



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

Faculty of Natural Resources and
Agricultural Sciences

Knocking on the door

— A study on nutritional education and women's empowerment on household level in rural Tanzania

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Master's Thesis • 30 credits
Agriculture Programme - Rural Development
Department of Urban and Rural Development
Uppsala 2018

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- A study on nutritional education and women's empowerment on household level in rural Tanzania

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Credits: 30 credits

Level: Second cycle, A2E

Course title: Master's thesis in Rural Development and Natural Resource Management

Course code: EX0777

Programme/Education: Agriculture Programme - Rural Development

Place of publication: Uppsala

Year of publication: 2018

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Online publication: <https://stud.epsilon.slu.se>

Keywords: Gender, Women's empowerment, Decision making, Intra-household bargaining, Nutritional education, Scale – N.

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Abstract

In Sub-Saharan Africa, food is often prepared by women, by mothers, grandmothers, daughters, sisters or sisters-in-law. Despite their crucial role in household food security women in developing countries are generally disempowered and they have low decision-making power. Neither do they decide what to cultivate, nor who gets what and how much food within the household. When women are empowered, it positively affects household food and nutrition security. In Tanzania, many are food insecure and 33 % suffer from undernourishment (FAO, 2017), and one underlying cause is found in the lack of nutritional knowledge. Therefore, during 2016 - 2018, the Scaling up Nutrition (Scale – N) project started to offer nutritional education, to enhance nutrition sensitive, diversified agriculture and to empower women. In this thesis, I map the pathways to women's empowerment that nutritional education can create and explore to what extent these have been achieved through the Scale – N project. Specifically, I consider whether the nutritional education has brought about changes in power relations within the households.

I draw on data from 24 face-to-face semi-structured interviews with women and men, and four gender-segregated focus group discussions in two villages in the central region of Dodoma, Tanzania. The data has been analysed using women's empowerment framework suggested by Kabeer (1999) and intra-household bargaining approach proposed by Agarwal (1997). Findings suggest that the nutritional education has influenced household food preparation and consumption, but not necessarily affected power relations within the household. I argue that there is a need for women to be part of all food related decisions, to contribute to their entire family's nutritional needs. In addition, women struggle with the double burden of domestic and productive work. However, women have their own strategies for how to become less dependent on their husbands. In families where both wife and husband have participated in nutritional education, there are signs on adapting to new techniques, a change in diet but mostly a better knowledge in what is good and nutritious food. Thus, it is imperative for Scale – N to continue to conduct nutritional education targeting women while also including men.

Key words: Gender, Women's Empowerment, Decision making, Intra-household bargaining, Nutritional education, Scale – N.

Acknowledgments

I cannot be anything but grateful to have gotten this opportunity to do fieldwork in Tanzania. First, I have to thank all villagers in Pangani and Lushoto, without their participation, my fieldwork would have not been possible. It means so much for them to share their life stories with me. There is also the matter of arranging everything, a special thanks to Grace, Charles, Bon and Ema, without you, the fieldwork would not have been neither possible nor as fun.

Also, that the Scaling Up – Nutrition project reached out and welcomed me as an MSc student, for that I have to say thanks. Through the project, I have encountered researcher both in Germany and in Tanzania that have helped me along the path of finishing this thesis, for which I am grateful.

At last but not least, Marcos Lana has been my contact to the project at SLU, as well as being my assistant supervisor. Thank you for your support and letting me be a part of Scaling Up – Nutrition and for answering emails faster than anyone I know! Finally, I want to thank my primary supervisor Johanna Bergman Lodin, for support, insight and inspiration as well as calming words.

Therese Strimell Flodqvist

Uppsala 2018

Getting there

It is still possible to see where the water forced itself between the massive *baobab* trunks, over millet fields and through the small green bushes. The red soil covers everything in a thin layer of dust, and the bushes sway around when we pass. Our bus bumps along the road; we pass women sitting by the side of the road selling neatly stacked tomatoes, mangoes and plantains; the immensely popular food banana that is typical for the northern and world-famous Kilimanjaro region. Stepping out of the bus I am overwhelmed by the intensity of the sticky heat, I realise how much I enjoyed the coolness of the air conditioning. It is around noon; the sun is at its peak and I am sticky with perspiration in the three steps it takes for me to get off the bus. As soon as we step down on the pavement, the *bajaj* and *pickipicki* drivers are approaching, offering us their services. We have arrived at the busy streets of Dodoma city, the capital of the United Republic of Tanzania.

However, this is not our final stop; we are heading to Chamwino district outside of the city, and then further on to two remote villages. My first visit is to the villages, let us call them Pangani and Lushoto, where for five days in early February 2018. Rain season in Dodoma region starts in December and lasts until May; this is when almost all of the year's rainfall occurs. Pangani and Lushoto, as many other farming communities in the area depend upon on the rain. I started my fieldwork in February, during the peak of their farming season. Even though it rained just a few weeks ago, there is no water to be seen. Dodoma is a dry region and Pangani suffers from water scarcity, the school's water tank has not been able to be refilled from the rain that fell in January. In the other village, Lushoto, the biggest concern is lack of land. There is not enough land for all families to have their own piece of land, so they are forced to rent. Going back and forth through the countryside on *pickipickis* I can see examples of how dramatically the rain has impacted the area, the bridge in front of us has collapsed because of the flash floods. Even though there is no water left in the river, there is no way for us to use the bridge. We have to drive on the side, down to the river bottom and then up again on the other side, as we will do many times later.

Table of contents

1	Introduction	8
	Aim and research questions	9
2	Background	10
	Scaling-Up Nutrition	10
	Introduction of kitchen gardens	12
	Context to the empirical field – the villages	12
3	Theoretical outset and guiding concepts	14
	Women's empowerment	14
	Intra-household bargaining	15
	Norms as behaviour	16
4	Methodology and starting points	18
	Some basics	18
	Qualitative methods	19
	Limitations during fieldwork	20
	Working with an interpreter	20
	Ethical considerations	21
	To ensure trustworthiness	22
5	Intra-household decisions	23
	Gendered workload and responsibilities	23
	To secure a financial resource	25
	Gender frames bargaining possibilities	30
6	Nutritional education	34
	"Mama is the one that knows"	34
	Changes in food and preparations	37
	To include husbands	42
7	Pathways to empowerment	46
	Women's empowerment as a mean to an end?	46
	To challenge the food allocation norm	47
	Better health and well-being	48
	From power over	49
8	Concluding discussion	50
	To understand women's empowerment	50
	Referenslista/References	53
	Appendix A – Interview guide face-to-face	59
	Appendix B – Guide to focus group discussions	63

1 Introduction

Malnutrition is a global burden; it takes multiple forms, such as child undernutrition or adult obesity (or vice-versa). Hence, no country, rich or poor, is free from malnutrition (FAO, 2017). Food is essential and it must meet our nutritional needs, which are determined by age, sex as well as physical activity. For instance, during pregnancy or a child's first 1000 days¹ there are other nutritional requirements than other phases during a life cycle (ADB, 2013; Ruel and Alderman, 2013). Our daily diets have to have sufficient macro- and micronutrients combined, with protein, carbohydrates, and fats together with minerals and vitamins. Today, globally, one out of nine people in the world are undernourished, which comes to 795 million people around the globe (UN, 2017). 66 million primary school children attend classes hungry across the developing world, with 23 million in Africa alone (ibid.). We know that many are food insecure in Tanzania, and 33 % suffer from undernourishment (FAO, 2017). Food is usually prepared by women, mothers, grandmothers, daughters, sisters or sisters-in-law. They are the un-official head of the family, it is the mother who takes care and feeds the rest of the family. Thus, women have a key role to improve food insecurity and malnutrition (O'Brien et al., 2016; Seebens, 2011). Nevertheless, women in developing countries are as a group often in a disempowered situation where they do not have the power to decide over their own lives and are often experiencing marginalisation, thus it is important to raise the voice of vulnerable groups (Agarwal, 1997; Chant, 2007). Due to patriarchal and traditional norms in Tanzania, women and men do not face the same opportunities nor challenges in agriculture (UN Women, 2018a). In addition, United Nations Development Programme gender inequality index rank Tanzania at 151st place among 188 countries (UNDP, 2016). United Nations Food and Agriculture Organization (FAO) connects women and food, and argues "[...] that improving women's education and status within their households and communities has a direct positive impact

