (SLU), Department of Urban and Rural Development, Sweden

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ABSTRACT

A static and apolitical framing of women's empowerment has dominated the development sector. In contrast, we assess the pertinence of considering a new variable, the will to change, to reintroduce dynamic and political processes into the way empowerment is framed and measured. This article uses a household survey based on the Women's Empowerment in Agriculture Index (WEAI) and qualitative data collected in Nepal to analyze how critical consciousness influences women's will to change the status quo and the role of visible agency, social structures, and individual determinants in those processes. A circular process emerges: women with higher visible agency and higher critical consciousness are more willing to gain agency in some, but not all, of the WEAI empowerment domains. This analysis advances current conceptualizations of empowerment processes: the will to change offers valuable insights into the dynamic, relational and political nature of women's empowerment. These findings support the design of development programs aiming at increasing visible agency and raising gender critical consciousness and argue for improving the internal validity of women's empowerment measurement tools.

1. Introduction

Today, most international rural development projects aim at empowering women. This illustrates how women's empowerment has moved beyond the purview of gender equality programs to become a broader development goal. What could be deemed as relative progress yet reflects nuanced and complex realities. In the context of agricultural and rural development programmes, international development agencies have considered empowerment not only as a right but also more prominently as 'a tool against hunger' (ADB, 2013, Food and Agriculture Organization of the United Nations (FAO), 2018), i.e. as a strategy to achieve other development goals, namely, to foster agricultural productivity, economic growth and to improve food security and household nutrition. Although some observers might see this instrumental framing as a strategic move to get gender equality into international development agendas, for others, it testifies of the dilution of initial feminist concerns and transformative ambitions into mainstream development discourses and practices (Batliwala, 2007; Cornwall, 2016; Mukhopadhyay, 2004; Parpart, 1993; Chakravarti, 2008).

Before it entered development circles in the 1980s–1990s, women's empowerment was a radical concept rooted in social change work (Cornwall and Rivas, 2015; Kabeer, 1999). Feminists envisioned empowerment as a process of social transformation, articulated around changing social relations, challenging both patriarchal norms and unequal social hierarchies, e.g., related to class, race, caste, or ethnicity, and transforming oppressive institutions (Batliwala, 2007). In this perspective, feminist scholars position conscientization as a central component of empowerment (Batliwala, 1994; Rowlands, 1995; Kabeer, 1994; Wieringa, 1994; Longwe, 1995). Conscientization, or the development of critical consciousness, was developed and popularized by Freire as part of his works on popular education and critical pedagogy and refers to 'the process in which human beings, not as recipients, but as knowing subjects, achieve a deepening awareness both of the socio-cultural reality which shapes their lives and of their capacity to transform their reality' (Freire, 1970, 51). The premise is that it is only upon realizing the injustice and inequalities they face that marginalized and oppressed people can collectively act against them.

In contrast, rural development programmes have conceptualized empowerment as an individual target, based on increased access to material assets (land, livestock, agricultural tools) and financial resources. This conceptualization aligns with the instrumental vision of women's empowerment highlighted earlier, whereby empowerment is a

* Corresponding author.
E-mail addresses: m.buisson@cgiar.org (M.-C. Buisson), floriane.clement@inrae.fr (F. Clement), stephanie.leder@slu.se (S. Leder).

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means to achieve other development goals (Nazneen et al., 2019). According to this vision, development agencies should see women 'as development managers who urgently deserve investment' (IFAD and Salzburg Global Seminar, 2012). Empowered women with increased access to production means, financial and human capital, and market, can then become female entrepreneurs or workers whose productive activities will support national and global economies. This vision of women's empowerment, prevailing in international development for several decades, sharply departs from its original feminist radical roots. Rather than transforming unequal social relations, political and socio-economic structures, it aims at providing women individual access to assets and resources without challenging the social, economic and political patriarchal system to which they subjected.

The development of tools to measure gender interventions in the agricultural development sector reflects to a large extent such an apolitical framing of empowerment. For instance, the Women's Empowerment in Agriculture Index (WEAI), initially developed for monitoring and evaluation purposes (Alkire et al., 2013), has focused on access to physical assets, participation in agricultural groups, and intra-household decision-making. While these measurements are needed and progress has been made in the last ten years, it still often fails to capture the relevance and complexities of gender relations in local contexts by applying exogenously defined notions of empowerment (Tavenner and Crane, 2022; Fuentes and Cookson, 2020). The debate on the Human Development Index and other composite indicators used by international organizations also underlines that combining multiple variables to capture multi-dimensionality also poses conceptual and methodological problems (Chowdhury, 1991; Cherchye et al., 2007; Greco et al., 2019).

If theoretical and empirical advances (Chiappori and Mazzocco, 2017) in intra-household analysis have allowed to depart from the unitary model and opened the box of bargaining and power relations between household members (Agarwal, 1997), the quantification and measurement of invisible and unconscious processes remains a significant bottleneck. Decision-making is more complex than a binary response including when a joint option is proposed in questionnaires and even joint decision-making does not necessarily come along with women's empowerment (Acosta et al., 2020).

This study aims to reflect upon and advance current tools and efforts to measure women's empowerment in the agricultural development sector, furthering recent studies (Alkire et al., 2013; O'Hara and Clement, 2018; Malapit et al., 2019). We explicitly address dynamic processes and plural forms of power by considering a new empowerment variable, the will to change. We consider the will to change as the critical step in-between critical consciousness and empowerment. We define the will to change as the degree of motivation or willingness to challenge the status quo related to oppressive social relations, gender norms and institutions. We analyze: 1) how critical consciousness influences the will to change and, 2) how agency may contribute to the will to change, thereby we are not considering empowerment as an outcome, but rather as a dynamic and circular process.

Our analysis draws from household survey data collected across six districts of Nepal in 2015 and 2017, complemented with qualitative data collected in two surveyed villages. We use regression analysis to explore to which extent visible agency and critical consciousness influence the will to change. We also rely on qualitative data to investigate hypotheses that could explain our quantitative results.

The following section presents the conceptual framework that guided our analysis. The framework stems from a review of the feminist literature on power, agency, and empowerment and draws on insights on critical consciousness from the field of critical pedagogy. The third section describes the quantitative and qualitative data from Nepal, the definitions of the indicators, and the empirical model. The fourth section presents the results combining quantitative and qualitative analysis and is followed by a discussion of the results. Finally, the conclusion summarizes the findings before developing their implications.

2. Feminist perspectives on power and empowerment

To sketch a conceptual framework for our analysis, we draw on feminist scholarship and literature on power. We define empowerment as a process whereby 'individuals and organized groups are able to imagine their world differently and to realize that vision by changing the relations of power that have been keeping them in poverty' (Eyben et al., 2008). Earlier work theorized power as a set of relations, processes, and structures of domination and oppression (Young, 1990; Bachrach and Baratz, 1962), broadly categorized as 'power-over'. This conceptualization was prominent within the 'Women in Development' perspective, which largely influenced development circles in the 1970s–1990s (Rowlands, 1998). Most feminists have, however, rejected the conceptualization of power as a good, distributed among individuals and groups. Following Foucault's post-structuralist perspectives on power[1] (1975, 1978, 1980), they have conceptualized power as dynamic and exercised across relations, discourses, and everyday social practices (Allen, 2016).

