

## TOPS–SPRING Gender Webinar Series

### **Women's Empowerment and Men's Engagement: How a Focus on Gender Can Support Agriculture and Nutrition**

#### **Webinar 2: Empowering Women in Agriculture—Strengthening Production and Dietary Diversity to Improve Nutrition**

April 30, 2014, 9:00 a.m. EDT

SPRING, TOPS, and USAID hosted the second of a three-part webinar series, *Women's Empowerment and Men's Engagement: How a Focus on Gender Can Support Agriculture and Nutrition*. Hazel Malapit, a Research Coordinator in IFPRI's Poverty, Health, and Nutrition Division, discussed her recent paper **Women's Empowerment in Agriculture, Production Diversity, and Nutrition**, highlighting household survey data from the USAID-funded Suaahara program in Nepal. The presentation provided updated analysis from the paper and focused on the relationship between women's empowerment in agriculture-focused activities and improved nutrition outcomes for mothers and children. Karin Lapping, Senior Director of Nutrition at Save the Children, responded to the findings as they relate to her in-depth understanding of the nutrition landscape in Nepal. This included an overview of Suaahara, the project that the data was collected within, to provide context on what the project has done and is doing to impact gender issues.

Hazel Malapit presented on the motivation behind the research and previewed key findings, methods, results, and a brief summary of the findings along with policy implications.

Why agriculture for nutrition? Increased agricultural production does not equal increased nutrition impact. There is not a 1-to-1 correspondence between agriculture growth and improved nutrition. It is a dynamic relationship and multifaceted. Agriculture production provides food for the household, it can provide income, and policy and food prices aid in decision making.

The five pathways through which agriculture can affect nutrition are mediated by gender roles (increase food for consumption, increase income, reduction in market price, shifts in preferences and shifts in control of resources within households). To try to capture some of how gender plays a role, the Women's Empowerment in Agriculture Index (WEAI) was developed. It directly captures women's empowerment in agriculture instead of measuring through the use of proxies (such as income).

The WEAI is a survey-based index for males and females in a household. This index can be used in conjunction with other indicators and proxies and as a diagnostic. Empowerment is measured for both men and women so as to measure gender parity. It can be used in other countries and used for comparisons. The WEAI has five domains of empowerment measured: production, resources, income, leadership, and time. Ten indicators measure the five domains to gauge empowerment.

More information on the WEAI can be found here: <http://www.ifpri.org/book-9075/ourwork/program/weai-resource-center>.

## **Study Objectives**

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1. To examine how production diversity and key indicators of women's empowerment are linked with mother and child nutrition outcomes in rural Nepali households.
2. To examine whether production diversity and women's empowerment mediate each other's relationship with mother and child nutrition outcomes.

## **Key Findings**

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- Production diversity is positively associated with nutrition outcomes for mother and children.
- Women's autonomy in production is positively associated with children's outcomes.
- Domains of empowerment that are significant for mother and child nutrition may not always overlap.

## **Methods**

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The researchers used 4,080 households in Nepal participating in the USAID-funded Suaahara project. The survey was administered to households with children under five years old to capture the empowerment of the mother. There is a lot of migration by males and only 1,005 were dual adult households, about a quarter of total households targeted for this data collection. Analysis was restricted to households where mothers reported working in agriculture as a primary or secondary activity. The key outcome variables to measure child-level nutrition outcomes: height for age, weight for age, weight for height, child's dietary diversity score; for mothers are: weight and height information (BMI), dietary diversity score.

The team constructed a production diversity index, looking at what the household produced against what was consumed. For empowerment the team looked at the empowerment score (WEAI), group membership (number of groups where she is an active member), control income use (number of agriculture activities where she has decision-making), workload (number of hours worked), autonomy in production (relative autonomy index score). The gender parity gap indicator was also used.

## **Results**

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More diverse production is associated with a more diverse diet for mothers as well as children.

