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Photo: Genevieve Audet-Belanger

**Enhancing the effectiveness of agriculture-to-nutrition pathways:**

# **Key insights from a gender analysis of impact evaluation design**

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**EXECUTIVE SUMMARY BRIEF  
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**Julie Newton  
Noortje Verhart  
Anita Bake**

**This document provides an executive summary of a larger report on “Enhancing the effectiveness of agriculture-to-nutrition pathways: key insights from a gender analysis of impact evaluation design”. See main report for detail on references and recommendations, including links to additional resources and the promising approaches.**

## 1. Introduction

With the growing recognition of the importance of multi-sectoral approaches to tackling undernutrition, there has been renewed interest in unleashing the potential of nutrition sensitive interventions. Yet, evidence that increased agricultural productivity does not automatically translate into improved household or individual nutritional status remains a cause of concern for development stakeholders (Webb, 2013). Several reviews linking agricultural interventions with improved maternal and child nutrition outcomes (DFID, 2014, Ruel et al, 2013, Masset et al, 2012) conclude that the available evidence base is weak, constrained by poor program design without a clear Theory of Change (ToC) and methodological limitations due to weak evaluation designs and poor sample sizes, resulting in a lack of rigorous evidence on the effectiveness of nutrition sensitive agricultural programs overall at addressing nutrition outcomes (Ruel et al, 2017; Leroy, Olney et al. 2016). As a result, little is known about how agricultural interventions can contribute towards better nutrition nor effective ways of measuring this. These are well acknowledged challenges given the complexity of nutrition-sensitive programs that prioritize addressing underlying causes of malnutrition involving long result chains and multiple pathways to make the links between improvements in agricultural productivity and nutrition outcomes.

In response, multiple agriculture-nutrition pathways frameworks have emerged to illustrate the different ways in which agricultural interventions can contribute towards better nutrition outcomes (Ruel & Alderman, 2013, Herforth & Harris, 2014; Malapit & Quisumbing, 2016; Meeker & Haddad, 2013, Ruel et al, 2017). Amongst these, women’s pivotal role at the interface of agricultural, nutrition and health pathways is noted as critical to leverage greater impact of agricultural programs towards nutrition outcomes (FAO, 2017; Quisumbing et al, 2014). This builds on decades of evidence emphasising women’s key roles as both farmers and caregivers, how their control over discretionary income is known to have greater impact on child nutrition and evidence that agricultural projects with improved nutrition results can be linked

to the active involvement of women (UNICEF, 2011; Leroy & Frongillo, 2007; Hawkes & Ruel, 2006). As a result, multiple influential food security and nutrition reports assert that investment in women farmers and women empowerment as a guaranteed way to improve nutrition impact (FAO, 2017; FAO 2013; FAO & ADB, 2013; Herforth et al, 2012). Yet, women empowerment pathways remain the pathways least understood and most difficult to measure based on the complexity of measuring women’s empowerment as a multi-faceted construct (Herforth & Ballard, 2016; Eerdewijk et al, 2017).

In response, there has been increasing attention towards the design of more rigorous theory-based nutrition sensitive programs, which explicitly look at the agricultural-nutrition pathways of impact overall and developing a better understanding of how women’s empowerment operates across these (Leroy, Olney et al. 2016; Ruel et al, 2017). There is much to learn from past evaluations in how they have assessed the mediating role of women empowerment in achieving impact on nutrition outcomes. It is in this context that there has been growing interest amongst Dutch policy makers and practitioners such as the International Research and Policy Evaluation Department (IOB) and the Netherlands Nutrition Working Group for greater coherence on Monitoring Evaluation and Learning (MEL) guidance and criteria on how to better measure agriculture nutrition pathways, particularly how gender and women empowerment mediates these pathways. The purpose of this study is to provide insights and key lessons for Dutch practitioners and policy makers to advance the understanding of agriculture to nutrition pathways, focusing on how the gender dimensions of intra-household dynamics and in particular women’s empowerment play a key role therein. With this understanding, the study seeks to support improvement in more gender aware design of agricultural policies and programs to better leverage women empowerment across the agriculture-nutrition pathways as means to achieve impact on both nutrition and women’s empowerment.

## 2. Methodology

This study draws on a two stage process. The first stage includes a comprehensive literature review of 49 resources covering empirical literature and impact evaluations on the role of intra household dynamics on agricultural to nutrition pathways. The second stage covers a deep dive into seven purposively selected nutrition sensitive projects from a women empowerment agriculture nutrition pathways lens (See Table 1).

The deep dive purposively applies a women's empowerment lens to agricultural-nutrition pathways framework to understand how nutrition sensitive programs addressed women's role and influence (or lack thereof) in relation to key decision making moments along the pathways. These include decisions on what is produced, what is sold and consumed, and how these influence who consumes what in the household and. It explores how evaluations

designs and project designs perpetuate implicit understandings of women empowerment and women's role in agriculture, which influence the evidence, generated on how women's empowerment matters for key pathways from agriculture to nutrition. It critically analyses how the choice of indicators used at impact and outcome level have implications for interpretations of how women empowerment may aid or hinder expected impact pathways from agriculture to nutrition. These are used to distil key recommendations for how nutrition sensitive evaluation designs can more effectively measure women's empowerment with a purpose to improve better program design, distinguishing between the evaluation of the mediating role of women in nutrition sensitive interventions as well as the evaluation of the impact of women empowerment interventions embedded within nutrition sensitive agricultural programs.