¹ A child's first thousand days window of opportunity to affect its nutritional status, the period from conception to a child's second birthday (Ruel and Alderman, 2013).

on food nutrition and security, in particular child nutrition.” (FAO, 2017, p.27). Thus, to improve food security and enhance nutritional statuses on household level, nutritionally sensitive interventions target women (Ruel and Alderman, 2013). Interventions are required on local level to address women’s empowerment together with food and nutritional security, and to be paired together with nutritional sensitive development programs on a global scale (Gillespie and Van den Bold, 2017). Numerous nutritional interventions and development programs are conducted in several developing countries to end malnutrition, including Tanzania. According to Tanzania Food and Nutrition Centre, malnutrition is “one of the most serious health problems affecting infants, children and women of reproductive age in Tanzania.” (TFNC, 2012, p.8). The Scaling-Up Nutrition project (Scale – N) conclude that this is because a lack of nutritional knowledge amongst participants, which has resulted in that Scale – N introduced nutritional education on village level (elaborated later on). Overall objective for Scale-N is to improve food and nutritional security for the most vulnerable rural communities in Dodoma and Morogoro regions, Tanzania (Scale – N, 2018). Through nutritional sensitive interventions, Scale – N is educating community members to raise their knowledge to enable them to make “better and smarter” decisions regarding their daily diets to improve food insecurity and malnutrition. Thus, Scale – N are working to empower women through knowledge regarding food and nutrition. This master thesis is an independent project within Scale-N.

Aim and research questions

My aim in this thesis is to explore the relationship between women’s empowerment and nutritional education on household level in rural Tanzania. More specifically, it is to understand women’s empowerment within the household in relation to nutritional education by considering the specific case of the Scale – N project. I will approach my research project through the following questions:

- How are intra-household decisions regarding food reached?
- How does nutritional education contribute to women’s ability to exercise choice on household level?
- Does nutritional education influence women’s empowerment within households? If so, how?

2 Background

The aim of this chapter is to present relevant background to the field, the Scaling-Up Nutrition project (Scale – N), what it entails as well as the villages involved.

Scaling-Up Nutrition

The Scaling – Up Nutrition² project (Scale – N) is a multi-stakeholder research project focusing on food and nutritional security in rural Tanzania, more specifically two villages in the Morogoro and two villages in the Dodoma region (see figure 1). Research is conducted by stakeholders and researchers from Sokoine University of Agriculture (SUA), the Leibniz-Centre for Agricultural Landscape Research (ZALF), the Humboldt Universität Berlin (HU) and the Swedish University of Agricultural Sciences (SLU). During a period of three years, (2016 – 2018), nutritional interventions and research have been conducted to enhance nutritional knowledge amongst participants. Scale – N research project is divided into three parts: biophysical, marketing and nutrition. The entry point for this thesis is the nutritional education that Scale – N has been conducting, thus, the other two parts will not be discussed here. In addition, Scale-N is also designed, “to empower women and build the capacity of vulnerable rural communities to shape a sustainable future.” (Scale – N, 2018). The Scale - N baseline survey concludes, among others, that prior to the training there was a limited knowledge in nutrition (Bundala et al., 2016). One gap identified was a large number of survey participants who did not wash their hands or perform other hygiene and sanitation practices before preparing or eating food (ibid.). Villagers also did not have a high level of knowledge regarding malnutrition,

² Besides Scaling-Up Nutrition there are multiple regional, national and trans-national programs in East Africa and Tanzania, to improve food and nutritional status amongst rural population e.g. Comprehensive African Agriculture Development Program, National Nutrition Strategy, or the most recent National Multisectoral Nutrition Action Plan.

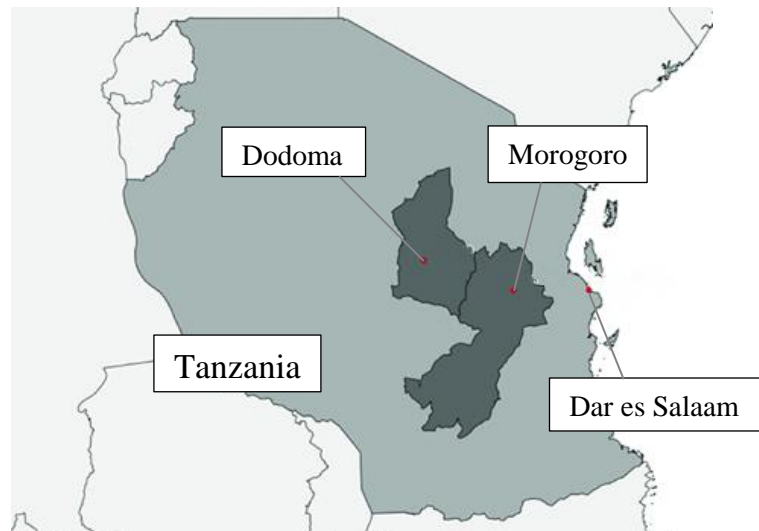


Figure 1. Map of Tanzania, with Morogoro and Dodoma region. Source: Scale – N project data.

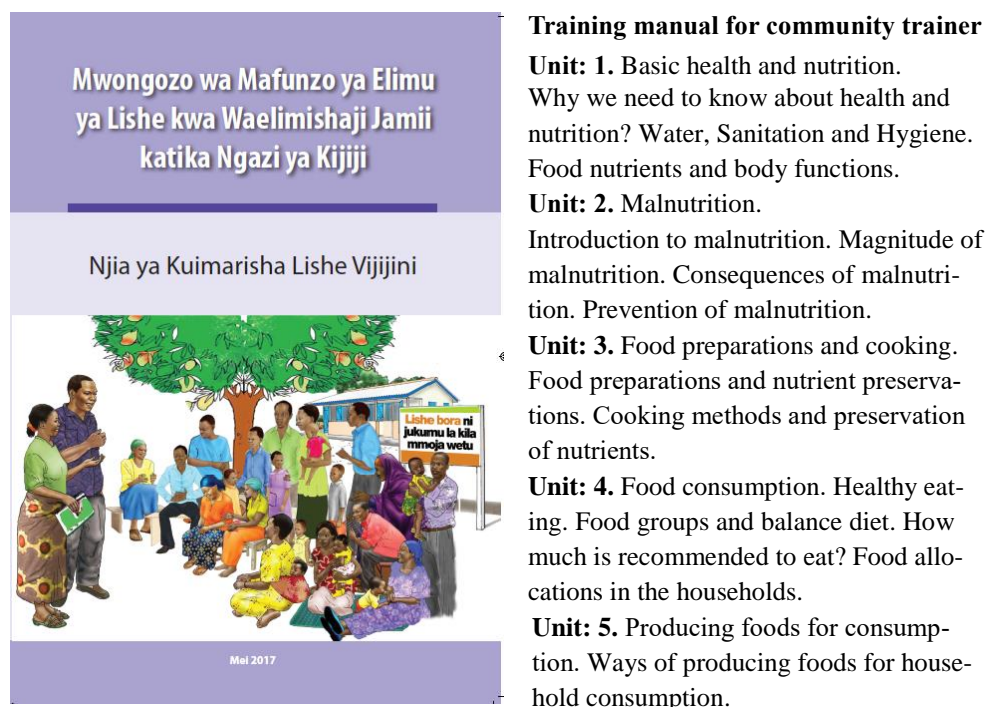


Figure 2. Cover page and table of content of nutritional education training manual for community trainers on village level. Source: Bundala et al. 2017, adapted by author.