More diverse production is also associated with children's weight-for-height z-scores and children's weight-for-age z-scores.

Mothers with greater control over income consume more diverse diets, but for dual adult households, empowered mothers consume less diverse diets. This is contrary to what we are expecting. We expect greater empowerment for women would yield greater diversity in diets. We are not sure why this difference exists, but perhaps this is capturing context-specific gender norms.

Empowered mothers are more likely to have higher body mass index (BMI).

In terms of children's nutrition, women's autonomy in production is associated with better nutrition status for children (HAZ, WAZ).

## **Conclusions**

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- In this context where most agricultural production is used for household consumption, agricultural interventions that promote diversity may improve nutritional outcomes.
- Depending on the objective of the work for women's empowerment, the policy response will be different and the indicators used will be different.
- The link between women's autonomy and children's nutrition status is promising: interventions to increase women's agency and capability to make decisions in agriculture provides both an opportunity to engage women more visibly in agriculture and contribute to children's nutrition.

## **Context of Findings— Karin Lapping**

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The data used for the research outlined by Hazel Malapit was from the baseline data of the USAID-funded Suaahara project (“good nutrition”) in Nepal. Karin will provide an overview of the context for the finding and the interventions focusing on gender and social inclusion. The project resulted from the *Lancet* series and is an at-scale project. It works in 25 districts in Nepal and is designed to address stunting, wasting, and underweight.

The program focuses on four areas with the goal to enhance the nutritional status of women and children (children under two in particular).

- Improved health and nutrition behaviors at the household level
- Increase in services
- Increase diverse and nutritious food
- Coordination with government and other actors

Examples of activities include those involving essential nutrition actions, hygiene, WASH, and homestead food production. Other cross-cutting areas include governance, capacity building, M&E, social behavior change (SBC), and gender. Underpinning many of the nutritional issues is gender – it needs to be addressed to have significant nutritional outcomes.

From the start the program focused on developing a gender equity social inclusion (GESI) strategy. This strategy around gender equality and social inclusion looked at a number of different factors: existing policies, cultural norms and beliefs, gender roles and responsibilities, and access to resources that restrict women and children from optimal nutritional status. Food allowances are restricted due to cultural practices. Women have long work hours that include both productive and reproductive chores. The massive out-migration will impact decision making in households and the evidence is emerging. Less than 1 percent of women have ownership of land. Decision making is greatly restricted and the mother-in-law has decision making powers. Awareness is high of the need to prioritize feeding children and mothers, but the behaviors are not following.

There have been some changes witnessed. Men are now seen doing some chores and eating with the women. But this degrades the confidence of men through things like village talk saying “husbands now belong to their wife.” Societal standards dictate this type of response.

The gender strategy developed for the program included looking at social inclusion from a gender perspective. Families need a supportive environment to change social norms. Mothers-in-law and husbands play a role in restricting women’s autonomy. Women raise boys and can be used as allies in making change.

We can’t expect change if we focus on women as development objects.

Suaahara has focused on three domains to empower women and activities are integrated throughout the program, not standalone.

- Workload
- Decision-making
- Benefits from accessing information and resources

A highlight of the activities is a campaign embedded in the SBC strategy, using the mother-in-law as a central character. Through radio and print, mother-in-laws are featured as positive role models to help improve nutritional outcomes around women and children. After the first show on complimentary feeding, there was a high response to the programming (3,000 phone calls received).

## **Key Points**

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- Incremental change is important.
- Empowerment will pay off in different ways.
- Efforts to enhance autonomy are important.
- More efforts are needed to assert causality rather than association.
- Different dimensions of empowerment play out differently.
- Women are important in and of themselves.