**Table 1 Project overview**

Project name	Location	Duration
Strengthening Household Ability to Respond to Development Opportunities (SHOUHARDO I & II)	Bangladesh	I: 3 years (2006-2009) II: 5 years (2010-2015)
Enhanced homestead food production project (E-HFP)	Burkina Faso	2 years (2010-2012)
Realigning Agriculture to Improve Nutrition (RAIN)	Zambia	4 years (2011-2015)
Nobo Jibon	Bangladesh	5 years (2010-2015)
PATHWAYS Program: empowering women in agriculture	Bangladesh, Tanzania, Mali, Malawi, Ghana	3 years (2013- 2016)
Integrated Improve Livelihoods Program (IILP)	Rwanda	5 years (2011-2016)
Dairy Competitiveness Program (RCDP II)	Rwanda	5 years (2012-ongoing)

### 3. Analytical lens: women empowerment in agriculture nutrition pathways

The current thinking on agriculture nutrition pathways identifies six pathways from agriculture towards nutrition (See Box 1). These highlight different processes operating at the individual, household, food market environment, health environment and enabling environment that affect women and men differently. The gender dynamics of processes within the household (intra-household dynamics) is noted as key for understanding why agricultural interventions focused on increased production (pathway 1) or increased income (pathway 2) do not automatically translate in improved nutrition (Webb, 2013).

Women's role at the 'nexus' of agricultural and nutrition and health is well recognised (IFPRI, 2011; UNICEF, 2011; van den Bold et al, 2013; Ruel et al, 2017). This is evidenced by three of the pathways specifically highlighting the critical role that women play in food and nutrition security; emphasising how their role and status (pathway 4), time (pathway 5) and workload (pathway 6) need to be considered in nutrition sensitive program design, implementation and evaluation. These are collectively referred to as 'women empowerment pathways' in an effort to support program designers and evaluators to understand how nutrition sensitive agricultural program can either empower or cause harm to women (Herforth & Harris, 2016).

However, there is a need for caution in treating the three women focused pathways as separate stand-alone pathways isolated from other pathways because it risks:

1. Leading to interventions that target women, without looking at the social relations women are embedded in.
2. Regarding the household as a unitary unit, assuming resources are equally shared and decisions are made based on mutual discussion and agreement.
3. Losing sight of how the three different pathways are inherently linked and work at different levels to incrementally support or hinder each other.

#### Box 1 Six pathways through which agriculture impacts nutrition

1. **Food source** – Agriculture production leads to increased availability and accessibility of diverse food from own production.
2. **Income from agriculture production and non-agriculture work** – Increased income from non-farm income and farm income by marketing of agriculture production could increase household capacity to purchase diverse foods.
3. **Food prices** – impacted by agriculture policies through supply and demand factors and thus affecting the selling and purchasing capacity of farmers.
4. **Women's social status and empowerment** – Women's role in decision-making may hamper their influence on production and consumption results.
5. **Women's time** – Women's involvement in agriculture could impact the time allocation for care practices or feeding of children in the household. Intensive workload from agriculture hampers their role as caretaker and vice versa.
6. **Women's own workload and health and nutritional status** – Women's involvement and employment in agriculture can affect their own health and nutritional status because of longer working hours in degraded conditions on the farm as well as having a lack of resources to seek for health services.

*Source: Ruel & Alderman, 2013; Herforth & Harris, 2014; Malapit & Quisumbing, 2016; Meeker & Haddad, 2013*

## The added value of a women empowerment lens

The current literature on women's empowerment has much to offer to deepen the analysis of the pathways. This study uses an elaborated women's empowerment lens to embed the study's analysis within the latest state of art thinking on women's empowerment (FAO, 2017; Ruel, 2017, Eerdewijk et al, 2017). This also allows for a more operational perspective focusing on strategies and interventions to leverage women's position across the pathways as an effort to adopt more explicit gender aware programming strategies ranging from do no harm to, gender accommodative (specific) strategies that use women empowerment as a means towards better nutrition outcomes and gender transformative programming where the end goal is women's empowerment. The intra household level remains the most important level of analysis, where the link between actual food availability and consumption is (or is not) made. This study defines women's empowerment as "the expansion of choice and strengthening of voice through the transformation of power relations, so women and girls have more control over their lives and futures" (Eerdewijk et al, 2017: 13).