including its symptoms and its impact on nutrition and health in different stages of life (Bonatti et al., 2017a). Furthermore, the Scale – N survey tells us that there was a low consumption of fruits, meat, eggs and fish by villagers, as well as consumption from different food groups (Bundala et al., 2016). Let us continue with a quick overview of Scale – N’s educational material, this one is adapted to community trainers (see figure 2). The nutritional trainings have been conducted to target different groups; firstly, to villagers/families that have children with low nutritional status, and secondly, to specific groups that can teach about nutrition themselves. The latter group includes community trainers, health care providers working at Reproductive and Child Health clinic (RCH), primary school teachers as well as village and hamlet leaders. For instance, primary school teachers have been targeted to introduce nutrition and a balanced diet to the school curriculum. The trainings focus on basic health and nutrition; on malnutrition and its consequences, food preparations and consumption together with production of food. Focus is not only on nutrition and preparation, but as well on water, hygiene, and sanitation.

Introduction of kitchen gardens

Besides offering nutritional education, Scale – N has also introduced the practice of kitchen gardening, to enable families to have closer access to green leafy vegetables such as Chinese cabbage, sweet potato leaves or English amaranth all year around and in turn better control over household food consumption (Lambert et al., 2014; Bonatti et al., 2017b). Scale – N introduced a pocket version, which is literally a bag that is about waist high and filled with manure, sand, and pebbles (Lambert et al., 2014). Due to water scarcity, the practice of pocket gardening has only been implemented in Lushoto (and not in Pangani). Kitchen gardens are one strategy for villagers to extend their food supplies during the lean period (Doss et al. 2012). In the Dodoma region, villagers eat ugali twice a day together with the green leafy vegetables. Ugali is the stiff porridge that characterise the Tanzanian food plate, which is often made of maize. However, maize is not a suitable crop to cultivate in Dodoma. Main crops are sorghum and pearl millet, thus the ugali that villagers consume are of the darker variety.

Context to the empirical field – the villages

Small-scale subsistence farming characterises this part of the country, where families have between 1.5 to 15³ acres and possibly some animals, such as chickens, goats or cows. Staple crops are as mentioned sorghum and pearl millet; other crops

³ It is only one informant that has these 15 acres, mean size of informants’ farmland are: Pangani – 8 acres; Lushoto - 3 acres.

that farmers cultivate in the area are sunflower, cowpea, green gram, sesame, groundnut and Bambara nuts. Pangani and Lushoto resembles each other in multiple ways (see table 1).

Table 1. *Overview of study sites*

	Pangani	Lushoto
No. of hamlets	5	13
No. of households	629	750
No. of water taps	1	10
Religion	Christian	Christian
No. of Churches*	12	4
No. of milling machine/s	0	3
Distance to Dodoma city, km	60	20
Distance to Mvumi town, km	20	11
Primary school	1	1
Kinder garden	1	1
Health centre	1	0**
Infrastructure - electricity	No	No
Infrastructure - roads	Poor	Poor
Ethnical group	Gogo	Gogo

* There is Anglican, Pentecostal, New Postal Church, Methodist churches in the villages.

** Under construction, started late 2017.

Main ethnic group is Gogo and everyone belongs to a Christian congregation. Pangani has a higher concentration of churches and a health centre in the village. Most houses are low and rectangular, mud-brick houses, with either tin or a grass-thatched roof. There is no electricity in either village; a few have smaller solar panels to charge their phone or television⁴. Both villages have a kinder garden and a primary school, neither have a secondary school. Lushoto has a greater number of households⁵ than Pangani and are divided into more hamlets, 13 contra 5. In addition, Lushoto has a higher number of water taps and milling machines and is located closer to Mvumi town and Dodoma city than Pangani, which enables villagers to sell their products in either Mvumi or Dodoma, therefore making Lushoto the most dynamic of the villages.

⁴ One of my informants, her husband owns a “TV-shop”, where villagers pay 100Tsh each to watch.

⁵ If not stated otherwise, households contains of a wife and husband with x-amount of children. Usually, in Lushoto and Pangani, the wife moves to her husband’s village after marriage. Members of the extended family live close by, just a few meters away, which creates a cluster of houses next to each other, thus, creating a feeling of a small village in the village.

3 Theoretical outset and guiding concepts

This chapter explains the theoretical concepts, which have been the guiding light throughout the work of this thesis. I first introduce the women's empowerment framework, and next I discuss the intra-household bargaining approach. The concepts have been suited and adapted together with the empirical material.

Women's empowerment

Scholars disagree on how to conceptualise empowerment (e.g. Bisnath and Elson 1999; Batliwala 1994; Kabeer 1999; Narayan 2002; Ravallian and Chen 2001). Nevertheless, empowerment implies a change, from a position of being disempowered to being empowered (Kabeer, 1999; UNDP, 2005). In this investigation women's empowerment are broken down into three interrelated concepts: *resources*, *agency* and *achievements* (see figure 3).

Resources are considered as the conditions that are 'setting the scene' or prerequisite to act upon. It is not an exclusively material resource but also includes human and social resources, which all have the capacity to enhance a woman's own ability to exercise choice (Kabeer, 1999). For instance, a resource can be arable land, access to a support system or nutritional education. Agency is focused on the ability to act, as Kabeer (1999, p.438) puts it, "[on] the ability to define one's goals and act upon them". In other words, where a woman has the opportunity and therefore power to determine, by herself, what she wants to do and then be able to follow through with it. Women do not act in isolation from their husbands or others; hence, this study also puts emphasis on the context and the relationship between women and men. In this thesis, power, as a theoretical concept, is used with a focus on the relation between people. Power is not possessed by someone but rather used between actors and can either take form in a more positive or negative sense (Kabeer, 1999). Thus, power can be defined in several ways, such as the power to, power within, power with or power over. Power to is the essence of agency, as stated above, when someone is able to define her or his own choices and achieve these (Kabeer, 1999). To

clarify, what is interesting to know is the differences in the inequality of choices, not in the differences in choices being made (Kabeer, 1999). Power over is as it sounds, an authority power, when someone's agency is capable to overrule the other/s (ibid.). Power within or self-esteem is crucial; a lack of power within will probably result in that you will not act upon your wish (Kabeer, 1999). Thus, to be able to act and exercise choice, one's self-esteem can be essential. Besides these different forms of power there is also the more subtle 'non-decision making' power (Kabeer, 1999). Where there is no apparent agency exercised but were the social norms and traditions 'make' unquestioned decisions for us (ibid.).

Focus in this thesis is mainly on *power to* but also *power within*, since the latter leads to the former. Together *resources* and *agency* constitute what is possible to *achieve*, what outcomes a woman is able to realise, or as in Kabeer's (2001, p.19) own words "[...]: resources, which form the conditions under which choices are made; agency which is at the heart of the process by which choices are made; and achievements, which are the outcomes of choices". The resource that is in focus in this investigation is nutritional knowledge provided by Scale – N and, how a woman is able to achieve change within her household using the knowledge. Thus, this thesis applies the three concepts of women's empowerment together: resources, agency and achievements.