An influential perspective of power in the feminist literature is that of power as constitutive and transformative, or the 'power-to.' The power-to largely emerged as a reaction against 'power-over', which is seen as a masculine conception of power, that is, power as domination and control (Allen, 2016). A widely used definition of the power-to is 'the ability to make strategic life choices' (Kabeer, 1999, 435). This perspective has highly influenced discourses and standardized measurements of women's empowerment in the development sector in the 2000s (Trommlerová et al., 2015). Similarly, in the agricultural development sector, the WEAI initially focused on individualized and visible forms of agency, building on Kabeer's definition (Malapit et al., 2019). This conceptualization underlies and tends to reproduce popular gender myths (Batliwala and Dhanraj, 2004). An example is the primacy given to increasing women's access to economic resources; the proliferation of microfinance and village saving and loan associations projects in South Asia testifies the popularity of those myths. Another recurrent narrative has been to "close the gender gap" (FAO, 2011; Quisumbing et al., 2014), namely unequal access to productive resources and opportunities between men and women. Yet for Kabeer (1999; 438): 'Agency is about more than observable action; it also encompasses the meaning, motivation, and purpose which individuals bring to their activity, their *sense* of agency, or the "power-within".'

The lack of attention to the 'power-within' in international development discourses and practices reveals a crucial gap in integrating some critical foundational aspects of Kabeer's and other feminists' works on empowerment (Cornwall and Rivas, 2015). For many feminist scholars, increasing the 'power-within' constitutes a preliminary and essential step in empowerment processes (Cornwall, 2016; Kabeer, 2005) as empowerment first entails the realization and understanding of relations and structures of oppression (Rowlands, 1995). Firstly, agency without a sense and meaning can reproduce or reinforce forms of gender subordination and inequalities (Kabeer, 1999). For instance, women's greater access to political power has not necessarily resulted in politics and policies that support greater gender equality (Batliwala and Dhanraj, 2004; Kabeer, 2005), and women's participation in microfinance might serve the development of new forms of patriarchal domination rather than contribute to their empowerment (Rahman, 1999 in Selinger, 2008). Similarly, misalignment between prevailing conceptions by development actors and contextual gender norms can further exacerbate gender conflicts and disrupt empowerment paths (Vercillo, 2020). Secondly, empowerment might not be perceived as desirable when it contradicts socially accepted norms, practices, and subjectivities, for example, in the case of rural out-migration of family members. This

[1] Yet, as noticed in Deveaux (1994), several feminist philosophers and political theorists have also criticized Foucault's lack of attention to gendered relations, lack of normative engagement and early neglect of agency.

reveals the influence of the *doxa* (Bourdieu, 1977) when particular practices and relations are not questioned or even experienced as unequal. For instance, practices such as seclusion or eating last in the family can remain uncontested when they align to cultural definitions of being a good mother or wife.

This perspective strongly resonates with the concept of critical consciousness developed by Freire (1970). The latter shares with feminist views of empowerment as the goal to fight against oppression. Critical consciousness encompasses the awareness of alternatives to oppressive gendered cultural norms and other forms of oppression. Freire (1996) argues that critical consciousness can only be reached through 'dialogue', an emancipatory process to overcome the 'culture of silence'. Building on his work, we understand the 'power-within' embedded in a collective struggle of creating social transformation towards a more egalitarian society. The essence of dialogue is the 'true word ', which is constituted of reflection and action and leads to transformation. The link between critical consciousness and dialogue offers a finer and more relational conceptualization of the power-within, going beyond what Kabeer (1999; 438) describes as individualist 'power-within'. Drawing on Freire's approach, we stress that social relations are constitutive of the power-within.

We see critical consciousness through dialogue as a necessary condition for increasing agency, yet it might not be sufficient. Realizing the existence of inequalities and injustice does not necessarily lead to the will to change and to challenge the status quo. The economic behavior theory highlights the status-quo bias, high transaction costs, and ultimately comfort in the continuation even when the situation is suboptimal (Samuelson and Zeckhauser, 1988; Kahneman and Tversky, 1982). Kabeer (2008) considers the issue of 'loyalty' within families and notably how loyalty between partners can 'mute women's willingness to protest gender inequality' (ibid; 22). Furthermore, a choice can only be exercised if alternatives exist (Kabeer, 1999). In turn, the choice not to exercise visible forms of agency can also be a well-thought-out strategy to achieve one's means (Kabeer, 2008), as demonstrated by Zwarteveen and Neupane (1996) in their study of women's nonparticipation in irrigation management in Nepal.

Therefore, the will to change or exercise choice emerges as an essential yet relatively under-theorized and under-researched concept. We only found an explicit reference to "the motivation to change" in Charmes and Wieringa (2003), who argue that 'the motivation to change existing gender relations, even when they are perceived to be unequal, depends on many factors, related to one's subjectivities, personal histories and the perceived costs and risks of transformation' (p. 425). To our knowledge, only Trommlerová et al. (2015) have conducted an empirical analysis of the will to change in their assessment of men's and women's willingness to change their lives in The Gambia. The feminist literature has not theoretically or empirically explored the linkages between the realization of oppressive structures of oppression and injustices (critical consciousness) and the will to change, which are both constitutive of the 'power-within'.

We precisely propose to address this research gap by analyzing how critical consciousness ('power-within') influences the will to change and how this process is affected by agency ('power-to'), social structures, and individual determinants. Hence, we truly consider empowerment as a process by positioning agency as an independent variable that influences the empowerment process, not as an outcome. Our contribution is largely empirical, based on the study of empowerment processes in the context of a climate adaptation and food security development project in Nepal, but we hope to contribute to theoretical developments as well by furthering conceptual reflections initiated in recent studies that propose to broaden and nuance the conceptualization of women's empowerment beyond the 'power-to'. For instance, O'Hara and Clement (2018) evidence the relevance of including critical consciousness in measurements of empowerment. They show that a critical consciousness index is correlated with locally pertinent determinants of empowerment that the WEAI does not capture. The same finding is echoed by Völker and Doneys (2020), who explore the meaning of empowerment for women in Laos, Myanmar and Vietnam and show how these meanings are driven by cultural, economic, and social contexts and differ from donor-driven definitions. Bernard et al. (2020) advance current ways to assess women's empowerment; using the case of milk production and consumption in Senegal, they dig into underlying mechanisms driving household members to challenge or not the status quo in decision making. In terms of methodology, Malapit et al. (2019) propose adapting the WEAI by integrating additional intrinsic and collective agency elements. Lastly, Leder and Sachs (2019) defend a more nuanced approach to current measures of empowerment in agriculture by revisiting respondents' WEAI questionnaires with relational life histories and qualitative data. They establish the fundamental importance of intersectionality, intra- and inter-household relations, and contextual variables, such as migration and seasonality in the empowerment processes.