## **Question & Answer Session**

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### **1) Can you clarify the definition of BMI used for the survey?**

Empowered mothers as measured by their lower workloads are more likely to have higher BMI, and therefore less likely to be underweight. My guess is that being empowered enables women to conserve physical energy, either by using resources or technology, or by consuming sufficient calories to maintain their calorie intake. For example, a woman who is able to purchase cooking fuel may no longer need to gather firewood and saves energy that way. In general, empowered women may have greater command over household resources, including nutritious food, which allows them to maintain a healthy weight.

### **2) How might age impact results? Are mothers with married sons more empowered?**

In the analysis, age was controlled in relation to nutrition. Older women tend to have higher empowerment scores. The study did not look at mothers with married sons. If married sons are

residing in the household, they were not included in analysis. We only looked at nutrition and empowerment of mothers, but did not look at determinants. No answer at the moment, but we could possibly look at the data.

**3) Is group involvement associated with less engagement in agriculture and agricultural diversity? How are outside income and assets taken into account in the WEAI?**

That's certainly possible. The control over income indicator captures decisionmaking over all types of income (ag and non-ag), because income is fungible. In the resources indicator, we ask about ownership and rights over all types of assets as well (land, farm equipment, big and small livestock, consumer durables, cellphones, etc.).

**4) Did the project [Suaahara] include empowerment as a goal or objective or was empowerment an unintended consequence?**

From the onset, the project did talk about gender equity and social inclusion, but "empowerment" was not used. It was explicit from the start of the project. The Nepal Mission has been really strong in how to approach gender. Previously large baselines showed maternal depression was linked to poor nutritional outcomes for children. Another issue to explore is how the social structures within a culture enhance self-sufficiency.

**5) Would joint decision making account for more or less autonomy for women?**

In the WEAI, we count both sole and joint decisionmaking as "having a say" or "having input" in a decision. The autonomy indicator, on the other hand, captures the underlying motivation for a person's decisions, and this is distinct from whether the decision is joint or by themselves. Theoretically, even if a person is the sole decisionmaker, their decisions may be motivated externally – to please other people or to avoid punishment – as opposed to internally, which means their decisions is aligned with their own values. Sabina Alkire has a really useful [explanation](#) about this.

**6) Is WEAI data based on household production or field production?**

In Suaahara, household food production. For the WEAI, we don't have that data and would need to defer to the co-authors.

**7) What is meant by autonomy and production?**

See the previous response. The WEAI materials can also help with providing further clarification. See <http://www.ifpri.org/book-9075/ourwork/program/weai-resource-center>

**8) Are the empowerment and agriculture data based on the household food production plots or the field plots? I would expect different decisionmaking depending on the type of plot, so it would be useful to understand this distinction.**

The agricultural data is collected at the plot level for all types of land that the household owns, rents or uses. The empowerment data is collected about food crop farming (for own consumption), cash crop farming (for sale in the market), livestock raising, fishing or fishpond culture. How decisions are made may vary for different types of plots, but to construct our empowerment indicators we have to summarize the information across all types of agricultural production activities.

**9) How does the WEAI take context into consideration when guiding and interpreting results?**

The team that developed the WEAI (USAID, IFPRI and OPHI) used the results from the pilot studies and the existing literature on empowerment to identify aspects of empowerment that were broadly applicable across different contexts. This is how they identified the five domains: production, resources, income, leadership and time. There is room to make contextual adjustments to the survey (aquaculture vs livestock, acknowledging important assets), but the process is the same. There are many aspects of empowerment not in the index only because they are not easily generalizable (mobility – in some places it is an issue, in others it is not an issue).

## ***Additional questions from the chat box that the webinar did not have time to address***

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- 1) **Does the fact that only 1/4 households are male + female skew the data, assuming that these may not be otherwise dissimilar from male-absent households?**

It might. But that's why we estimated our regressions separately for dual-adult households.

- 2) **Did child dietary diversity score include dietary intake of children <6 m of age? & How meaningful is an increase of 4 one-hundredths of a dietary diversity score?**

No, dietary diversity of children was measured for children 6-59 months of age. It's true that these magnitudes may be too small to make a real difference, so thanks for bringing this up. We may have to rethink our interpretation of our results.