Intra-household bargaining

Women's empowerment and intra-household bargaining are intertwined, both since agency is central in women's empowerment and since it is a precondition for bargaining to take place, or as Kabeer (1999, p.438) argues, "[w]hile agency tends to be operationalized as 'decision-making' in the social science literature; it can take a number of other forms. It can take the form of bargaining and negotiation [...]". Thus, I am approaching the empirical material with the intra-household bargaining approach as well (see figure 3).

Before explaining the bargaining process, there is a need for a short explanation on what I mean by households. This investigation rejects the unitary household model; instead, households are understood as a complex social reality, where gender relations change depending on the context or situation. Gender relations are dynamic and heterogeneous rather than static and fixed, and the household contains of different actors that have a diverse range of interests. These interests are constantly challenged and renegotiated between actors and, they can be joint as well as competing (Doss, 1999; Okali, 2012; Seebens, 2011). A household member has different abilities and opportunities to pursue them, depending on a range of factors (Agarwal, 1997). Moreover, I assume that the spouses have access and control of different resources, production and consumption activities (Alderman et al., 1995; Farnworth

et al., 2013; Quisumbing and Maluccio, 2003). Households do not exist in isolation to the community but in relation to it, and the market and the State (Agarwal, 1997). However, this investigation is focused on the household, since many of the everyday decisions are made there as well as it is a key area for organising the daily lives of women and men.

There are multiple factors that contribute to a household member's bargaining power in an intra-household decision-making process (Agarwal, 1997). Here, 'fall-back' position or 'threat point' is critical to determine a person's bargaining power, which is how good a woman or a man can socially and economically survive outside the household if bargaining fails and leads to marital breakdown (Agarwal, 1997). Thus, bargaining depends on a member's fall-back position, which is determined by a range of factors, and a strengthening in said position will in turn "lead to an improvement in the deal the person gets within the household" (Agarwal, 1997, p.4). Thus, factors can strengthen or weaken a household members' bargaining power. Agarwal (1997, p.7) discusses that some factors "[are] quantifiable, such as individual economic assets, others less so, such as communal/external support systems, or social norms and institutions, or perceptions about contributions and needs". The latter, social norms can be resembled as an umbrella that influences the other factors, both what to bargain about and/or how to bargain (Agarwal, 1997). When it comes to individuals or families in small-scale subsistence-oriented farming communities in rural areas, the most important resource that determines someone's fall-back position is that of arable land. Other factors that affect a member's fall-back position is someone's access and control of resources, together with the ability to labour (to earn cash) (ibid.). Someone's sense of self-interest is another factor that affect the fall-back position, which is that a woman might maximise the household welfare, since she will probably be dependent on her children later on in life (Agarwal, 1997). There is also factors of perceived contributions to household's needs contra actual needs of household member's (ibid.). 'Voice' or often the lack of voice is another factor that is needed to be able to enter a negotiation at the first place (Bergman Lodin, 2012), while a member's ability to exercise coercion in a household has the possibility to inhibit or force the counterpart not to even enter a negotiation (Kabeer, 1999).

Norms as behaviour

Social norms guides behaviour, how a woman or a man are supposed to behave, which can limit a rural woman's ability to bargain (Agarwal, 1997; Fafchamps and Quisumbing, 2002). Social norms exist everywhere and enter everyday life activities through interactions with others. To explain and understand norms, it helps to turn to Bourdieu (1977) and his concept of 'doxa'. According to Bourdieu (1977,

p.168), it is the “universe of the undiscussed and undisputed”. In other words, it is something silent, which is unquestioned and taken for granted that predetermines a woman’s or a man’s behaviour, that determine our being and doing (Bourdieu, 1977). Thus, ‘doxa’ determines what to do, how to do it and so on, which is evident in the gender division of labour within a household. When ‘doxa’ is present, a behaviour becomes naturalised and is not questioned, by neither a woman nor a man. In other words, you are swimming in a vast ocean (doxa), which you will continue to swim in until there is a contested way of being and doing available. Hence, norms and traditions are here seen as rules and structures that are defining parameters of how a woman or a man ‘are supposed’ to act, thus, structures have the ability to shape choices (Kabeer, 1999). Individual women can act against these norms and structures, but, to push and transform gender structures there is a need of collective empowerment, as Kabeer herself concludes, “[t]he project of women’s empowerment is dependent on collective action in the public arena as well as individual assertiveness in the private.” (Kabeer, 2001, p.48).

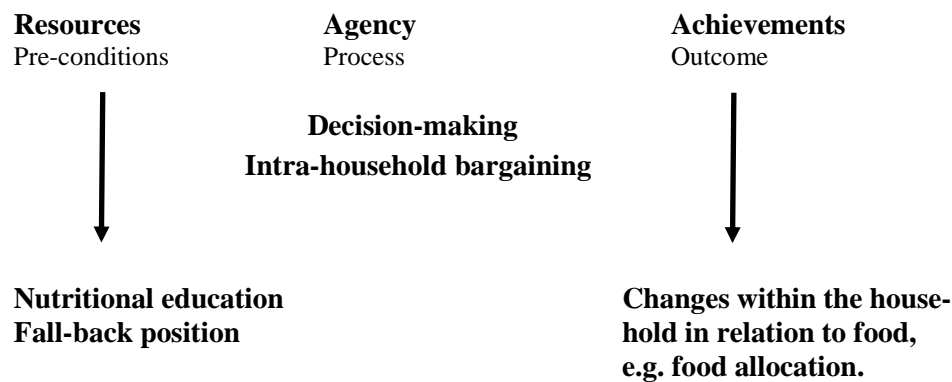


Figure 3. Source: Kabeer, 1999, adapted by author.

Figure 3 is to conclude this chapter and interlink women’s empowerment and intra-household bargaining together. Nutritional knowledge is, in this thesis, considered as a resource or pre-condition for a woman’s agency or power to, which also is a factor that strengthens a woman’s fall-back position in an intra-household process (c.f. Agarwal, 1997; c.f. Kabeer, 1999). Thus, the support by Scale – N and the knowledge that is provided can enhance a woman’s power within and therefore power to at the same time as in increases her bargaining power (c.f. Agarwal, 1997). Building on Kabeer (1999), I argue that when a woman is able to exercise choice and achieve a change with the use/help of knowledge she has acquired from Scale – N trainings, she is empowered.

4 Methodology and starting points

This chapter explains what, where and how I conducted my fieldwork, from qualitative methods, limitations during fieldwork and working with an interpreter to ethical considerations. Firstly, there is a discussion about chosen research approach and lastly, I will talk about how I am working to ensure trustworthiness in my findings.

Some basics

I believe that gender disadvantages are about social structure that are created in a complex social reality, hence, this study is based on a social constructivist worldview together with a transformative worldview (Creswell, 2014). Philosophical assumptions, personal values and experiences combined influences the research approach, what methods to use while it also has guided me on how to formulate my research aim and questions (Bryman, 2008). This investigation employs a qualitative research approach with a case study design and a purposive sampling has been adopted regarding informants (Bryman, 2008). Since I am interested in investigating whether nutritional interventions have affected women's empowerment, everyone involved has either themselves, or had someone in their immediate family that participated in Scale – N nutritional trainings.

My fieldwork was divided into two stages, when arriving in Tanzania and at Sokoine University of Agriculture (SUA) I presented my fieldwork plan/ideas to researchers there, which resulted in a stripping-down of study villages and focused on the two villages in the Dodoma region. During the first stage and visit to the villages I conducted pilot interviews, met with Scale – N contacts and I got a first glimpse of the communities. This enabled me to test how my interview guide worked, which made it possible to rearrange some of the questions and add in some others (c.f. Bryman, 2008). The second stage was to revisit the villages and conduct

the main part of my data collection divided between semi-structured interviews and focus group discussions (FGDs).