3. Data and methods

3.1. Data and context

The empirical analysis that follows is based on survey and qualitative data collected in 2015 and 2017 in Nepal. The quantitative data collected is part of the impact evaluation of the Anukulan project, funded by the UK DFID program "Building Resilience and Adaptation to Climate Extremes and Disasters" (BRACED). The Anukulan project aimed at developing climate-resilient livelihoods for local communities in Western Nepal. The project facilitated the emergence of economic opportunities through horticulture training, the development of rural marketing organizations, and water resource management interventions. The program targeted poor and rural households facing climate extremes and disasters in six districts of the provinces 5, 6, and 7 of Nepal: Doti, Kailali, Kanchanpur, Dadeldhura, Bardiya, and Surkhet. The project had a specific objective related to women's empowerment, and thus the baseline and the follow-up surveys used the abbreviated WEAI (a-WEAI) questionnaire, a streamlined version of the WEAI. The a-WEAI was specially developed for monitoring and evaluating development programs, as the time to administer the questionnaire is reduced by 30% as compared to the WEAI (around 2 hours for the WEAI) (Malapit et al., 2020a). As our research organization was one of the research partners of the project, in charge of leading the WEAI data collection and analysis, based on earlier studies (O'Hara and Clement, 2018) and insights gained from qualitative work, we enriched the a-WEAI questionnaire with questions on critical consciousness and the willingness to change its agency status.

The sample design measures a variation equivalent to 58% of the standard deviation of the five WEAI domains of empowerment and targets 600 households. The survey covers 20 Village Development Committees[2] (VDCs). District stakeholder consultations were conducted to identify the treated VDCs as well as the potential control with similar observable characteristics. The 20 VDCs surveyed were randomly selected among these two groups.

The general household questionnaire was administered to 600 households in 2015 with questions on land and water uses, crop production, dietary diversity, group participation, technology adoption, and resilience to climate risks. Besides, the a-WEAI questionnaire (Malapit et al., 2020a) was administered to the main female and male decision-makers of the household separately from the same surveyed households. In 2017, as part of the follow-up survey, a subset[3] of the initial respondents responded to the same household and a-WEAI questionnaires, but the household survey data are not available. In this

[2] VDC was then the lowest administrative unit in Nepal, before the federalist structure was set-up.

[3] 37% of the respondents from the baseline are present in the follow-up survey.

analysis, we use the data collected in 2017 as part of the enriched a-WEAI questionnaire. This questionnaire was answered by 600 women and 544 men from the same households. For robustness checks and to control for household covariates, we use data from the baseline household survey available for 233 of the women respondents and 192 of the men respondents.

Qualitative data from earlier studies inspired our revision of the WEAI tool and hence supported the design of the survey but we also collected new qualitative data, which we used to interpret the quantitative results. It was collected in two villages in Doti and Dadedhura districts. In 2015, 2016, and 2020, we conducted 60 semi-structured in-depth interviews with female and male farmers of diverse ages, both Chhetri and Dalit castes,[4] and of different classes, based on land ownership. In addition, we conducted 16 life histories with diverse women farmers, eight gender-mixed and gender-disaggregated focus group discussions with empowerment rankings, frequent observations, and participatory methods such as transect walks and village resource mappings. The triangulation of this data, especially transect walks and village resource mappings with Focus Group Discussions (FGD), supported a better understanding of complex inter-household relations. The continuous involvement with the same local farmers over several years and a pool of data helped us come closer to local meanings of and pathways to women's empowerment (cf. Leder et al., 2017; Leder and Sachs, 2019). The qualitative data helped identifying discrepancies between locally perceived women's empowerment as strongly entangled within complex intra- and inter-household relations and measured a-WEAI data of binary intra-household relations. For example, we discussed the survey questionnaire in two FGDs to understand diverse women's responses and values attached to the empowerment indicators, particularly women of different age, family compositions, or of the different castes (Chhettri and Dalits).

3.2. Indicators for domains of visible agency

We use the a-WEAI indicators that measure visible agency across five domains of empowerment (5DE) (Malapit et al., 2020a). The 5DE sub-index assesses the roles of women in agriculture as well as their level of engagement in production, resources, incomes, time, and leadership.

The WEAI and a-WEAI were developed as aggregated overall empowerment indicators with the idea of enabling comparisons across different cultural settings and over time. With this external validity objective, the 5DE indicators are, therefore, binary variables that aggregate information from different activities, different types of assets, different groups. However, in doing so, it also rubs out heterogeneity between households that we would need to keep in a micro-level study for contextual or internal validity. To counterbalance the measurement of visible agency toward more internal validity, we build alternative indicators for each of the domains of empowerment developed from the a-WEAI questionnaire. The alternative indicators reflect the quantities (of decisions, assets owned, groups, hours of work) for each woman respondent.

We do not discuss in this paper the domain of empowerment related to income. To avoid overloading the respondent with questions that would not necessarily be relevant in our local context, information on the willingness to have more control over the income was not collected. Furthermore, we do not use the second sub-index of the a-WEAI, the Gender Parity Index (GPI) in this study.

3.3. Indicator of gender critical consciousness

To capture critical consciousness (CC), we assessed the extent to which individuals agree with oppressive gender norms commonly found in the public and domestic spheres in Nepal. We used the same set of questions that are specific to the Nepal context as O'Hara and Clement (2018). Enumerators presented to women and men respondents six statements and asked them to which extent they agree with these statements using a Likert scale (from strongly agree 1 to strongly disagree 5): (i) "A woman should tolerate violence in order to keep her family together.", (ii) "There are times when women deserve to be beaten.", (iii) "A woman should obey her husband in all things.", (iv) "Women should leave politics to men.", (v) "Women's work should be limited to household chores, such as cleaning and cooking.", (vi) "Education is not valuable for daughters/daughters-in-law.".

The responses to the six questions are aggregated into a single normalized index with the same weight for all the statements.

In the case of women respondents, the indicator assesses their level of critical consciousness and ability to step back from the dominant social norms. In the case of men respondents, the indicator evaluates their perception of oppressive gender norms commonly accepted in the public and private sphere. On average, women reach a score of 80.7 percent, while it is 77.6 percent for men (p-value of the *t*-test of difference 0.0021). In the analysis, we use the indicator of women's critical consciousness and the difference between women's and men's critical consciousness indicators in each household. We expect a large difference between the female and male to be a constraining factor for women's ability to challenge the status quo and enhance an empowerment process.

3.4. Indicators of the will to change

Finally, we added a set of questions to the a-WEAI questionnaire to reflect the motivation and emotional capacity of respondents to challenge the status-quo in agency and to see their roles in the different domains of empowerment evolving. For the production domain, enumerators asked to which extent respondents would like to have more inputs in decision making for each of the agricultural activities of the a-WEAI questionnaire. Responses followed a Likert scale with four levels: not at all, to a small extent, to a medium extent, and to a high extent. Using the same aggregation of the activities used in the 5DE method, we build a normalized indicator of the will to have more inputs in agricultural decisions.