- 3) **What is meant by shifts in preferences? If food preferences, why is this necessary and should we be trying to change this?**

This can be any type of preferences, including food preferences. This is just one of the ways that agriculture is linked to nutrition, and as with the other pathways, gender matters (men and women can have different preferences). It doesn't necessarily mean that we should try to change it, but we need to know that its there and that it can influence the outcomes we care about.

- 4) **Are these variables assessed specifically for agriculture, for agriculture and nutrition, or more generally, e.g., empowerment in the household but not the ag decisionmaker?**

The empowerment indicators were assessed specifically for activities related to agriculture. These indicators measure empowerment of the individual respondent.

- 5) **Since cluster sampling was used, did the models adjust for the cluster sample design?**

Yes.

- 6) **How correlated were the different elements of group membership, control over income, autonomy in production, and workload? Would a model that has all of them on the righthand side be worthwhile? & What kinds of group membership are considered in the model?**

There is some statistically significant, but small, correlations between all of these. We had tried having all the decomposed indicators on the righthand side on an early version of this paper, but it didn't perform very well. The group membership indicator counts the number of groups that the woman is an active member of. Both formal and informal groups are included.

- 7) **To what extent have the questions used to construct the empowerment index been validated? For example, I found it unusual that women reported sleeping on average, 10 hours per day; so to what extent are these reported "time spent" questions accurately capturing reality?**

The WEAI was validated in the pilot studies in Bangladesh, Guatemala and Uganda. In our sample, women report working 11.27 hours in paid and unpaid work. The balance of hours is spent on other activities, including leisure (visiting friends, social gatherings, etc) and rest.

- 8) **Can we say that the women empowerment is linked to child nutrition's status, if there are another person (perhaps the household chief) who takes care to other issues (feed all the family, cultural issues, other kinds of well being issues depending on communities' habits) ?**

To the extent that these are related to the household characteristics (socio-economic status, location, caste, etc), we are able to control for them, so yes, in that case we can say that women's empowerment is linked to children's nutrition.

- 9) **Are there any indicators that have opposite effects on nutrition of the women versus their children?**

Yes. We find that autonomy has a negative relationship with maternal dietary diversity, but positive relationship with HAZ and WAZ.

- 10) **Does "Women's Autonomy in production" reflect whether the women are working on family farm or as casual labor (daily wage)?**

I think it would make more sense to take a look at the [WEAI survey module](#) to understand what we are capturing in these questions.

- 11) **Are there any other behavioral determinants that were found to be significant other than access and social norms? (*Suaahara*)**

The Social Behavior Change and Communications (SBCC) strategy for Suaahara includes interpersonal communication, community mobilization and mass media. The strategy was developed based on formative research and a review of existing secondary data. The SBCC work was then further refined with the baseline data. The SBCC strategy and resulting activities address the full range of determinants of malnutrition in the Nepal context and underpin all of the program activities. As noted during the webinar Gender Equity and Social Inclusion (GESI) is a core cross-cutting area of the project and thus the SBCC strategy and all resulting activities were informed with GESI in mind. Access and social norms were just two elements that were mentioned in the webinar as being particularly influenced by GESI issues but the SBCC work is comprehensive to the entire Suaahara project

## Shared Resources

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- Blog post with updates on the past year of the WEAI: <http://bit.ly/1hViebx>
- WEAI Time Use module tutorial: <http://youtu.be/jr8ebiKukbQ>
- 2013 WEAI Learning Event videos and presentations: <http://www.ifpri.org/book-9075/node/9079>
- WEAI Resource Center: <http://www.ifpri.org/ourwork/program/weai-resource-center>
- A4NH gender and nutrition blog: A4NH: <http://www.a4nh.cgiar.org/category/gender-2/gender-nutrition-idea-exchange/>