Qualitative methods

I conducted fieldwork during February and March 2018 and altogether I met and talked with 55 individuals. I started fieldwork with conducting 24 individual interviews, usually outside in their yard next to their houses, often together with an audience of curious children. The interviews lasted between 40 and 70 minutes, and the children quickly got bored when they realised that it was just three people sitting down, talking to each other. After finishing the face-to-face interviews, I conducted four gender-segregated FGDs, two in each village, which lasted for about 60 – 90 minutes. The guides for interviews and FGDs are divided into themes regarding Scale – N activities, food and nutrition, farming activities and household decisions (see appendix A and B). Additional material such as Scale - N household surveys and reports, together with Tanzania specific articles as well as articles regarding food and nutrition security and women have been used as secondary sources.

By conducting interviews and FGDs, it is possible for me as a researcher to get closer to participants explicit attitudes and values, which might be harder to comprehend from a survey (Silverman, 2015). The purpose for me to conduct interviews was to examine and try to understand people's individual perceptions of their household activities and to capture gender relations and decision-making processes within the households. While the main purpose for me to conduct FGDs was to gather people together, for participants to meet and discuss with each other instead of just my interpreter and myself. This was to merge participants' different experiences as well as to grasp their diverse perceptions of household gender dynamics. It is important to be aware that both FGDs and face-to-face interviews are a created situation between my informants, my interpreter and I, where I am asking informants to comment on their lives (Silverman, 2015). Every meeting is unique and therefore questions were adapted to each person/group and situation, thus, no interview or FGD was identical.

For the FGDs, I worked with vignettes. I constructed a typical, fictional Dodoma family, with Veronica and Antony as parents together with their three children Neema, Andasoni and Olivia. This enables participants to discuss about Veronica and Antony, but draw on experiences from their own lives (Bryman, 2008). For the group to be able to create and sustain a lively discussion by themselves (Silverman, 2015), I invited eight people for each of the FGDs', and everyone but one showed up.

Limitations during fieldwork

There are multiple limitations when conducting fieldwork in another country, in a new context. One of the first things I faced during the face-to-face interviews was the “why are you here?” question from Mr Tito, one of several to ask me this. He was one of the first persons I interviewed in Pangani. Mr Tito referred to me as a foreign student, and why there is not a Tanzanian student doing this work instead? His question kept popping up in my head during fieldwork, and reminded me of the importance to reflect on myself as a westerner in rural Tanzania as well as a researcher doing qualitative research (Tracy, 2013). On the one hand, that I have to put my own perspective and biases aside and on the other hand, to be aware of the same perspective and biases influences my work and my interaction with the people in the villages (Hajdu, 2006). I as an outsider have to put myself in their position and try to see things from my informants’ perspective.

A contribution is in place when conducting fieldwork, for me to show appreciation that the informants are taking time out of their schedule to help me in my work. In Scale – N project there is practice giving refreshments in the form of soft drinks and biscuits as well as a symbolic contribution in cash. As my work is a part of Scale – N project I have done the same. There are some issues to take into consideration when providing a contribution in cash. I have to ask myself, how this can affect my data but also future researcher and what kind of expectations that builds up with it. In addition, if villagers only appear if they are compensated in cash or if they only tell me what they think I want to hear. There is also a question of what happens when the cash enters the household. To give consumable items like soap or iodized salt benefits the entire family, while giving money might not contribute everyone in the household.

There is also the question of the time I was there, when during the year as well as for how long a period. I as a researcher have to be aware that my weeks in the villages has affected my overall understating of life there. This might not be seen as a limitation, but something, that affects overall activities and mind set. Lastly, there are multiple language barriers to consider, the informants’, the interpreter’s and my own. However, working with an interpreter is crucial and necessary for my fieldwork.

Working with an interpreter

There are more than 120 ethnic groups in Tanzania, and all of them speak their own language, but Swahili is the official language and spoken throughout the country (Sida, 2015). I worked with two different interpreters, one during the first stage of my fieldwork and later, another interpreter for the second phase of the fieldwork.

I constructed my interview guide in English, and during interviews and focus group discussions it was orally translated into Swahili, and then back again (see appendix A and B). This means that, when translated, there were at least one and sometimes two changes of language, where meaning can get lost in translations (Kapborg and Berterö, 2002). To be able to get as much fruitful information as possible from my interviews I had meetings with my interpreter/s beforehand and went through the guides' together, for us to be on the same page and understand each other. Both what my key points were in the guide as well as how the questions worked when translated into Swahili orally. Despite this, there were times of confusion during interviews, thus, we had to take a few minutes to clarify and understand each other. While transcribing, I did notice that I could have probed into certain questions more; however, this is something that can happen when conducting interviews in my mother tongue as well.

Ethical considerations

As a researcher, there are always ethical issues to consider, for example anonymity of my informants, to inform them about my study or how my research can be of value for them (Creswell, 2014). There is as well as the “do no harm” principle, e.g. I cannot make any promises that are not possible to keep (Swedish Research Council, 2017). To start with the latter, I explained that my work is for my thesis, and that I will present it back at SUA so that it can be used to create knowledge, which can help to further develop and strengthen future Scale - N interventions and activities. Besides the “do no harm” principle, it was rather for me to inform about the study; to get an oral agreement of consent; to assure the respondent's confidentiality and explain how I will use the data (Swedish Research Council, 2017). Thus, before starting I presented myself, why I was there talking to them and that I intended on asking them questions about Scale – N activities, food and nutrition, farming activities and household decisions. This was done so my informants knew what was coming, as well for them to have a chance to back out if they felt like it. Before starting, I asked everyone if it was okay to use an audio recorder and that, the material is going to be used for my own work. During the final part of the interviews as well as the FGD, there was room for my informants to ask me questions, which some did and some did not.

When it comes to the question of anonymity, it is if I can keep my informants anonymous to you as a reader. One-step is to change their name in the thesis together with the names of the villages, thus, Pangani and Lushoto are not the villages I conducted fieldwork in (but are places in Tanzania). However, Scale – N is a running

project, researchers and trainers have had activities in the villages since 2016, and therefore it is possible for some individuals to trace who they are.

To ensure trustworthiness

When conducting research, there is also the question of how to ensure trustworthiness in my study, which can be done through credibility, transferability, dependability and confirmability (Shenton, 2004). This investigation has adapted strategies to ensure credibility using appropriate and recognised research methods as semi-structured interviews and FGDs, together with the use of thick description throughout this thesis (*ibid.*).

Let us consider the issue of transferability and dependability. Transferability refers to if it is possible to transfer my findings to other settings (Shenton, 2004). The premise here is that the household (and community) is a socially constructed reality and therefore changeable, and values are hard to strip down and take into a sterile laboratory to be transferred to another setting (*ibid.*). Thus, there is no aim in this study to produce truly transferable results, which also leads on to dependability, i.e. if similar results are possible to obtain. My findings are what my informants have told me, it is their experiences and their everyday lives, which are individual experiences and therefore hard to duplicate.

Lastly, confirmability, which is to confirm that I as a researcher do not influence the study (Shenton, 2004). However, I believe that it is not possible to obtain a total objectivity. Instead, it is important to explain and admit to my philosophical assumptions and that it influences my work at the same time as I recognise this it is possible to reduce my influence of the study by having my aim and research questions as a guideline throughout the process (Creswell, 2014).

5 Intra-household decisions

In this chapter, you will find a compilation of the empirical material collected in two villages in Dodoma region, together with the analysis. The findings are divided into three chapters; this chapter is focused around the first research question; how intra-household decisions regarding food are reached. Since the findings from the two villages are similar, they are mainly discussed together throughout this chapter.