For the resources domain, we consider two indicators. First, for each asset, respondents were asked to which extent they would like to have better access to the item. Following the same method as previously described for the production domain, we obtain a normalized indicator of the will to have better access to productive and non-productive capital. Second, for each credit, we asked if the respondents would like to have more inputs in decisions related to credit and on the use of the money borrowed. We similarly construct an indicator of the will to have more inputs in decisions related to credit. For the leadership domain, we use a normalized indicator of the will to have more inputs in group decisions using the responses given for each of the groups. Finally, we aggregate two questions for the time allocation domain: feeling to be overburdened with work and willingness to do less household work and participate in activities outside the home. We obtain a normalized indicator of the will to challenge workload.

In addition, we compare women's will to change for specific production decisions, assets, and groups that are traditionally part of the women and men spheres. For the production, we compare food crop farming (mostly cereals production), which is part of the men's domain, with vegetable farming, which is mostly in the hands of women. For access to assets, we compared land access, as an example of an asset owned by men, and poultry access, as an example of an asset mostly controlled by women. For participation in groups, we considered agricultural and producers' groups, which are mostly men groups, and microfinance and saving groups, which are mostly driven by women in our context.

[4] Chhetris are a 'high' caste group in Nepal, whereas Dalits, formerly known as the untouchable, are the 'lowest' group in the social hierarchy, located outside of the caste system.

Descriptive statistics and definitions of all the variables are in Tables 1 and 2.

3.5. Data analysis methods

This analysis aims to elucidate the relations between the will to change on one side and the visible agency and gender critical consciousness on the other side. The quantitative analysis uses the following empirical models:

$$W_{ij} = \beta_0 + \beta_1 CC_{ij} + \beta_2 A_{ij} + \beta_3 I_{ij} + \varepsilon_{ij} \quad (1)$$

$$W_{ij} = \beta_0 + \beta_1 CC_{ij} + \beta_2 A_{ij} + \beta_3 I_{ij} + \beta_4 H_{ij} + v_j + \varepsilon_{ij} \quad (2)$$

We estimate the model from equation (1) on the entire sample, and we use the sub-sample for which household and village level characteristics are available from the household survey for estimating equation (2).

The dependent variable W_{ij} is the will to change for the women interviewed in household i from village j. CC_{ij} is a vector of critical consciousness which includes both self-consciousness from the women i from village j and the difference between her critical consciousness and one of her male decision maker within her household. A_{ij} is the visible agency, estimated by a-WEAI binary variables and alternative continuous variables. I_{ij} is for the individual characteristics of the women respondent, namely her age in our estimates. The vector of household's characteristics, H_{ij}, encompasses the age, gender, ethnicity and caste of the head of household, the number of household members, the area of land owned, the number of bedrooms in the dwelling, and a binary variable equal to 1 if the household receives remittances. v_j is also a binary variable equal to 1 if the village lies in the Tarai-Madhesh region, i.e. in the plains, while villages in the hills take the value 0. Finally, ε_{ij} is the term of errors.

We estimate the equations independently for the five components: agricultural decisions, access to assets, decisions over credit, workload,

Table 1
Descriptive statistics.

	DOMAIN	Type of indicator	Description	Number of observations	Mean	Standard deviation	Minimum	Maximum
WILL TO CHANGE	Production	Composite	Normalized indicator of will to have more inputs in agricultural decisions.	566	0.40	0.18	0	0.93
	Production	Disaggregated	Normalized indicator of will to have more inputs in food crop farming decisions.	513	0.73	0.21	0	1
	Production	Disaggregated	Normalized indicator of will to have more inputs in vegetable farming decisions.	502	0.74	0.21	0	1
	Resources	Composite	Normalized indicator of will to have better access to productive capital.	593	0.37	0.17	0	1
	Resources	Composite	Normalized indicator of will to have better access to non-productive capital.	595	0.40	0.23	0	1
	Resources	Disaggregated	Normalized indicator of will to have better access to land.	560	0.72	0.22	0	1
	Resources	Disaggregated	Normalized indicator of will to have better access to poultry.	380	0.75	0.24	0	1
	Resources/ Credit	Composite	Normalized indicator of will to have more inputs in decisions related to credit	325	0.20	0.15	0	0.74
	Time	Composite	Normalized indicator of will to challenge workload	598	0.67	0.15	0	1
	Leadership	Composite	Normalized indicator of will to have more inputs in group decisions	498	0.23	0.16	0	0.92
	Leadership	Disaggregated	Normalized indicator of wills to have more inputs in agricultural groups.	318	0.70	0.27	0	1
	Leadership	Disaggregated	Normalized indicator of will to have more inputs in saving groups.	279	0.66	0.27	1	1
CRITICAL CONSCIOUSNESS			Normalized indicator of critical consciousness	584	0.81	0.17	0	1
			Difference critical consciousness between main female and male decision-maker in the household	522	0.03	0.18	−0.67	0.67
VISIBLE AGENCY	Production	WEAI	Individual has some input in decisions or feels can make decisions in at least two agricultural activities	574	0.86	0.34	0	1
	Production	Alternative	Number of agricultural domains in which individual makes decisions.	586	0.82	1.35	0	7
	Production	Alternative	Number of agricultural domains individual has some inputs in decisions.	587	4.56	1.20	1	8
	Resources	WEAI	Personal or joint ownership of at least two small assets or one large asset.	600	1.00	0.04	0	1
	Resources	Alternative	Number of agricultural assets individual owns solely or jointly.	594	4.20	1.21	1	7
	Resources	Alternative	Number of assets individual owns solely or jointly.	599	7.52	2.30	1	14
	Resources/ Credit	WEAI	Individual makes at least one decision regarding at least one source of credit.	600	0.25	0.43	0	1
	Resources/ Credit	Alternative	Number of decisions of the individual to borrow money.	600	0.38	0.81	0	6
	Time	WEAI	Individual worked less than 10.5 h the previous day	600	0.47	0.50	0	1
	Time	Alternative	Number of hours worked the previous day	600	10.26	2.45	0	16
	Leadership	WEAI	Individual is a member of at least one group	600	0.83	0.38	0	1
	Leadership	Alternative	Number of groups with membership	600	1.80	1.30	0	6

Table 2
Descriptive statistics, individual and household variables.

Description	Number of observations	Mean	Standard deviation	Minimum	Maximum
Age of the respondent	597	34.13	12.02	18	73
Age of the head of household	233	41.85	12.80	19	77
Female headed household	233	0.37	0.48	0	1
Dalit household	233	0.18	0.38	0	1
Janajati household	233	0.45	0.50	0	1
Number of household members	233	5.45	2.34	1	20
Area of land owned (in heactare)	233	0.34	0.24	0	1.08
Number of bedrooms in the house	233	7.06	3.23	0	11
Household receiving remittance	233	0.30	0.46	0	1
Tarai region	233	0.55	0.50	0	1

and participation. In these five cases, the dependent and independent variables are aggregated indicators. Besides, we estimate the same models with a non-aggregated indicator for the dependent variable. In those cases, W_{ij} is the will to have more inputs in the decisions about specific production activities (food crops, vegetables), the will to have better access to specific assets (land, poultry), and the will to have more inputs in the decisions taken by specific groups (agricultural group, microfinance or saving group).