## What do we know about how women empowerment mediates agricultural nutrition pathways

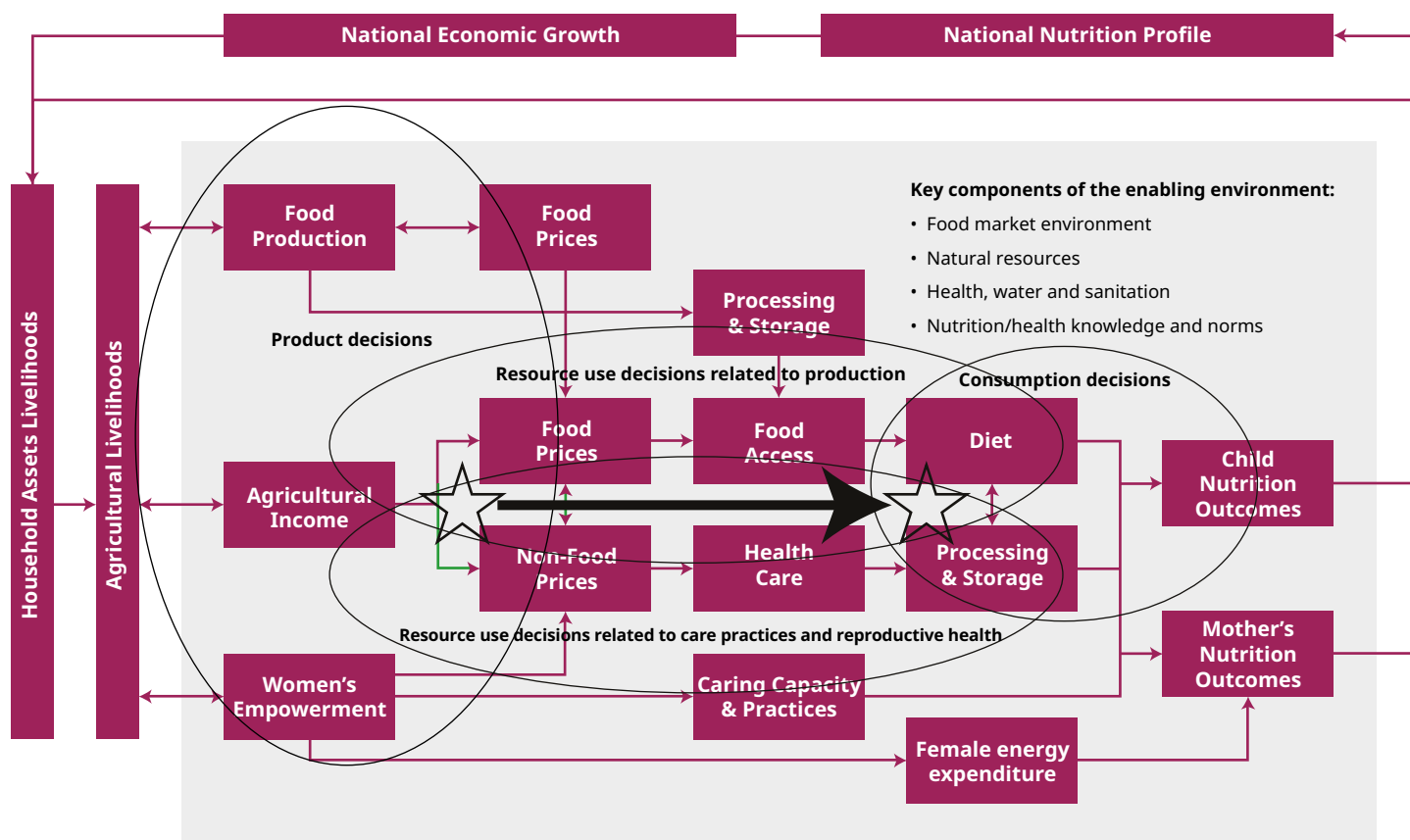
The literature reinforces the importance of the agency dimension of women's empowerment focusing on women's key role in decision making moments along different nodes of the agricultural nutrition pathways matter for their own and their children's nutritional status (Meinzen-Dick et al.,2012; Quisumbing, 2010; World Bank, 2001). The decisions where the evidence suggests women play a key role towards achieving progress towards nutrition can be clustered as follows:

1. **Production decisions** regarding choice of crops to grow, use of farm inputs, to sell or to eat, the use of income at household level
2. **Resource use decisions** regarding time use for productive versus care work, reproductive health and feeding practices at household level
3. **Consumption decisions** regarding to what food is prepared, how food is distributed, what food is accepted and actually eaten

Figure 1 demonstrates the relevant nodes (illustrated as stars) where key decisions overlap (red circles) from a women's empowerment perspective. The first node (Star 1) demonstrates the links between production decisions and resulting resources (food and/or money) and how these resources are used (and controlled by whom) in relation to how women and men decide who does what to generate income and to care for the family. The arrow demonstrates the crucial links between decisions to determine what to do with income, decisions that determine who does what, and the decisions around who consumes. These culminate into the second node (Star 2) where production and consumption decisions are linked through decisions on how income is used and how time is allocated between different household members. It demonstrates the relationship between control over resources (time, money, productive resources) and a say in decision making greatly influences the nutritional status of individuals, and more specifically mothers and their children.



**Figure 1 The agriculture-nutrition pathways framework and the key decision making moments**



Source: Adapted from Herforth & Harris (2014)

## 4. Key findings

The study provides an overview of key observations on program design and evaluation design with regards to how the evaluation approached measuring women's empowerment, the choice of indicators and overall design. It concludes with key observations on implications to understanding women's empowerment and key recommendations for programming and evaluation design.