Gendered workload and responsibilities

Subsistence oriented farming characterises Pangani and Lushoto; villagers mainly depend on their farmland to supply them with enough food from their harvest. Without post-harvest surplus they do not have a source of income and are then forced to labour to secure a financial income. If families harvest enough, they will sell the surplus to earn cash and buy necessities with the profit. Households typically have a gender-divided workload, where domestic activities are a wife's duty, while a husband's duty consists of out-of-house responsibilities. I meet Ester under the shade of their mango tree; we sit in between her family and her mother in law's house. She explains about her responsibilities,

All domestic activities belong to me, like cleaning, cooking, and washing, taking care of children, also fetching water and collecting firewood. During rainy season we do farming together, but my husband goes first to the farm while I prepare food. Then I join my husband there [at the farm], and do farming activities, and pick vegetables that are nearby, before going back home [...]

During this rainy season Ester and other women have a double burden of domestic and productive work. "It is a woman's job to know about food. My husband just eats." Roza explains during my meeting with her. She agrees with Ester that all domestic activities are a woman's job; they should know how to take care of all

domestic duties. A husband, on the other hand, is responsible for such as constructing the house, grazing their cattle or clearing farmland. However, there are occasions when a husband can enter his wife's domain to cook or clean, during times when his wife is away in another region, sick or even hospitalized. In other words, only when his wife is away or/and not capable to do any work, can a husband cross the visible threshold of the kitchen as well as the invisible threshold (but equally real) of that of a woman's duty.

I meet Mmoti by the village office in Lushoto; he is one of the husbands that has participated in Scale – N trainings. Mmoti, he expresses,

I will go early in the morning, like 6 or 7 am and return by 2 pm⁶, we can return early because now we use our bulls, then we can do everything faster. When I return home, I can have a rest, or walk around the village or just start weeding in the surroundings at home.

Farming activities frame and decide everyone's lives in communities such as Pangani and Lushoto and, mornings start early, as soon as the sun rises, the first thing for Mmoti is to leave home to start with his farming activities. It is in the middle of the rainy season so farmers have to make use of the morning sun, both in terms of light as well as because of the temperature, it rises quickly and around noon, it easily hits around 30 - 32 degrees Celsius. It makes everything harder, especially to conduct physical activity during those hours. Moreover, having bulls makes Mmoti's family part of one of the better off families in Pangani and Lushoto; besides their bulls, they have chickens, cows and guinea fowls. Families save and invest in animals, however, some villagers do not have this opportunity. This is true for Daudi and his family, they used to have chickens but unfortunately, they died. Even though, they do not have chickens themselves, there is a mother hen with her chicks next to us when we sit down on his wooden stools, secured in the shades of a creeper. Daudi also rises early during this season to start work in the fields, "5 am – returns at 3 pm, when I return back home I take a bath and rest. If I have to collect firewood, [...] I have to skip farming, because it takes too long". Daudi and his family do not have any bulls to help with farming, hence, he spends more time at their farm, and he starts to work earlier and ends later than Mmoti. Moreover, Daudi

⁶ My interpreter translated informants' time into "English time", since Swahili time is determined by the sun. The day is divided into 12 hours of sunlight and 12 hours of darkness. The first hour is when the sun rises, typically around 6 am, which makes 6 – 7 am, the first hour – *saa moja asubuhi*. My first experience with this was when I bought a bus ticket for next day's travel. The ticket said 2:30 am I slightly freaked because I did not intend to travel when it is still pitch black outside. I was just standing in the overcrowded entrance to the busy bus stand, staring on my ticket when an elderly man saw my confusion and came up to me, looked at my ticket and pointed and said "no, worries, Swahili time".

express that he collects firewood, which usually belongs to the domestic sphere and is therefore not his responsibility. There can be different explanations to this behaviour, one can be that boundaries are being pushed and Daudi has started to help his wife and share domestic responsibilities. However, it does not mean that the gendered responsibilities are changing; domestic duties are still a woman's responsibility. Daudi's statement rather show that these gendered duties do not apply to all families regarding all issues. In addition, when Mmoti or Daudi return home, they have time to rest, if there is not something to do around the house. This is something that none of the women I meet have expressed. Women do not usually have time to conduct other businesses or activities other than their domestic and productive work, which simultaneously ties them to their houses, which affects how and when they can build up businesses, intensify farming activities or travel to meet friends and family (Doss, 1999; Doss et al., 2012). Child rearing is one of these things; the average number of children among my respondents are five children, which is also the average in Tanzania (CIA, 2017). Children can be both a resource now and later on in life, as well as a constraint on current resources. The family can have trouble to invest in nutrition, health and education for each of them. There is no tuition for governmental primary or secondary school level in Tanzania, there is no secondary school in either Pangani or Lushoto, thus, children have to leave home to get a secondary education. This results in families sending only one or maximum two of their children to secondary school, and then probably one of their boys. An obvious consequence of this is that girls often have a lower level of education. A result of this behaviour is fewer options on the labour market for women, lower quality jobs and income, as well as decreased individual and social well-being (Sachs, 2005; UN Women, 2018b). Let us now continue and focus on the specific responsibility of securing a financial resource, in other words, to bring home money.

To secure a financial resource

There is always a flow of cash in Lushoto and Pangani, it comes and goes and as soon as families acquire cash, they spend it. Families have different opportunities to earn money; from either post-harvest surplus, or they work as hired labour on other farms, construction sites or migrate to other regions to be able to support their families. As shown, men are responsible for out-of-house activities, which includes being responsible for bringing home cash and with that the bigger household expenditures. This gendered division of work results in a division of decision-making, which is apparent in households in Pangani and Lushoto.

The perception that men are responsible for securing money is evident amongst both women and men. According to the women in the FGD⁷ in Pangani, “Baba [Antony] is responsible to earn money and get cash for food, but the family depends on Veronica to buy and prepare food.” The men from Pangani made a similar connection, though further qualifying the spouses’ different spheres of responsibilities. “Baba [Antony] is responsible for providing money. Veronica will buy other foods like vegetables and small foods like beans or grains, and she will get money from him”. There is a common image that men are the breadwinners of the family that contributes to their families through paid work, while Veronica is expected to contribute to their family’s well-being without being paid or recognised for her work (Kabeer, 2003). There is a difference in a person’s *actual* contributions and needs in the household compared to the *perception* about a person’s contributions and needs (Agarwal, 1997). A woman’s domestic work is usually undervalued based on perceptions about contributions to the household (Agarwal, 1997). Hence, it is possible to understand that a man can be overvalued because of perceptions about needs based on a husband’s financial income to the household (Agarwal, 1997).

The male participants speak from experience and provide their wives with money so she can go to the open market or to one of the village shops to purchase food and necessities. The women FGD highlights that they depend on both Veronica and Antony since he buys the food and she is the one that prepares the food. Thus, without both, there would not be any food in their household. Both spouses have interest, either jointly or their own, where cooperation makes everyday life smoother. At the same time as there are dynamic gender relations that entails of separate interests, which spouses seek to maintain and re-negotiate (Okali, 2012). Spouses’ responsibilities and obligations are guided by norms and traditions that expect a woman to take care of household chores or a husband are supposed to secure a financial resource (c.f. Bourdieu, 1977). These different gendered responsibilities can be understood as ‘doxa’, the vast ocean in which villagers’ swim in and are telling a woman or a man what to do and how to do it (ibid.). Therefore, this way of being and doing is undisputed and villagers have a silent agreement between each other. Hence, both women and men perceive that it is ‘natural way of behaviour’. In other words, as a woman or a man, your being and doing is already determined by expectations guided by your gender (Kabeer, 1999). If villagers continue to enforce this behaviour/in line with ‘doxa’, they are simultaneously reproducing the gendered responsibilities. It is only when someone starts to questions ‘doxa’ that people become more conscious of their behaviour and it can be contested (Bourdieu, 1977).

