

# EMPOWERING WOMEN IN AGRICULTURE: THE ROLE OF THE WEAI IN BANGLADESH

*Akhter U. Ahmed, M. Mehrab Bakhtiar, Agnes Quisumbing, Hazel Malapit, and Julie Ghostlaw*

## Introduction

Empowering women is crucial for a country's development because it leads to greater economic growth, increased productivity, and improved social outcomes. When women have access to education, economic opportunities, and decision-making power, they are better able to contribute to their families and communities. This can lead to increased income, improved health and education outcomes, and reduced poverty.

In Bangladesh, women and girls still face considerable barriers to accessing economic opportunities, and are often subjected to traditional gender roles that may hinder them. Although women play a crucial role in agriculture, they experience many challenges that limit their productivity and economic potential, such as limited access to credit and training. They are also often marginalized and excluded from decision-making processes.

As the complexity and importance of gender equity in development work has increased, so too has the need to measure empowerment and progress made toward improving empowerment and achieving gender parity. In Bangladesh, there has been growing momentum on the part of the government and development partners to use evidence to inform gender-sensitive and -responsive policies and programs. The Women's Empowerment in Agriculture Index (WEAI) has emerged as a key tool to achieve this objective.

This brief examines how WEAI data have informed and supported the design of policies and programs to promote women's empowerment in Bangladesh.



## Bangladesh Integrated Household Survey (BIHS)

In 2012, the United States Agency for International Development (USAID), the International Food Policy Research Institute (IFPRI), and the Oxford Poverty and Human Development Initiative (OPHI) launched the WEAI to measure women's empowerment in USAID's Feed the Future target countries. Bangladesh was one of the three countries where the WEAI was piloted. Since then, the WEAI has found broader applications in agricultural settings beyond USAID's Feed the Future zones. The index evaluates women's empowerment across five domains – production, resources, income, leadership, and time – enabling researchers and policymakers to comprehensively assess women's and men's inclusion in the agriculture sector, identify constraints to

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empowerment, and make comparisons across countries and settings that have collected the same data.

Under the [USAID-funded Policy Research and Strategy Support Program \(PRSSP\)](#) (2010-2020), IFPRI researchers designed the [Bangladesh Integrated Household Survey \(BIHS\)](#) – the most comprehensive national survey of rural households in Bangladesh to date. The BIHS was first conducted in [2011/2012](#) across 6,500 households, and the same households were resurveyed in [2015](#) and [2018/2019](#) to track changes over time. These surveys are statistically representative of rural Bangladesh, the 20 districts that comprise USAID’s Feed the Future Zone of Influence in southwest Bangladesh, and the seven administrative divisions of the country.

The BIHS has filled knowledge gaps that existing data could not (**Box 1**). For instance, these surveys collected sex-disaggregated data, where appropriate, as well as plot-level data on agricultural production and practices, individual dietary intake, and anthropometric measurements of all household members. Bangladesh also became the first country worldwide to collect data on women’s and men’s empowerment on a national scale through WEAI data from the 2011/2012 BIHS.

#### **BOX 1: BIHS has emerged as a global public good**

“...The data from the BIHS is invaluable. It is great to have a partner that one can count on for good data and have absolute confidence in the quality of the data. This is the highest accolade I can think of. The fact that the Zone of Influence Survey is embedded into the BIHS, we are just starting to fully take advantage of it...Thus, having them integrated is a huge benefit.”

– *USAID respondent to external evaluation of USAID-funded Policy Research and Strategy Support Program (PRSSP) (Woller and Siddiqui 2020)*

The collection of such detailed, complex data has generated unprecedented global demand and spurred data-driven innovation in Bangladesh and beyond. The BIHS datasets have been widely used since they were published online, with thousands of downloads across six continents by development practitioners, graduate students, and researchers from institutions such as the World Bank. Lessons from Bangladesh are being studied and applied in the country and globally (**Box 2**).