We use Ordinary Least Square Regressions to estimate the empirical models (1) and (2). In model (2), we estimate robust standard errors clustered at the ward level to account for intra-cluster correlation. There are 28 wards used in the analysis. With this relatively small number of clusters, the standard errors can be biased downward. We, therefore, present p-values calculated with the wild cluster bootstrap method to avoid over-rejection of our null hypothesis (Cameron et al., 2008).

We acknowledge that endogeneity of the agency variable through simultaneity bias and unobserved variables correlated with agency and the will to change are theoretically possible. However, we consider the visible agency and the will to change from each domain of WEAI and not the empowerment in general as in Trommlerová et al. (2015). This desegregation reduces the likelihood of endogeneity. Another point is the sequential order and conditional framing of the questions, which justify our empirical model with visible agency determining the will to change and not the reverse. The will to change was elicited after agency and was conditional on the actual level of agency. In addition, in some estimations, relatively low R-squared values indicate a high variability of the relation between dependent and independent variables as it is often the case in behavioural studies. Recognizing these potential caveats, we interpret our results as correlations and not as causal estimates.

The qualitative interview data were coded following the principles of qualitative content analysis (Mayring, 2010) and grounded theory elements (Glaser and Strauss, 2008) with the software NVivo. The combination of these two analytical methods allowed both inductive coding open to locally meaningful themes and cultural explanations, as well as deductive coding based on the a-WEAI indicators and the concepts of critical consciousness and the will to change. This integrated participatory method documentation and visual data (mappings and photographs). The triangulation of methods took diverse issues into account which are not covered in the questionnaire and highlighted the ambivalences around increased visible agency and intra-household relations.

4. Results

4.1. Results on the agricultural production domain

First, we note that the will to have more inputs in agricultural decisions is positively and significantly correlated with the critical consciousness index (Table 3). The result is robust to the inclusion of control variables and to the reduction of the sample size. As expected, the difference of critical consciousness between the female and male from the same household has a negative sign but is significant in only one of the specifications. Second, already having inputs in decision-making is positively correlated with the will to have more inputs in agricultural decisions. However, when we consider the disaggregated indicators, there is an indication that the number of agricultural domains in which women make decisions negatively influences their will to have more inputs. Contrarily, the direction of the relationship is positive when we consider the number of agricultural domains in which women have inputs in decisions.

This result is confirmed by the qualitative findings and reflects the ambiguous and diverse set of feelings related to increased decision-making in the context of widespread male out-migration in Nepal (Leder and Sachs, 2019; Maharajan et al., 2012). With 31 percent of the households receiving remittances and 58 percent of them being headed by women, the discrepancy between de-jure and de-facto female headed households is particularly common in our study region. During our semi-structured interviews, the majority of women indicated that their husband's absence and the sudden increase in decision-making responsibility leaves them with burdening emotions. Lacking supportive advice from their husbands and their maternal families often living far away, they experience loneliness and worry about children's education and health, food, livestock, as well as husband's security abroad. One outspoken woman, who took decisions regarding her children and farming by herself as her husband was absent, shared with us her sadness about the lack of support and loneliness resulting from out-migration. "No one will give me anything, if I tell them my sad stories, when I meet people first, they are very friendly and smile, I hide my sadness very well. You came and asked, it hurt my heart to talk about all this. But I don't talk about my sadness. I hope my children have a nice future and I pray every day that my son gets better."

In focus group discussions and interviews, recurring themes were the importance of mental, financial and labor support on everyday matters such as childcare and repaying loans. Stepping into new roles and making decisions alone can create additional pressure and stress. However, other women felt differently about their husband's absence; they enjoyed greater independence through increased mobility and greater individual decision-making power. This is especially the case when there are no in-laws in the household, as in their presence, patriarchal hierarchies are maintained, and in-laws often take over the role of the absent husband by controlling finances, burdening daughters-in-law with additional work, or restricting their mobility and influence in decision-making (Leder, 2022). Lastly, women who make decisions not alone but by giving inputs desire more independence and agency as they might feel that, despite their inputs, their contributions might not always be valued fully as per their intent. These findings highlight the importance of diverse family relations in collaborative intra-household decision-making that could not be captured through the a-WEAI.

In Table 4, we estimate the determinants of the will to have more inputs in decisions related to food crop farming and vegetable farming. Food crop farming relates mainly to cereals' production, mostly dominated by men for decision and labor. On the contrary, vegetable production for self-consumption is mostly in the hands of women. Critical consciousness is positively correlated with the will to have more inputs in the decisions related to cereals' and vegetables' production. As

Table 3
Production.

	VARIABLES	(1)	(2)	(3)	(4)
		Will to have more inputs in agricultural decisions			
Critical consciousness	**Critical consciousness**	0.182***	0.470***	0.100**	0.349***
		(0.0509)	(0.000)	(0.0396)	(0.125)
			[0.000]		[0.000]
	Difference critical consciousness self - male decision-maker	−0.0506	−0.144	−0.0233	−0.140*
		(0.0484)	(0.0977)	(0.0378)	(0.0766)
			[0.144]		[0.070]
Visible Agency	**WEAI indicator - Input in decisions**	0.112***	0.0999***		
		(0.0222)	(0.0359)		
			[0.014]		
	Number of agricultural domains 'makes decision'			−0.0319***	−0.0126
				(0.00535)	(0.0286)
					[0.620]
	Number agricultural domains 'has inputs in decision'			0.0983***	0.0964***
				(0.00513)	(0.000)
					[0.000]
Age of the respondent		0.000296	0.000416	8.18e-05	0.000291
		(0.000644)	(0.00115)	(0.000488)	(0.000818)
Age of the head of household			0.000356		0.000145
			(0.000770)		(0.000634)
Female headed household			−0.00418		0.0103
			(0.0209)		(0.0217)
Dalit household			−0.0750**		−0.0259
			(0.0314)		(0.0229)
Janajati household			0.0440		0.0310
			(0.0432)		(0.0411)
Number of household members			0.00741		0.00572
			(0.00600)		(0.00530)
Area of land owned			−0.0180		0.0163
			(0.0615)		(0.0352)
Number of bedrooms in the house			0.00157		−0.00157
			(0.00573)		(0.00314)
Household receiving remittance			−0.0638**		−0.0724***
			(0.0272)		(0.0231)
Tarai region			−0.0714		−0.00884
			(0.0501)		(0.0384)
Constant		0.147***	−0.0928***	−0.118***	−0.343***
		(0.0493)	(0.0295)	(0.0412)	(0.109)
Observations		486	176	493	182
R-squared		0.080	0.346	0.451	0.608

Notes: Robust standard errors clustered at the VDC level in parentheses. Wild VDC-level cluster bootstrap p-values in brackets. *** significant at the 1 percent level, ** significant at the 5 percent level, * significant at the 10 percent level.

Table 4
Production, disaggregated.