### Observations on program design: how projects integrated gender to leverage women's empowerment for impact on nutrition

The study revealed that many of the agriculture (nutrition sensitive) and nutrition (nutrition specific) interventions were not directly integrated nor aligned. Overall, agricultural focused activities targeted women and men separately with different types of interventions

based on their wealth status linked to their access to resources. In contrast, many of the classical nutrition specific programming such as Maternal Child Health Nutrition (MCHN) targeting women ran in isolation of the agricultural production and income interventions, which mainly benefitted men. Nobo Jibon and Shouhardo included dedicated MCHN packages in their programs, but the target groups for these packages, did not necessarily overlap with households that also received agricultural and income generation packages. At the other end of spectrum were programs that did not include any nutrition related interventions, yet made assumptions that agricultural productivity or increased income would be spent on purchase of nutrition food. For example, RCDP focused on income generating activities, with the assumption that increased income would automatically lead to nutritional benefits. The nutrition specific interventions targeted women intentionally, without looking at intra household dynamics and how these influence production and consumption outcomes and the nutrition sensitive interventions completely overlooked

intra household dynamics with the focus on wealth status. This demonstrates how the dynamics within the household remain a black box. Where linkages between nutrition specific and nutrition sensitive interventions were made was through:

- Integration of nutrition messages in the training on agricultural production and livelihoods for men
- Interventions targeting men and women from the same household through sessions on gender and inviting men for nutrition sessions
- Integration of agricultural as well as nutrition messages into Behaviour Change Communication (BCC) messages disseminated throughout the program.

Designated 'women empowerment' interventions- often labelled as gender activities- were observed as being better able to align the nutrition and agriculture interventions through linkages mentioned above. They tended to prioritize women at a certain point of their lifecycle when they were mothers (i.e. when pregnant, lactating, or with children U2). It was observed that many adopted a gender accommodative approach to programming that emphasized leveraging gender/ women empowerment interventions as a means to secure progress on nutrition outcomes. Different examples of how projects integrated a gender and/ or women's empowerment approach throughout the interventions included following:

- RAIN sought to embed women empowerment approach (labelled as its gender intervention) by targeting women throughout all interventions and integrating discussions of gender throughout all its extension material. It also including targeted orientation for implementing staff on gender.
- The CARE Pathways project focused on transformation of gender relations at intra household level by engaging both women and men within targeted households. In each country it included context specific programs to engage men and boys to advance women's empowerment.
- Both Shouhardo and RAIN integrated specific 'empowerment' sessions within the nutrition BCC targeting both women and men to promote more joint decision making within couples, or other household members to support women to practice key decisions that impact on nutrition.

There were few examples of gender transformative strategies to women empowerment interventions. These comprise interventions that aim for achieving progress on women empowerment as end goal and intentionally address underlying gender norms at household and community level as a way to secure progress on women empowerment as an end goal. From the few examples that existed, these tended to focus on the community level and involved community dialogues targeting leaders and elites addressing institutional structural dimensions related to harmful gender norms and gender equality issues (e.g. Pathways, RAIN). Overall, these were observed as making a stronger link between agriculture and nutrition outcomes and achieve impact on women empowerment as an end goal, not only a means better nutrition outcomes.

## Observations on evaluation design: Positioning of women's empowerment in impact evaluation design

The study identified evaluations measured women's empowerment for different purposes related to understanding how the project contributed to the following:

1. **Women empowerment as an end goal (in addition to children's nutritional status as the main impact)** Evaluations used composite indexes of women empowerment to report on the projects ability to secure impact on women empowerment as an end goal. None of the randomised control trials were used to attribute the impact of the project on women empowerment, nor how a women empowerment package integrated into a nutrition sensitive project achieved progress on nutrition, nor how women empowerment interventions worked through different pathways.
2. **How women's empowerment (as a whole, or different elements of empowerment) contributed to improving children's nutritional status as a mediating factor** Different statistical analyses were used to make the link between different elements of how women's empowerment contribute to changes in nutrition. Non-experimental designs focused on descriptive analysis of baseline and endline comparison of key impact indicators

were unable to provide a narrative of linkages across the agricultural-nutrition pathways. More comprehensive approaches making the link between how women empowerment operates across the pathways were present in mixed-methods evaluations, particularly through the use of complementary qualitative and/or process evaluations to provide context and in-depth understanding of the results of the quantitative impact evaluations (For example the E-HFP project).

- 3. How a specific labelled set of 'women empowerment package' of interventions impacts nutritional status of children** Only one evaluation sought to understand how its dedicated transformative women empowerment package impacted progress on nutrition indicators. There was a noticeable absence of analysis of implementation modality delivery models and how 'women empowerment interventions' work in practice.

## Observations on women empowerment indicators

There were clear efforts to distinguish specific women empowerment indicators or composite indices to report on projects contribution to women empowerment (as an outcome). On the one hand, using composite women empowerment indices allows the project to report on achievement on 'women empowerment' overall. However, combining different dimensions of empowerment into a single number brings risks. Figure 2 dissects the women empowerment indicators and maps these across the agriculture-nutrition pathways. When applied across the pathways, we observed how the contents of composite indicators emphasise certain decision-making nodes and prioritize different elements of empowerment at specific nodes of the pathways.

**Clustering of indicators around resources and agency:** Figure 2 demonstrates three areas of clustering. There is a dominance of resource related indicators (yellow), decision making (orange) in relation to production and income decisions. There is another cluster around women's knowledge and practice of IYCF, time-use, access to social capital, and mobility. A third clustering centres around nutrition related indicators (light blue). This reinforces predominant interpretation of women empowerment grounded in resources being the most important element for women empowerment and their agency to decide how these resources are

used. Agency indicators clustered around decisions related to production (the front end of the agricultural nutrition pathways) and less so on how these translate to consumption decisions (the back end of the agriculture-nutrition pathways related to decisions on care practices and food preparation and distribution).