Bangladesh’s WEAI data have been used in numerous publications. A literature review by Myers and colleagues (forthcoming) found that more than a third of peer-reviewed publications on the WEAI utilized WEAI data from BIHS. These publications have contributed to the evidence base linking empowerment to desired food systems outcomes. For instance, Sraboni and

colleagues (2014) show that the women’s empowerment score is positively associated with calorie availability and dietary diversity at the household level. Seymour (2017) found that a reduced empowerment gap between spouses is associated

#### **BOX 2: High-level policy support for the WEAI at the 66<sup>th</sup> Committee on the Status of Women (CSW) side event**

“It [the WEAI] was the first of its kind to directly measure women’s empowerment in agriculture. Now, after 10 years of using this tool in Bangladesh, I am pleased to share that we have learned so much about women’s empowerment and how it is linked to important outcomes in agriculture and nutrition...This information has been used to design and implement gender- and nutrition-sensitive agricultural programs in Bangladesh.”

– *Dr. Shirin Sharmin Chaudhury, MP, Speaker of Parliament, Government of the People’s Republic of Bangladesh*

with higher levels of technical efficiency. Finally, Ahmed and Tauseef (2022), using all three rounds of the BIHS, found that higher women’s empowerment scores reduce the likelihood of households remaining in chronic and transient poverty.

These examples demonstrate the diverse range of research questions that can be addressed using WEAI data from BIHS, and the potential impact that such research can have on policy and practice.

Moreover, the integrated format of the BIHS, which provides information on empowerment and other outcomes for the same households, has given researchers the opportunity to investigate a multitude of factors that can be influenced by women’s empowerment, including agriculture and nutrition. Researchers can also examine factors associated with women’s empowerment, such as individual and household characteristics, that can potentially be targeted for interventions.

## **Enhancing Nutrition- and Gender-Sensitive Agriculture Informed by the WEAI: The Agriculture, Nutrition, and Gender Linkages (ANGeL) Pilot Project**

### **Background**

Over the past few decades, there has been significant headway in improving agricultural production and nutrition in Bangladesh, but a recent slowdown in nutrition gains has led to calls for evidence-based strategies to secure this progress. Although there was a growing body of evidence on the potential of nutrition-sensitive programs to accelerate advancements in nutrition (Ruel and Alderman 2013), until recently, information had been

limited on effective strategies to enhance nutrition-sensitive agriculture in Bangladesh. WEAI data could help show that women are the missing – and critical – part of the equation for boosting nutrition-sensitive agriculture in the country.

Using the BIHS 2011/12 first-round data, which generated the first national empowerment insights globally, IFPRI researchers identified linkages between agricultural production diversity, dietary diversity, and women's empowerment (Sraboni et al. 2014). Based on this evidence, IFPRI researchers in Bangladesh conceptualized the [Agriculture, Nutrition, and Gender Linkages \(ANGeL\)](#) pilot project.

### Design

The ANGeL pilot project represents a successful application of the WEAI in Bangladesh. ANGeL is a cluster-randomized controlled trial (RCT) that aims to identify actions and investments in agriculture that could improve farm household income, enhance nutrition, and empower women. IFPRI-PRSSP designed the pilot project, and the Bangladesh Ministry of Agriculture and other partners implemented it to evaluate the impact of three types of interventions for promoting nutrition- and gender-sensitive agriculture:

- **Agricultural production:** Trainings that facilitated the production of high-value food commodities rich in essential nutrients through crop diversification, livestock, and other means
- **Nutrition knowledge:** High-quality training in behavior change communication to improve people's knowledge of nutrition
- **Gender sensitization:** Activities to empower women, raise their status, and encourage gender parity

ANGeL was implemented in 16 districts across rural Bangladesh over a 17-month period in 2016–2018. During implementation, husbands and wives, together, participated in different combinations of trainings, depending on which intervention they were assigned to receive. ANGeL was jointly funded by the Government of Bangladesh and USAID under PRSSP.

### Results

IFPRI's evaluation of ANGeL found that both men and women benefited from agricultural production and nutrition trainings, but women learned more. Various training combinations increased farmers' income and agricultural diversity, and improved diet quality (Ahmed et al. 2022). Furthermore, ANGeL increased both women's and men's empowerment, raised the prevalence of households achieving gender parity, and led to small improvements in gender attitudes. While the impact of joint participation of men and women in interventions cannot be fully assessed, it is likely that the positive impacts on women's empowerment arose from implementation strategies that provided information to both husbands and wives when they were together (Quisumbing et al. 2021).