VARIABLES	(1)	(2)	(3)	(4)
	Will to have more inputs in agricultural decisions …			
	for food crop farming	for food crop farming	for vegetable farming	for vegetable farming
Critical consciousness	0.164**	0.592***	0.170**	0.631***
	(0.0684)	(0.208)	(0.0693)	(0.235)
		[0.05]		[0.008]
Difference critical consciousness self - male decision-maker	−0.109*	−0.299**	0.00558	−0.245*
	(0.0659)	(0.116)	(0.0665)	(0.126)
		[0.011]		[0.054]
Observations	449	162	437	163
R-squared	0.015	0.155	0.020	0.204

Notes: Robust standard errors clustered at the VDC level in parentheses. Wild VDC-level cluster bootstrap p-values in brackets. All estimations include a constant and the age of the women as control variables; in addition, estimations in columns (2) and (4) include household level control variables. *** significant at the 1 percent level, ** significant at the 5 percent level, * significant at the 10 percent level.

before, the difference between women's and men's critical consciousness is negatively correlated with the willingness to challenge the status quo. In this case of inputs to production decisions, the magnitude of the coefficients is similar for men-dominated activities and women-dominated activities.

4.2. Results on the resource domain

Higher critical consciousness is again positively and significantly correlated with the will to have better access to productive and non-productive capital (Table 5). The magnitude of the coefficients is comparable between the non-productive capital and the productive capital.

The agency measured by the number of assets owned by the respondent is a significant determinant of the will to have better access to assets. One more asset owned increases the will to have better access to productive and non-productive capital by respectively 10.4 and 7.7 percentage points.

Qualitative data also confirms the correlation between of lack of agency and obstructed will to change aggravated by male migration. One woman we interviewed stated: "My husband is abroad in India, but decides even on small expenditures. I would like to have more influence, but I don't want to fight, so I have to listen. Without husband's support how can I run the house? When you get married you don't have right to anything."

With the analysis conducted for disaggregated dependent variables

Table 5
Resources, capital.

	VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Will to have better access to productive capital				Will to have better access to non-productive capital			
Critical consciousnessrowhead	Critical consciousness	0.130***	0.292**	0.114***	0.271***	0.127*	0.576***	0.106**	0.390**
		(0.0483)	(0.138)	(0.0313)	(0.000)	(0.0691)	(0.215)	(0.0454)	(0.185)
			[0.030]		[0.000]		[0.006]		[0.042]
	Difference CC self-male decision-maker	−0.0490	−0.0937	−0.0671**	−0.110	−0.00818	−0.133	−0.0344	−0.0873
		(0.0466)	(0.0883)	(0.0302)	(0.0760)	(0.0662)	(0.115)	(0.0435)	(0.119)
			[0.302]		[0.138]		[0.244]		[0.442]
Visible Agency	**Number of agricultural assets owned**			0.104***	0.102***				
				(0.00392)	(0.000)				
					[0.000]				
	Number of assets owned							0.0772***	0.0574***
								(0.00296)	(0.000)
									[0.000]
	Observations	515	188	515	188	517	190	517	190
	R-squared	0.014	0.152	0.586	0.611	0.008	0.441	0.573	0.655

Notes: Robust standard errors clustered at the VDC level in parentheses. Wild VDC-level cluster bootstrap p-values in brackets. All estimations include a constant and the age of the women as control variables; in addition, estimations in columns (2), (4), (6) and (8) include household level control variables. *** significant at the 1 percent level, ** significant at the 5 percent level, * significant at the 10 percent level.

Table 6
Resources, disaggregated.

VARIABLES	(1)	(2)	(3)	(4)
	Will to have better access to …			
	Land	Land	Poultry	Poultry
Critical consciousness	0.319***	0.646***	0.197**	0.435**
	(0.0658)	(0.214)	(0.0868)	(0.178)
		[0.003]		[0.016]
Difference critical consciousness self - male decision-maker	−0.172***	−0.284*	−0.0343	−0.0615
	(0.0631)	(0.153)	(0.0847)	(0.325)
		[0.065]		[0.850]
Observations	493	176	329	137
R-squared	0.046	0.173	0.019	0.143

Notes: Robust standard errors clustered at the VDC level in parentheses. Wild VDC-level cluster bootstrap p-values in brackets. All estimations include a constant and the age of the women as control variables; in addition, estimations in columns (2) and (4) include household level control variables. *** significant at the 1 percent level, ** significant at the 5 percent level, * significant at the 10 percent level.

in Table 6, critical consciousness is positively correlated with the will to have better access to poultry and land, but the coefficients are larger for land, an asset mostly in the hand of men. Access to land is critical, and in this case, a more developed critical consciousness tends to challenge the social norms and increase the willingness to pervade men's domains.

Regarding credit (Table 7), we note that only the number of decisions already taken to borrow money is significantly correlated with the will to contribute more to such decisions. This confirms the virtuous cycle identified before. However, critical consciousness and other visible agency indicators are non-significant. Our qualitative findings show that the availability of loans does not necessarily translate into actual access and financial security. In several cases, we found that women were charged with taking loans from women-specific saving groups by their husbands, whereas the money was spent on repaying their husbands' loans for out-migration rather than their small agricultural enterprises as declared. This practice further worsens women's financial worries when moneylenders pressure left-behind wives and demand their money back, as one interviewed woman confessed: "I have to take another loan to pay back my husband's loan." Women being instrumentalized to access credit hence may be the reason why critical consciousness and visible agency indicators do not significantly determine the will to have more inputs in credit-related decisions.

4.3. Results on the time domain

The critical consciousness is not significantly correlated with the will to reduce workload even if we can still note the negative sign (Table 8).

Table 7
Resources, credit.

	VARIABLES	(1)	(2)	(3)	(4)
		Will to have more inputs in decisions for credits			
Critical Consciousness	**Critical consciousness**	0.0104	−0.0303	0.0146	−0.0184
		(0.0567)	(0.0768)	(0.0535)	(0.0662)
			[0.690]		[0.744]
	Difference critical consciousness self - male decision-maker	0.0536	0.0863	0.0717	0.111
		(0.0535)	(0.122)	(0.0506)	(0.127)
			[0.530]		[0.364]
Visible Agency	**WEAI indicator – Decisions related to credit**	0.0252	0.0148		
		(0.0175)	(0.0377)		
			[0.678]		
	Number of decisions to borrow money			0.0531***	0.0518
				(0.00883)	(0.0328)
					[0.132]
	Observations	280	99	280	99
	R-squared	0.018	0.119	0.125	0.236

Notes: Robust standard errors clustered at the VDC level in parentheses. Wild VDC-level cluster bootstrap p-values in brackets. All estimations include a constant and the age of the women as control variables; in addition, estimations in columns (2) and (4) include household level control variables. *** significant at the 1 percent level, ** significant at the 5 percent level, * significant at the 10 percent level.

Table 8
Time.