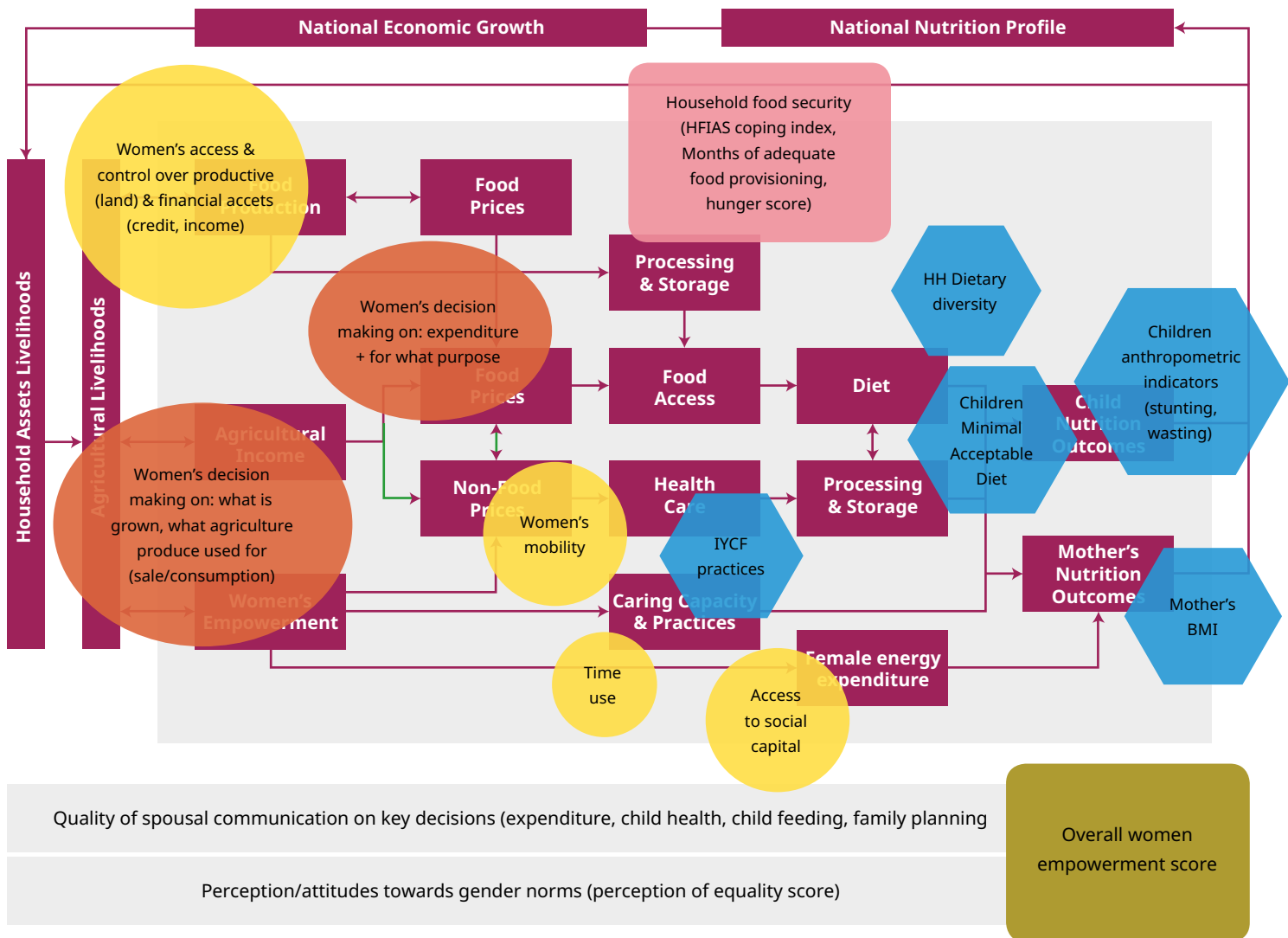
**Omissions:** Of the three main elements of women empowerment, institutional structures were operationalised the least. In our sample, they were represented mainly as indicators on gender norms capturing aspects related to collectively held expectations and beliefs about how women, men, girls and boys should behave at different stages of their lives (light grey). However there were also significant omissions. Gender norms regarding intra household food distribution and how this affects food consumption for different household members were not addressed. This is an important omission given the gender norms surrounding what different food groups different household members can consume (e.g. certain meats) and the quantity of that consumption. Similarly, none of the reviews explore how food preferences and acceptability of certain types of foods (except during pregnancy) influence what is consumed in the household.

Gender norms in the market (concerning mobility) and how they determine women's access to markets was not addressed. None of the evaluations explored the role of care practices and knowledge of other care givers. This is a significant omission given that many mothers are also involved in productive work (farm labour, other), and are likely to hand over child care and feeding responsibilities to other female household member.

The relationship between time and workload for productive and reproductive tasks was rarely explored. This is a significant omission given the growing evidence that agriculture interventions hamper women's child care time and capacity as they need to manage the care, feeding, and health of young children alongside the agriculture work (Black, Alderman, et al., 2013; Johnston & Kadiyala, 2015; Malapit & Quisumbing, 2016; Ruel & Alderman, 2013). There were no attempts to measure or document backlash from men (in terms of GBV, or controlling the benefits of asset transfers). There was limited analysis of how intersectionality may affect women's ability to manoeuvre decisions along the different nodes of the agriculture nutrition pathways.