Motivated by ANGeL's robust results, the Ministry of Agriculture in Bangladesh committed to scaling up the ANGeL program nationwide in December 2020. Although the scale-up was temporarily deprioritized in light of the COVID-19 pandemic and the Ukraine crisis, it is unprecedented for Bangladesh's government to approve a program for scale-up based on an RCT. Indeed, interventions like ANGeL that are proven to be effective in enhancing nutrition-sensitive agriculture and can be implemented by the government are more important now than ever. The government is currently seeking donor funding for national scale-up.



## Conclusion

The use of data and evidence has been essential in driving progress toward women's empowerment in agriculture in Bangladesh. Since the development of the WEAI, the government and development partners have harnessed these empowerment

insights to design, implement, and even motivate the expansion of programs like ANGeL that have potential for enhancing nutrition- and gender-sensitive agriculture in Bangladesh.

## References

- Ahmed, A., F. Coleman, J. Ghostlaw, J. Hoddinott, P. Menon, A. Parvin, A. Pereira, A. Quisumbing, S. Roy, and M. Younus. 2022. *Increasing Production Diversity and Diet Quality through Agriculture, Gender, and Nutrition Linkages: A Cluster-Randomized Controlled Trial in Bangladesh*. IFPRI Discussion Paper 2112. Washington, DC: International Food Policy Research Institute (IFPRI). <https://doi.org/10.2499/p15738coll2.135845>
- Ahmed, A.U., and S. Tauseef. 2022. "Climbing Up the Ladder and Watching Out for the Fall: Poverty Dynamics in Rural Bangladesh." *Social Indicators Research* 160 (1): 309-340. <https://doi.org/10.1007/s11205-021-02808-2>
- Myers, E., J. Heckert, S. Faas, A. Quisumbing, H. Malapit, R. Meinzen-Dick, and K. Raghunathan. Forthcoming. "Is Women's Empowerment Bearing Fruit? Mapping Women's Empowerment in Agriculture Index (WEAI) Results to the Gender and Food Systems Framework." Unpublished, International Food Policy Research Institute, Washington, DC.
- Quisumbing, A., A. Ahmed, J. Hoddinott, A. Pereira, and S. Roy. 2021. "Designing for Empowerment Impact in Agricultural Development Projects: Experimental Evidence from the Agriculture, Nutrition, and Gender Linkages (ANGeL) Project in Bangladesh." *World Development* 146. <https://doi.org/10.1016/j.worlddev.2021.105622>
- Ruel, M.T., and H. Alderman. 2013. "Nutrition-Sensitive Interventions and Programmes: How Can They Help to Accelerate Progress in Improving Maternal and Child Nutrition?" *The Lancet* 382 (9891): 536-51. [https://doi.org/10.1016/S0140-6736\(13\)60843-0](https://doi.org/10.1016/S0140-6736(13)60843-0).
- Seymour, G. 2017. "Women's Empowerment in Agriculture: Implications for Technical Efficiency in Rural Bangladesh." *Agricultural Economics* 48 (4): 513-522. <https://doi-org.ifpri.idm.oclc.org/10.1111/agec.12352>
- Sraboni, E., H.J. Malapit, A.R. Quisumbing, and A.U. Ahmed. 2014. "Women's Empowerment in Agriculture: What Role for Food Security in Bangladesh?" *World Development* 61: 11-52. <https://doi.org/10.1016/j.worlddev.2014.03.025>
- Woller, G., and A.R. Siddiqui. 2020. *Final Evaluation Report: USAID/Bangladesh Policy Research and Strategy Support Program (PRSSP) Final Performance Evaluation*. Washington, DC: United States Agency for International Development (USAID).

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**Akhter U. Ahmed** is a Senior Research Fellow and Country Representative for Bangladesh; **M. Mehrab Bakhtiar** is a Research Fellow; **Agnes Quisumbing** is a Senior Research Fellow; **Hazel Malapit** is a Senior Research Coordinator; and **Julie Ghostlaw** is a Country Program Manager, all in the Food and Nutrition Policy Division of the International Food Policy Research Institute (IFPRI).

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For more information on IFPRI's work in Bangladesh, please visit the IFPRI-Bangladesh microsite: <https://bangladesh.ifpri.info/>. For more information on the ANGeL project, please visit: <https://bangladesh.ifpri.info/agriculture-nutrition-and-gender-linkages-angel/>. Visit the WEAI Resource Center to learn more: <https://weai.ifpri.info/>