



Measuring women's social and economic empowerment

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Introduction

Empowerment is a key outcome of many development and women's rights programs. It can be defined as the ability to translate one's choices into desired actions and outcomes, the ability to envisage options and to make a choice, and inclusion in agriculture. Efforts to measure empowerment have, however, been fraught with challenges owing to the complexity of the concept.

Most existing indices measure empowerment at regional, national or community levels, where men and women are combined as a homogenous group - although some only measure women's empowerment. Such indices do not normally measure levels of empowerment within households.

The Women's Empowerment in Agriculture Index (WEAI) is a composite measure of empowerment of men and women at the household level. It was developed collaboratively by the United States Agency for International Development (USAID), the International Food Policy Research Institute (IFPRI), and the Oxford Poverty and Human Development Initiative (OPHI) to track multi-dimensional changes in women's empowerment levels as a direct or indirect result of development initiatives, and is composed of two sub-indices: the five domains of empowerment (5DE) and the Gender Parity Index (GPI).

The 5DE are: production, resources, income, leadership and time. Each of the domains has indicators, which are measured to establish any change within the domain (Table 1). The 5DE is an aggregate measure of empowerment among groups of women and men which demonstrates the number of domains in which they have attained 'sufficiency' or 'adequacy' and the extent to which these have been attained in percentage form. The GPI shows the percentage of primary women in dual-adult households who are as empowered as, or more empowered than, the primary men in the household. It also shows the empowerment gap between these men and women when one is less empowered than the other. WEAI is obtained from a weighted product of 5DE and GPI (i.e. $WEAI = 0.9 * 5DE + 0.1 * GPI$).

Table 1: 5DE and their indicators

Domain	Indicators
Production	Input in productive decisions Autonomy in production
Resources	Ownership of assets Purchase, sale, or transfer of assets Access to and decisions on credit
Income	Control over use of income
Leadership	Group membership Speaking in public
Time	Workload Leisure

Adaptation of WEAI

The adapted WEAI differs from WEAI in five main ways, namely: inclusion of a health domain and indicators; addition of an indicator to the leadership domain; lowering of domain weights and empowerment thresholds; removal of 'jointness' as a measure of adequacy; and adapting data collection tools to cover the changes. The authors made these changes in order to meet the intentions of the Kenya study. Each of these changes is explained hereafter.

Inclusion of the health domain

The WEAI has five domains. In the Kenyan study, a sixth domain, labeled 'health', was added, because the programs being evaluated had a strong focus on economic empowerment and were silent about women's rights, especially reproductive health rights. The addition of this domain enabled the team to investigate individuals' capacity to make informed and appropriate reproductive health decisions and their perceptions on gender-based violence (GBV). Inability to make one's own reproductive health decisions and holding attitudes that supported GBV represented vulnerability in terms of rights and, hence, disempowerment. In this study, health is defined as "a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity".

Inclusion of additional indicator

In the WEAI, the leadership domain has two indicators; group membership and speaking in public. In the Kenya study, an additional indicator - being in possession of an identity card - was included. An identity card is an extremely important document in Kenya because it determines access to opportunities such as joining a registered group, owning a mobile phone SIM card, using mobile money transfer services, having a bank account, accessing credit, and the ability to vote. The inclusion of this indicator was informed by the need to establish whether women owning identity cards were able to keep them and use them at will, without seeking another person's consent.

Table 2: The health domain and its indicators

Domain	Domain
Health	Autonomy in making appropriate reproductive health decisions Attitudes towards GBV

Adjustments to domain weights and empowerment thresholds

In the WEAI, a woman is considered empowered if she has adequate achievements in four of the five domains or is empowered in some combination of the indicators that reflects 80% adequacy (termed the 'empowerment threshold'). Each domain is accorded a weight of 20%. In the adapted index, a woman is considered empowered if she has sufficient achievements in four of the six domains or is empowered in a combination of indicators that reflects 67% adequacy. Due to the addition of the health domain, the weight of each domain is 16.7%.

Removal of 'jointness' as a measure of empowerment

Joint ownership of property and joint decision-making regarding purchase and transfer of productive assets by women and men in male headed households represent adequacy in the WEAI. However, during the pre-testing of the adapted WEAI questionnaire, women indicated that if they did not agree with their husband regarding use, purchase and transfer of productive assets, their husband's decisions carried the day. On ownership, women left all assets with the husband in the case of divorce thereby negating the perceived joint ownership. Informed by these experiences, the authors of the Kenyan study decided to remove 'jointness' as a signifier of empowerment. By so doing, the data presented in this study shows, in absolute terms, who the main decision-makers are regarding various activities of agricultural production and the assets that men and women can own.

Table 3: Leadership domain and indicators in the adapted WEAI

Domain	Indicators
Leadership	Group membership
	Speaking in public
	Ownership of identity card

Women may have access to productive resources but lack control over them



Adaptation and administration of research tools

Quantitative data used in the study were collected using household and individual questionnaires.

Table 4: Development projects

Development partner	Program/project type
East Africa Dairy Development	Dairy value chain
Kenya Agricultural Research Institute	Indigenous chicken value chain
Juhudi Kilimo	Agricultural assets micro-financing

Methodology

The study was conducted in three different research and development partner projects located in five geographical locations.

The dairy program uses a hub approach that incorporates dairy farmers into a value chain production system, thus improving earnings from dairy production. The indigenous chicken program organizes farmers into groups, trains them on chicken rearing and produces improved indigenous chicks for farmers to buy and start production with. The micro-credit program provides agricultural loans in the form of livestock and agricultural equipment to farmers. These assets double up as collateral and farmers are not required to produce additional collateral.

Conclusions and recommendations

The WEAI, modified through the addition of the health domain and its indicators and an additional indicator on ownership of a national identity card to the leadership domain, is an adaptable tool that can be used to track women's empowerment. The methodology is also flexible enough to be adapted to the local context, as shown with the removal of 'jointness' as a measure of empowerment and lowering the adequacy threshold to 67%.

Ability to measure multiple domains of empowerment simultaneously and to show how each domain influences empowerment is another key strength of the WEAI and its adaptation. The index can be used to measure the extent of men and women's empowerment at intra- and inter-household scales and track impacts of projects or programs on men and women's empowerment. It is a quantitative methodology, yielding data that can be used to strengthen and test findings from qualitative studies on empowerment, which tend to be dismissed owing to their anecdotal nature.

WEAI, 5DE and the GPI, like all other composite empowerment indices, have some limitations. Although these measurements can be aggregated at various levels, such as project, region, and country, one is not able to test for significance of difference between the aggregated categories. Nevertheless, one can test for the significance of difference between categories by comparing empowerment scores, which are measured at the individual level. The authors recommend that more studies be undertaken to develop metrics of empowerment that take into account inequality between primary men and women in the households, and which at the same time are capable of determining the significance of differences between the aggregated categories.

The dairy program incorporates dairy farmers into a value chain production system



Ownership of assets provides a means for women's empowerment by increasing their bargaining power and authority within the household and community



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