**Figure 2 Components of women empowerment indicators mapped across the agricultural nutrition pathways**



**Level of analysis focuses on individual and farm**

**level:** Most indicators focused on the individual level, collected from the primary caregiver, usually the mother. Most of the evaluations focused on women's relationships in the arena of the farm, then in relation to the household and to limited extent in relation to the community and the market. Promising attempts to measure intra household level dynamics were observed through indicators measuring the quality of spousal communication (between primary caregiver and spouse) on key decisions related to different elements of pathways (production, health care, food

preparation), and perception on key gender norms which looked beyond the individual and looked at norms at household and community level (light grey). At intra household level, evaluations either included an overarching indicator "expressing attitudes that support gender equitable roles in family life" or went into detail on expectations on women's expected behaviour: mobility, ability to express opinion freely, attitudes to whether acceptable to beat a partner to keep family together, girls going to school. Both indicators focused on women's perception of these norms, and did not ask other household members in the quantitative questionnaire. The evaluations focused predominantly on women's relationships with their male spouse.

## Observations on evaluation design

### **Purpose of evaluations: emphasis on attribution to nutrition outcomes rather than understanding role of women empowerment as a means to better nutrition**

The key purpose of impact assessments is to attribute impact of the project as a whole towards progress on impact indicators. In the review, a main strength of the different evaluations was their ability to report on progress on the nutritional status of children, followed closely by food security and diet indicators at impact level. However, the evaluations were not able to assess in detail how the different components of women empowerment inter-relate or interlock at key decision nodes along the agricultural-nutrition pathways in ways to secure impact on nutrition outcomes related to nutritional status or diet. This is partly because there was a lack of clear definition of women empowerment and theory of change of how women's empowerment operates across the pathways.

The evaluations prioritize certain elements of women's empowerment (i.e. access/control over resources) and/or focus on one element of the pathways (e.g. agricultural production). This is a missed opportunity to collect evidence on how the different elements of women empowerment relate along the different nodes of the agriculture to nutrition pathways and understanding women empowerment in general. More importantly, it is not known whether these programs may have done harm. Given the underlying implicit assumptions and how these relate to interpretations of women's empowerment, it means that evaluations fail to test if these assumptions hold true during program implementation.

### **Choice of evaluation design: mixed method designs were better able to measure how women empowerment works along the pathways**

Women's empowerment was analysed through a variety of different evaluation designs. Some relied on experimental designs using quantitative methods to look at attribution of the project to women's empowerment overall (through a composite indices) in different combinations of nutrition-sensitive treatment groups. However, none used experimental designs to test how women empowerment interventions contribute to nutrition outcomes with a control group. The scarcity of experimental designs used in this review

are symptomatic of the challenges of rolling out such studies in practice.

Nevertheless, experimental designs using RCT are limited in their ability to provide a narrative about the pathways, as they are focused on attribution towards overall impact indicators (usually nutritional status). They also prioritize understanding empowerment an 'end state' rather than as a process that is constantly evolving. As a result, the experimental designs in this sample have not been able to test how interventions address different dimensions of women's empowerment or understanding how the pathways work. This raises questions on whether they are the appropriate design for understanding how women's empowerment works as a mediating factor along the pathways.

Moreover, it was also noted that there was no attempt to ground measures of women's empowerment in women's own perspectives of what empowerment means to them as a basis to compile the women empowerment indicators. Thus, women's voices were notably absent from these evaluations. Women's own interpretations of empowerment matter for pragmatic reasons, they allow a more accurate understanding of empowerment grounded in lived realities of women's lives and to that specific context.

The review identified more promising efforts to provide a narrative about how different dimensions of women's empowerment (as a means to nutrition) relate to the agriculture-nutrition pathways through the use of mixed methods evaluation design. The approach to evaluation design influences the extent to which different nodes of agriculture nutrition pathways are analysed. In practice, these relationships tend to be analysed in more depth outside of an impact evaluation, often through intermediary follow up studies, or as observational studies during program implementation (Ruel et al, 2017). Looking at impact, without understanding which interventions were successful (or not) to achieve women's empowerment, and how this worked in practice does not produce conducive learnings for how such interventions can be replicated in other contexts. Rather, given the characteristics of empowerment, it may be more constructive to evaluate the contribution of an intervention (as opposed to attribution) to empowerment as a process of transformative change.

### **Unit of analysis: prioritizes the individual level**

The main unit of analysis for nutrition data focused on the individual level, collecting data on children aged under 2 (collected from primary care giver who are the mother) and women of reproductive age. Women were the primary unit of analysis and collection for indicators on women empowerment and intra household dynamics at the household level.

It was observed that with mixed methods approach there was more effort to extend the unit of analysis to also include men; usually the spouses in an effort to better understand intra household dynamics. They were therefore more detailed in their analysis and reporting of how different domains of women's empowerment interact across the pathways to affect nutrition outcomes. Overall we noted limited efforts in unit of analysis to disaggregate beyond sex, and age to other social markers.

### **Documentation in the evaluations on how women empowerment operates across the agricultural nutrition pathways was mixed**

The explicit effort to analyse women's empowerment encouraged more dedicated effort for a separate section within the evaluation reporting on women empowerment. However, this reduced the analysis of women empowerment as stand-alone 'gender section of the evaluation'. As a result, the analysis of how women empowerment domains intersect and interlock across the pathways in relation to other underlying determinants of nutrition was sometimes overlooked. Therefore, evaluations need to also consider how they document the results of how women empowerment mediate progress towards nutrition.