	VARIABLES	(1)	(2)	(3)	(4)
		Will to challenge workload			
Critical Consciousness	**Critical consciousness**	−0.0326	0.0221	−0.0315	0.0217
		(0.0441)	(0.117)	(0.0442)	(0.0776)
			[0.880]		[0.890]
	Difference critical consciousness self - male decision-maker	−0.0410	−0.0365	−0.0462	−0.0445
		(0.0424)	(0.109)	(0.0424)	(0.102)
			[0.748]		[0.692]
	WEAI indicator - Work less than 10.5 h	0.0335**	0.0471		
		(0.0132)	(0.0306)		
			[0.132]		
Visible Agency	Number of working hours			−0.00665**	−0.00961
				(0.00276)	(0.00645)
					[0.116]
	Observations	519	190	519	190
	R-squared	0.018	0.072	0.017	0.069

es: Robust standard errors clustered at the VDC level in parentheses. Wild VDC-level cluster bootstrap p-values in brackets. All estimations include a constant and the age of the women as control variables; in addition, estimations in columns (2) and (4) include household level control variables. *** significant at the 1 percent level, ** significant at the 5 percent level, * significant at the 10 percent level.

Women working less than 10.5 h a day tend to be more prone to challenge their workload. However, the continuous variable presents a different perspective; the number of working hours is negatively correlated with the will to challenge the workload. These two results are not contradictory and show how the definition of the variable may influence the results. In the context of our study, and as it was defined in the a-WEAI, 'workload' encompasses care work (including domestic tasks such as cooking and cleaning), income-generating tasks, and community and political work. Each of these three workload components is associated differently with the will to reduce workload. It suggests that different types of work hold different degrees of desirability.

In the two villages where we conducted qualitative fieldwork, the workload is not seen as questionable and remains entrenched in social and cultural norms. In our qualitative interviews, we noted that women with a higher workload due to community-related or political work also have a high level of critical consciousness and visible agency. At the same time, women with a high workload due to care work and income-generating activities felt disempowered and lacked both time and energy to challenge the status quo, as one woman explained in a focus group discussion: "Only if our mother-in-law helps with the household work and our husband allows can we go to attend trainings." Finally, agricultural workload underlies high variations throughout seasons and cropping cycles, and across gender.[5] As workload is not a static variable, it is all the more challenging to draw generalizations on the links between workload and the will to challenge the status quo.

4.4. Results on the leadership domain

Table 9 shows results related to the leadership domain. The critical consciousness indicator, as well as the participation in at least one group, are not significant determinants of the will to have more input in groups' decisions. This occurs in a context from the sampled households where more than 80 percent of respondents are members of at least one group, often created by a development project. In our case study villages in particular, there has been a significant number of development interventions which have required almost every woman to be a member of one or several groups. However, group membership is in many cases token, as many of these groups become not functional once the project stops. Even when they are functioning, most of these groups do not challenge oppressive social norms and can even reinforce them (Clement and Karki, 2018). Our qualitative data confirm this finding. Women indicated that by participating in groups, they learn about projects and access to schemes and improve their ability to introduce themselves to strangers or a group. Nevertheless, they are often dependent on 'upper' caste (Chhetri) male's decisions, often made in other informal settings, while women are called to group meetings for representational reasons. Experiences of their requests being overheard or starved off have led to disillusionment in community groups, ultimately tending to reinforce exclusion. Some women are exposed to derogatory remarks when they challenge existing gender norms of purity (purdah) by increasing their mobility, bargaining with men, and speaking up in groups. For example, one outspoken young woman shared that other women would call her derogatorily 'politician' as she did not conform to the gender norms of being submissive and staying at home.

In addition, the gender, age, and caste composition of the group, as well as kinship ties, are highly influential and can limit or enhance one's desire to have more significant input in groups' decisions. In one of our case study villages, for example, we observed a daughter-in-law covering herself up with her veil as soon as her father-in-law joined a meeting and turning mute despite being outspoken earlier. We noticed similar accommodating behavior when a group of Dalits slowly dissolved without engaging in any further discussions after an 'upper' caste man joined them. These cultural norms and acceptance of hierarchies might explain why mere group membership is not a significant determinant of the will to have more influence in the decision-making of groups.

Beyond membership only, the level of participation and of influence on group decisions may be more strongly correlated with the will to change. In our two case study villages, women who experienced some form of success in their groups, e.g. through their accounting skills or their ability to sell their vegetable produce, gained recognition from other women in the village. This was evidenced in our focus group discussions with women on what being empowered means "Someone empowered is a person who helps a lot, invites us and tells us what she has learned." Once they have gained some recognition, they are more likely to be asked and to accept to join other groups as well. This may explain that the number of groups in which women are members is a positive and significant determinant of the will to have more input in group decisions. Participation in an additional group increases by 11 percent the will to change indicator.

We finally consider disaggregated participation in specific groups in Table 10 to confirm the qualitative observations. Higher critical consciousness is negatively correlated with the will to have more inputs in decisions made by agricultural groups. These groups can be farmers'

[5] Gender-specific workload varies with seasonality due to the contextual gender division of labor, e.g. men's responsibilities for ploughing and women's responsibility for more time-intense tasks such as transplanting, weeding and harvesting.

Table 9
Leadership.

	VARIABLES	(1)	(2)	(3)	(4)
		Will to have more inputs in group decisions			
Critical Consciousness	**Critical consciousness**	−0.0381	−0.0883	−0.0413	−0.00182
		(0.0520)	(0.106)	(0.0273)	(0.0219)
			[0.430]		[0.976]
	Difference critical consciousness self - male decision-maker	0.0417	0.0406	0.0369	0.0324
		(0.0485)	(0.128)	(0.0253)	(0.0575)
			[0.724]		[0.526]
Visible Agency	**WEAI indicator - Member of at least 1 group**	0.0880	0.0368		
		(0.0707)	(0.138)		
			[0.740]		
	Number of groups with membership			0.120***	0.113***
				(0.00357)	(0.000)
					[0.000]
	Observations	431	154	431	154
	R-squared	0.005	0.037	0.725	0.698

Notes: Robust standard errors clustered at the VDC level in parentheses. Wild VDC-level cluster bootstrap p-values in brackets. All estimations include a constant and the age of the women as control variables; in addition, estimations in columns (2) and (4) include household level control variables. *** significant at the 1 percent level, ** significant at the 5 percent level, * significant at the 10 percent level.

Table 10
Leadership, disaggregated.

VARIABLES	(1)	(2)	(3)	(4)
	Will to have more input in decisions in …			
	Agricultural groups	Agricultural groups	Microcredit and saving groups	Microcredit and saving groups
Critical consciousness	−0.215*	0.312	0.00692	0.280
	(0.113)	(0.399)	(0.116)	(0.315)
		[0.437]		[0.376]
Difference critical consciousness self - male decision-maker	0.170	−0.0413	−0.0621	−0.0607
	(0.105)	(0.353)	(0.111)	(0.174)
		[0.907]		[0.728]
Observations	273	98	238	100
R-squared	0.036	0.184	0.034	0.132

Notes: Robust standard errors clustered at the VDC level in parentheses. Wild VDC-level cluster bootstrap p-values in brackets. All estimations include a constant and the age of the women as control variables; in addition, estimations in columns (2) and (4) include household level control variables. *** significant at the 1 percent level, ** significant at the 5 percent level, * significant at the 10 percent level.

groups, forest community user groups, or water users' committees. It indicates that women with higher critical consciousness are reluctant to be involved in such men-dominated groups. Our qualitative data suggest that they might not consider their participation in these groups as an efficient use of their time and energy, especially considering competitive demands for group membership: "There are so many groups. I only attend when outsiders (project staff) are there."