⁷ The FGD discussions are based on my fictional Dodoma family with Veronica and Antony and their three children, to enable participants to draw on their own experiences at the same time distance themselves from their lives and discuss with Veronica and Antony as examples (see ‘qualitative methods’ for more).

Moreover, the fictional Dodoma family have three children, two girls, Neema and Olivia and one boy, Andasoni, and when Veronica and Antony continue with the same pattern and behaviour, they are reproducing behaviour and transfer it onto their children. Thus, their children adopt the behaviour that is already internalised in Veronica and Antony (c.f. Bourdieu, 1977).

Financial inequalities have a critical role in structuring power relations, in domination and subordination positions (Agarwal, 1997). Nonetheless, wives cannot solely depend on their husbands'; women FGD in Pangani share their experiences,

[Veronica and Neema will] make plans together on what to buy and ask Antony for money but if he says there is no money, Veronica and Neema would go for labour to get cash. Then they can buy food for what they have earned, they would buy rice, *maharage*, meat, sorghum or maize.

The women express that Veronica cannot fully rely on Antony, nor they on their husbands. Nevertheless, the women speak from their own experiences, and they know that they have to secure an income by themselves. Women do not have the ability to persuade nor do they have any voice against their husbands, it is easier that they earn money by themselves (c.f. Bergman Lodin, 2012). Thus, women are sometimes forced to participate in the labour market and defy the societal norms and duties that tells them to stay at home (Kabeer, 1999). That women participate in the labour market is not a negative thing per se, but here it is a result of that they do not have a financial resource to purchase food with. Women entering the labour market is a whole other discussion, which is not under scrutiny in this thesis. However, with a financial resource, women strengthen their fall-back position in an intra-household bargaining situation (Agarwal, 1997).

As with gendered responsibilities, there are work tasks that are typically female or male oriented. For instance, women's work can be that of collecting and selling firewood, producing and selling local brew⁸, as well as to trade with household utensils or vegetables. In addition, even though women work outside the household. Roza, she has her own small business; she explains,

I have a business; we do not pool our money. I get no support from my husband, he does not like that, but it does not matter to me. When it is dry season, I will start again [with my business]. He does not want development in the

⁸ Local brew is homemade alcohol is called, it differ between regions. In Dodoma region it is produced out of either sorghum or millet since this is their main crop. For instance, In the Kilimanjaro region, local brew is mostly produced out of bananas since that is their main crop.

house; he is having the ideology that if I am wealthier than he is, I will be 'over' my husband and that is not good. I will have to be aware of him [...]

Roza's domestic and productive workload prevents her to conduct business throughout the year. By conducting a business, Roza has her own financial income that is necessary since her husband does not provide for her or their children. He does not approve that Roza is securing a financial resource by herself. Roza exercises choice despite her husband's unwillingness, even though that she is aware that conducting business can affect her in a negative way later in life. There can be multiple reasons or explanations for that Roza's husband has stopped contributing to the household finance, one of these can be that she has her own business that provides her with an income, thus, he is not needed. Moreover, when Roza chooses to conduct business, it might reflect badly on him as head of household, which create an image of him as neither being a provider nor a 'good husband' by their families and neighbours. This can create a backlash into that her husband wants to protect his manhood and Roza lives with threat of violence or actual violence both mentally and physically, which affects her overall well-being. Nonetheless, according to Agarwal (1997) having a financial resource strengthens Roza's position in intra-household bargaining process with her husband. In addition, with her own financial resource, Roza questions the societal norms and has the possibility to push the hierarchy of decision-making, who is in control of what in the family (Kabeer, 1999). That will hopefully rather push decision-making power from her husband to them together, for them to make joint decision in the future (ibid.).

When there is no opportunity to secure money within the village men are forced to migrate, since the expected financial returns are higher somewhere other than in the villages (Doss, 1999). It is important to note that it is not only men that migrate; it can also be one of the eldest child in a family, either the oldest daughter or son. When husbands migrate, it further prevents women to leave their homes for shorter or longer periods to conduct other business or intensify farming activities (Okali, 2012) (as elaborated earlier). In Pangani and Lushoto, men leave for work either within or outside the Dodoma region, to work on bigger farms where they cultivate crops such as cashew or ground nuts. Grace's husband has migrated and he is away for the time being, she explains that, "He has been there for 2 month; [...] I do not know for how long, he will return when the work there is over. He makes decisions through the phone." Grace's husband works on a cashew farm, west of Dar es Salaam, it takes several hours to travel there from Pangani or Lushoto. First, you have to get into Mvumi town, which will take at least one hour on a *pickipicki*, then catch one of the public minibuses, the *daladala*, for about one-hour ride into Dodoma city. You can be in luck and the *daladala* leaves when you arrive or you are forced to wait; the logic is that the minibus departs when it is full. From Dodoma city, there

are long distance buses that can take you the 440 kilometres to Dar es Salaam. Nevertheless, Grace is solely responsible for all the household activities, domestic as well as productive. When husbands migrate, their spouse becomes *de facto* female-headed households, since they take on the male gendered responsibilities and tasks (Doss, 1999; Seebens, 2011). Besides shifting responsibilities, migration will (hopefully) provide the family with another source of income that will enable them to “buffer income fluctuations through remittances” (Seebens, 2011, p.9). In addition, migration results in a loss of manual labour on their own farmland at the same time it is one less mouth to feed. Simon is one example of how he is responsible for securing the financial resources’, he explains,

If she needs something for the house, I will provide it for her. I spend my money on treatments for the family, if someone is sick. To buy foodstuff at home or anything else at home, I am the one that is responsible for that.

Simon is an example of the perception regarding how husbands are supposed to secure money for the household. Even though both he and his wife have their own source of income, it is still his responsibility to be the provider for the family. It is possible to understand Simon’s statement that this is the ‘natural way’ of being and doing, he is not questioning the fact that he is responsible to secure money nor does his wife (c.f. Bourdieu, 1977) (see earlier discussion). In addition, together with the securing of a financial resource, Simon is, as head of household, also responsible for bigger one-time expenditures, such as treatments or bigger food expenditures. While his wife spends her own money on smaller everyday items or necessities for their children. Moving on to Jaqueline and her family, she expresses,

No, my husband does nothing. He can maybe do some labour work during rainy season [...] My money is for domestic use, to buy things for children and things for school, and clothes for myself and my children. Also, to buy things so I can continue on with my business, I sell *bagia* here in the village. [...] If I have money, I can buy any animal or land. I am buying my own security, if I do not prepare myself, my husband can just leave at any point.