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## **5. Summary: implications of evaluation design and indicators to understandings of women empowerment as a means and an end goal**

The study revealed evidence gaps in the links between decisions around production and income use, and the decisions made in the household in relation to care practices, time, workload and how tasks are divided in relation to production and care related work. This makes it difficult to track how women's empowerment works as a mediating factor in agricultural interventions to contribute to nutritional status.

The study illustrates how the choice of indicators used along the different decision making nodes of the agriculture nutrition pathways reinforce predominant understandings of women's empowerment. This has implications for what evidence is generated on the role of women's empowerment in achieving impact on nutrition, often reinforcing predominant assumptions (See Box 2). Impact evaluations tend to emphasise quantitative methods with women as the main unit of data collection and analysis. Mixed method evaluations proved more effective at collecting data on intra household relations and how behaviour of women is connected and influenced by behaviour of other household members, particularly spouses.

When the intrahousehold dynamics is not unpacked it can reinforce assumptions of how women empowerment works (Box 2). This perpetuates dominant interpretations of women's empowerment and existing ideas on what men and women do, need or want without engaging with women's own voices and interpretations of what matters to them. Rather it reinforces a homogenous view of women's main role in securing nutrition outcomes through their roles as 'mothers'. This ignores their productive role as farmers and income generators, and this reinforces gender norms about what women and men are supposed to do in the household. It also places pressure on women as the primary stakeholder responsible for the wellbeing of their children.

**Why does this happen?** This is partly because the majority of evaluations did not articulate a clear definition of women empowerment in the design phase, nor provide a clear theory of change of how their intervention strategy positions women's empowerment across the targeted agricultural-nutrition pathways in the scope of their program. Moreover, often there

was no attempt to ground measures of women's empowerment in women's own perspectives of what empowerment means to them as a basis to compile the women empowerment indicators. Thus, women's voices were notably absent from these evaluations.

Many of the reviewed evaluations failed to document the extent to which the indicators were pre-tested in different contexts and their rationale for selecting specific women empowerment indicators which emphasize certain domains more than others. This is reflection of a lack of validated women empowerment indicator(s) used in nutrition-sensitive agriculture. This is largely due women's empowerment being a multi-faceted construct that is context specific and is both a process and outcome. This makes it difficult to quantify, explaining why the field of measuring empowerment is still evolving and there is a lack of validated and replicable measures. The exception to this is the Women Empowerment in Agriculture Index (WEAI), which has been designed for agricultural programs. It is only recently that it is being adapted to project level and will include nutrition add on module (See Recommendations).

When programs do not define women empowerment from the start, they risk reinforcing implicit assumptions about how women empowerment works towards nutrition (Box 2). This leads to impact evaluation designs that do not measure whether these assumptions hold true during program implementation. This is a missed opportunity to collect evidence on how the different pathways connect and understand women empowerment's mediating role along the connections.

Therefore, there remains scope for further improvement in evaluation designs to better understand how women empowerment can be leveraged to secure progress on nutrition. This involves moving beyond instrumentalizing women to transforming women's ability and position to influence key decision making moments along the pathways.

## **Box 2 ASSUMPTIONS ABOUT WOMENS EMPOWERMENT**

1. Women are mainly mothers, and are the only caregivers in the family
2. Women make decisions and do activities on their own, as if they are not influenced by others in the family and/or community
3. Women's increased knowledge and skills on how to produce food, leads to increased production of food, and therefore automatically increased dietary diversity in the family
4. Women's increased access to productive resources, increases the production of nutritious crops for sale and/or for direct consumption
5. Women's control over food crops, leads to the consumption of these by herself and by family members
6. Women's increased income (through agricultural training, access to finance, increased production), means automatically greater control of women over that income, which leads to expenditures on food and care practices, which together will lead to improved nutritional status
7. Women's knowledge on Infant Young Child Feeding practices improves the diet of their children
8. All women are the same regardless of age, situation on life-cycle and other social markers (ethnicity, religion, wealth status) and have the same ability to manoeuvre decisions

## 6. Recommendations

This study highlights a number of key recommendations which are further elaborated in the main report with links to useful resources and promising approaches. The recommendations are premised on the assumption that a gender situation analysis has been undertaken to inform a Theory of Change and design tailored intervention packages that either addresses women empowerment as a) a means to nutrition or b) women empowerment as an end goal.

### Intervention design

**When designing agricultural programs to be more nutrition sensitive, carefully consider what types of nutrition impact is realistic in the scope of your program**

- If an agricultural project is seeking to achieve impact on **reducing incidence of stunting**, this implies a multi-sectoral approach to programming entailing a) broader scope of multi-sectoral interventions addressing both immediate and underlying cause of under-nutrition (addressing both inadequate diet as well as disease); b) longer time frame of programming (5 years); c) targeting households with pregnant and lactating mothers of children under two.
- If the focus of agriculture programs is to **improve diet** of household members this implies at minimum agricultural interventions and/or nutrition specific interventions consider intra household dynamics, and at a maximum, that projects are designed to integrate and align agriculture, nutrition and intrahousehold dynamics interventions together. This suggests extending the target group towards improving individual diet of other household members (women who are not pregnant, adolescent girls and boys).