5. Discussion

5.1. Conceptualization and empirical measurements of women's empowerment

Our results suggest that the will to change is a relevant variable in the measurement of women's empowerment as it is significantly correlated with the stated level of agency and our index of critical consciousness across several domains. Whereas this does not demonstrate causation, it empirically supports the existence of a relationship between meaning, motivation and agency, as theorized by several prominent feminists (Kabeer, 1999). This is an important result, which also advances current measurements of empowerment by considering motivation and purposive action as constituent elements of agency (see Gammage et al., 2016). This has substantial implications for both research and development on empowerment. For instance, it allows questioning often binary discourses on the feminization of agriculture, which claim either women's empowerment or vulnerability in the agricultural sector as a result of male out-migration (Leder, 2022). Similarly, our findings also question the aim of increasing women's agency, e.g. through participation in saving or agricultural groups, without addressing patriarchal structures, as followed by numerous development projects in Nepal (Leder et al., 2017).

Our qualitative analysis confirms the importance of paying attention to the meaning, motivation and purpose that women assign to different forms of agency (Kabeer, 1999). It is particularly relevant in contexts where women gain some forms of agency, but without necessarily a change in prevailing gender norms, gendered institutions and political-economic structures. For instance, in our case study, an increase in long term male out-migration has suddenly opened spaces for some women to make decisions, which has not necessarily resulted in perceived empowerment. Depending on individual determinants and intra-household relations, it might have led to feelings of stress, isolation or of greater freedom and independence (Leder, 2022). It becomes particularly obvious why measuring agency alone can be misleading in such contexts. Measuring the will to change, critical consciousness and agency as a tryptic across different domains or spaces of empowerment supports a better understanding of the dynamic process of empowerment, relating observable forms of agency with the (non-)realization of oppressive structure, the (non-)recognition of alternatives and the desire to challenge the status quo. In our case study, when the three variables are not correlated, this signals a form of agency which women do not value, or which does not challenge existing patriarchal structures, as in the case of improved access to credits or participation to local user or saving groups.

Jointly assessing critical consciousness and the will to change also reveals when hegemonic values and socially-accepted gender norms are key constraining factors to empowerment, e.g., when both critical consciousness and the will to change have low values. Considering the will to change might help to move away from essentialized assumptions about women towards a more nuanced consideration of the diversity of meanings associated with empowerment, depending on individual determinants and local contexts. Lastly, the will to change offers valuable insights into the dynamic, relational, and political nature of women's empowerment. This is particularly prominent in our analysis of the influence of household relations and social-economic characteristics on women's will to change. We make an original contribution to further our

understanding of how they shape women's agency and empowerment (Kabeer, 2005, 2008) by evidencing that they also do influence one's willingness to challenge the status quo as they shape the (perceived and real) horizon of possibilities and one's life-related aspirations. Uncovering the workings of oppressive gender norms and structures and considering personal and intimate life aspirations in turn promotes a feminist and politicized understanding of empowerment.

5.2. Mixed research methods

Assessing the value of the will to change in measurements of empowerment was only possible through mixed research methods. Our study contributes to the nascent body of knowledge that combines quantitative and qualitative data to understand women's empowerment (O'Hara and Clement, 2018; Doss et al., 2022). While quantitative data are more representative in term of geography and diversity of respondents, qualitative data uncovers ambivalences and contradictions within the data collected. For example, qualitative data exemplifies the complexity of intra-household relations, not only between husband and wife, as collected with the a-WEAI tool, but also with in-laws or depending on the number and age of children. This complexity influences agency across several domains such as agricultural productivity and resource access. Another challenge is to combine quantitative and qualitative data in terms of geographical scale (community vs representative sample), analytical scale (individual vs household and truncated intrahousehold information), and temporal scales (life histories vs last year or agricultural season). This was particularly salient as we had to rely on the WEAI for our quantitative data collection. Although we extended the WEAI with two indicators, we nevertheless remained constrained by its conceptual framing of agency and intra-household decision-making. On the contrary, in the case study, we specifically explored the local and emic definitions of agency and empowerment. Collecting life histories demonstrated the development of an individual woman's will to change, especially before and after marriage, and in the later course of her life as a married woman. Hence the qualitative data captured variables and processes that cannot be considered and tested by the statistical analysis (Ahmed and Sil, 2009). However, several iterations of confronting our statistical results with the qualitative data allowed to generate hypotheses and plausible explanations for the relationships observed and the absence or presence of correlation.

6. Conclusion

This study aims to contribute empirically and theoretically to efforts targeting women's empowerment in the development sector in locally meaningful ways. We explored the pertinence of using an underrecognized concept, the will to change, to assess women's empowerment through a household survey and qualitative data collected in Nepal between 2015 and 2020. We analyzed the influence of several potential determinants of the will to change, namely critical consciousness, existing levels of agency, and social and economic determinants.

Our results are twofold. On the one hand, we empirically advance our understanding of empowerment processes in the context of rural Western Nepal. Importantly, our findings highlight that agency and critical consciousness are positively correlated with the will to change across several domains. Gaining agency expands the perceived domain of possibility, and women with higher critical consciousness are likely to be willing to have more agency. These results indicate the presence of a virtuous circle. But this also means a vicious circle for women who cannot outreach the social norms, have less agency, and lower realization of oppressive gender norms and relations.

On the other hand, we advance current conceptualizations of empowerment processes. First, we establish the relevance of considering the will to change as a pertinent empowerment indicator and its complementarity with critical consciousness and visible agency. The will to change is strongly associated with the critical consciousness index across several domains. This has significant implications for policy and development interventions as it might help identify where and when gaps in critical consciousness most restrain women's empowerment. In such situations, we recommend agricultural development programs to develop interventions promoting gender critical consciousness and creating spaces to rethink social norms and practices collectively rather than technical interventions for the promotion of visible agency (horticulture training, seed provision, etc.). Following the central role of dialogue in Freire's conscientization process, broader transformative engagements with gender relations in agriculture and natural resource governance could encompass reforms in the formal educational sector (cf. Leder, 2018), participatory gender training (Leder and Sachs, 2019), as well as promoting a culture of dialogue on gender, masculinities, and social inclusion issues within development organizations (Cornwall et al. 2011; Shrestha and Clement 2019; Malapit et al., 2020b). It would mean designing programs with outcomes that are not only measurable but also transformative (Cornwall and Rivas 2015).

To conclude, these findings open new avenues for research as they call for more carefully linking the measurement of women empowerment to local meanings and contexts. Similarly, disaggregated indicators and continuous variables have more explanatory power than composite indicators commonly used. Heterogeneity is not only between the empowerment domains but also within. While these composite indicators are essential for external validity studies, we recommend not generalizing their use and carefully choosing culturally and context-specific indicators for internal validity.

Declaration of competing interest

Authors confirm that they have no conflicts of interest to disclose.

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