**Adopt integrated and aligned programming of agriculture and nutrition related interventions**

To achieve impact on nutrition related indicators (stunting and dietary diversity), nutrition sensitive agriculture could consider better aligning and integrating its agriculture and nutrition interventions. This involves moving away from a siloed programming towards looking at how the different agriculture-nutrition pathways intersect through: a) content and sequencing of interventions; b) targeting strategies

based on insights in intra household dynamics, focusing on different individuals within the household and wider community.

At a minimum, this requires separate agriculture and nutrition focused interventions to address intra household dynamics in their respective designs. At a maximum, agriculture and nutrition interventions can be explicitly integrated through taking into account intra household dynamics. Applying the agriculture nutrition pathways framework together with the gender aware continuum are useful tools to think through different options (See main report for illustrative examples).

**Consider piloting and testing different intervention modalities and document learning**

Ongoing learning throughout the implementation of programs could explore what combinations of interventions (agriculture, nutrition and intra household dynamics) and delivery systems work best to promote uptake of interventions and sustain their empowerment effects over the long term.

**Consider creating space in the design of Monitoring, Evaluation and Learning Systems for local interpretations of empowerment through participatory monitoring systems**

Because empowerment is a bottom up process, women's own experiences and articulations of what empowerment means to them is central to measurement process. Participatory approaches to measuring empowerment offer a useful avenue to complement routine M&E as a way to track and understand changes in local understandings of empowerment.



## Indicators for measuring women's empowerment

The selection of indicators capturing the role of gender and intra household dynamics along the pathways depends on the different strategies applied in agricultural nutrition programs.

- At a minimum, consider including 'do no harm' indicators to capture the potential harmful or unintended consequences of agriculture nutrition programmes throughout implementation in two key areas: competing workload demands for women and when men take over benefits of training and asset transfers. These can be complemented by indicators of gender based violence to capture potential backlash.
- When women's empowerment is understood as a mediating process towards nutrition (means to an end):
  1. Consider using multiple indicators that capture the three domains of empowerment (agency, resources, institutional structures) aligned with the scope of project
  2. Consider using indicators, which help to better understand how gender norms work across the pathways
  3. Consider broadening the unit of analysis and data collection beyond the individual to intra-household level

To understand how women empowerment works across the pathways, data is required from multiple individuals in the same household. This entails collecting data from both primary care-giver (women) and their spouse.

**When the focus of evaluation is to measure women empowerment at impact level, consider using existing validated measures of women's empowerment.**

- Consider using the latest validated women's empowerment measures such as the upcoming Project level Women in Agriculture Empowerment Index (Pro-WEAI).
- When developing new composite women empowerment indicators, ensure that evaluations include detail explanation of the definition of women empowerment and rationale around the construction of the metric.

## Impact evaluation design

**Consider including an explicit objective within the evaluation design to distinguish between:**

1. How nutrition sensitive agricultural interventions empower women (impact)
2. How women's empowerment contributes to improved dietary diversity (mediating factor)

**Consider using multi method evaluation designs**

Quantitative and qualitative methods can be used in mixed methods evaluation designs strategically (sequencing, triangulation, validation) to explain empowerment as both outcome and process will provide a more comprehensive picture of what progress was made on women's empowerment overall and how it operates across the agriculture nutrition pathways.

## Areas for further enquiry

Promising areas of follow up research include:

- **Understanding women's role in the market and value chains:** The gender dimensions of the links between availability and affordability of nutritious foods and consumption and expenditure on nutritious foods and how these translate to nutrition outcomes is underexplored
- **Exploration of how the pathways from agriculture to nutrition are connected through decision making, resources use (income and time as most important) and the influence of social norms:** Further research could focus on identifying the tipping points of success. This could dig deeper into the role of intrahousehold dynamics and, women's empowerment focused interventions. Such research could further unpack how essential women's empowerment is and what are the most successful combinations of interventions and in different contexts. It could focus on understanding how these combinations work for different types of women and men at different stages of the life-cycle and across different social groups (wealth, religion, ethnicity).

[See main report for more detail on recommendations and promising approaches](#)

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## **KIT Royal Tropical Institute**

KIT Royal Tropical Institute is an independent, not-for-profit organization founded in 1910. It acts as centre of knowledge and expertise in the areas of international and intercultural cooperation, operating at the intersections of theory and practice and between policy and implementation.

Our international team of over 70 experts. The team is composed of top professionals who combine their disciplinary expertise with knowledge about research, institutional and capacity development, monitoring and evaluation and partnership building. As a knowledge institute, KIT Royal Tropical Institute has a long history and reputation in the fields of Local Economic Development and Gender.

The Gender unit has over 20 years' experience in gender and development with an established reputation of being a cutting-edge knowledge and practice-based group of professionals specialising in rights based approaches to gender equality, gender research, capacity development and technical assistance across multiple thematic areas.

KIT Royal Tropical Institute also has a strong expertise on research design and implementation including data analysis & results documentation. Expertise includes baseline surveys, feasibility studies, impact assessments & participatory action research methods involving capacity building for national researchers and experts.

## **Food and Business Knowledge Platform**

The F&BKP is one of the five Knowledge Platforms for global development initiated by the Dutch Ministry of Foreign Affairs. Within this Platform, international networks and organizations of business, science, civil society and policy collaborate in the field of food and nutrition security. They identify knowledge issues that are relevant now and in the future and initiate learning and research. The Platform disseminates lessons learned and highlights promising innovations that will contribute to local and global food security.



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