Jaqueline secures her own income by selling *bagia*⁹ to other villagers. Jaqueline is in control of her money and can therefore choose by herself what to do with it. It enables her to spend money on what is best according to her. In addition, expenses can be divided between the smaller expenses and larger one-time expenses, clothes are typically being considered as a larger one-time expense that men control (Kiewisch, 2015). While women are usually in charge of smaller items and expenses,

⁹ *Bagia* is small snack ball made out of cowpea powder, fried and then eaten when cooled down.

such as notebooks for school, food items like oil, juice or iodised salt. Moreover, Jaqueline is eager to continue her business, since it provides her with a financial security, and at the same time strengthens her bargaining power within the household (c.f. Agarwal, 1997). Self-esteem or the power within can be essential and determines if someone is willing to enter an intra-household bargaining situation or wanting to make decisions (Kabeer, 1999). Jaqueline's business provides her with a financial resource that she can use to invest in animals or land, which she needs if (or when) her husband decides to leave. Jaqueline is aware that by purchasing and investing in animals it provides her with security that her husband is unable to fulfil if their marriage were to dissolve. This is an explicit statement of how resources strengthen a woman's ability to survive outside of the household, what Agarwal (1997) defines as the fall-back position. Hence, Jaqueline's financial resources together with the ownership and control over animals strengthens her fall-back position in an intra-household bargaining with her husband. However, if Jaqueline loses her income, it weakens her fall-back position within the household and simultaneously reduces her economic contributions to the household (c.f. Agarwal, 1997). Moreover, Jaqueline owns their land; she is the only woman whom I have met that owns and is in control of arable land. As with John, this further strengthens Jaqueline's fall-back position in an intra-household bargaining process (ibid.). Hence, Jaqueline's ability to survive, if their marriage were to dissolve is higher since she has her own share of arable land together with her other resources. It is possible to argue that Jaqueline is less dependent on her husband because of the mentioned factors. However, Agarwal (1997) argues that a woman's possibility to an exit depends on the social acceptance of divorced women. Thus, it depends on how easily a divorced woman can be remarried, which means that even though Jaqueline's fall-back position has been strengthened through her ownership and control of arable land are diminished by the social non-acceptance of the possibility of being divorced women (ibid.). However, a financial resource is not the sole factor in determining ones' possibility to bargaining, gender is another one, hence; let us now consider how gender influences ones' bargaining power.

Gender frames bargaining possibilities

When it comes to intra-household bargaining process, Antony's gender has already determined his dominant position in a bargaining process in the same way, as Veronica's gender provides her with a more subordinate position than Antony (Agarwal, 1997). Findings show that men in general decide and have power over women; let us consider how power relations are perceived among participants of FGD. Again, my fictional Dodoma family, are discussed among women FGD in

Lushoto, “Because Antony is the head of the household, [...] Women are very down here, so we will let him do whatever, even if it is stupid. [...] We do not have a voice here.” Men FGD from Pangani made a similar connection “[...] because Antony is the head of the household, his bowl has to be full of meat.” Both of the groups share the experience of societal norms and traditions that favour men over women, especially in relation to food. Husbands are in charge and are therefore entitled to, and deserve what is considered the best food, i.e. meat (elaborated further on). The female participants of the FGDs draw on their own experiences, and believe that there is no point for them (nor Veronica) to act against their husbands’ will, Veronica ‘will let him do whatever’. The women do not have any voice against their husbands, nor Veronica against Antony, which inhibits them to participate or even enter in a negotiation with their husbands (Bergman Lodin, 2012). While men expect their bowls to be full of meat, women accept it and that they have second or even third claim over household’s resources. By not participating in bargaining with their husbands, women are enforcing the norms and traditions that are telling them to prioritise their husbands, which will be reproduced on to next generation. Moreover, when women themselves, perceive that it is not worth it to negotiate with their husbands, it is possible to understand it as an internalised behaviour and ascribe them with a lack of power within or rather that their husbands’ have the power over themselves (c.f. Kabeer, 1999). Hence, they lack power within at the same time as they are enforcing the current ‘being and doing’, they are behaving exactly in the way societal norms tells them to act (c.f. Bourdieu, 1977). Sara is another example of this, I meet her in the morning when it is still possible to sit in the sun; we sit on blue plastic chairs behind her house. Sara explains,

When we cross, I have to bend down to let him do whatever, his decisions are better, so I will let him decide what he wants. There is nothing to do; you have to let him do. These men, they want their decision to be followed, they know better.

Sara understands there is no point in going against her husband; she does not have any voice and will prioritise his decision over hers, similarly as the female FGD discussed earlier. Sara speaks from experience; there is no advantage for her to literally raise her voice in a disagreement with her husband. It is only possible to speculate what kind of situations that has led her to this conclusion; this reflects upon the image of the man as head of the household that he has power over Sara (c.f. Kabeer, 1999). In addition, by stating that his decisions are better, Sara is implicitly saying that her decisions are worse. It is possible to understand Sara’s statement is an expression of her husband’s power over her that defines their relations within the household. Sara is compelled by society to behave in a certain way as a

woman, as well how to bargain, openly or quietly (c.f. Agarwal, 1999). The same behaviour or pattern has become internalised and therefore naturalised with Simon, he expresses a similar perception, “If I see my thoughts to be productive, I will force my way through [with it]. I have never spent my money on something stupid.” As head of the household, Simon has decision-making powers and he states that if needed he ‘forces’ his decision through. Both Sara and Simon express a mutual perception, that husbands have power over their wives. Turning to Agarwal (1997) and her intra-household approach, Simon’s control over household finances together with his gender are factors that enables him that from the start to have a dominant position over his wife. It is possible to interpret and explain Sara’s behaviour with a lack of power within, or the self-esteem, while Simon has a power within that enables him make decisions that overrules his wife (ibid.). This is also evident in what Tito experiences, but here it is rather what happens when he and his wife disagree, he states that there “[...] can be a conflict. In this village a man decides about everything, when his wife says no – beat the wife.” Both Simon and Tito express explicit example of an authority power, more specifically, the power they have over their wives (c.f. Kabeer, 1999). Tito explicitly states that if a wife opposes her husband there is both, threat of violence and acting out of physical violence (and/or mental abuse), which is evidence on that he wants to maintain control over her (c.f. Seebens, 2011). Sara and female participants of the FGD do not have any voice and have stated that women are ‘very down here’, that they have to listen to their husbands and comply with them, and that their husbands are in control of household resources. Hence, husbands have the possibility to exercise coercion and wives do not have any voice, which results in them not being able to enter a bargaining situation from the start (c.f. Bergman Lodin, 2012; c.f. Kabeer, 1999). Nevertheless, a woman usually has control over the domestic sphere and all the activities of which that entails. Thus, for a woman to exercise choice regarding food, to be able to raise family members nutritional statuses, might not depend on men’s general power over women.

Up until now, I have considered gendered roles and responsibilities in Pangani and Lushoto, how societal norms guide spouses’ behaviour and decides who does what and when within the household. In addition, how economic inequalities together with gender have a critical role, but not solely in structuring and defining decision-making hierarchies within a household (Agarwal, 1997). When women have their own financial resources, their fall-back position improves, which has the possibility to strengthen their own advantage in an intra-household bargaining process with their husbands (Agarwal, 1997). The face-to-face interviews together with FGDs show that there is no golden rule to how families keep their financial resource. Nonetheless, when spouses pool their finance together, there is a common understanding that it is the wives that are responsible for keeping the cash. Even though

families pool their finance, spouses' make sure not to pool everything, but they hide all or some of their cash from their spouses. Kiewisch (2015) argues that secrecy about a financial resource within the household is a usual safeguarding strategy that enables women to become less dependent on their husbands, which at the same time creates a competitive dynamic between the spouses. Additionally, women often do not have much power nor have any voice to "go against" their husbands' will or decision. However, food belongs to a woman's domestic duties, whereas husbands usually do not have any decision-making power over this, thus, leaving food related decisions to their wives. Nonetheless, if this is to be considered that women have power to, is another issue, since food is already a predetermined responsibility as well as an obligation for a woman. Then, food and food practices are what a woman is supposed to do, thus acting, as she should within the vast ocean of 'doxa' there is no evident exercise of power (Bourdieu, 1977). It is rather what Kabeer (1999) describes as a 'non-decision' making power where the gendered duties and responsibilities have already decided what and how women and men in Lushoto and Pangani are supposed to act and by doing this they are enforcing and reproducing said structures. Thus, intra-household decisions regarding food are reached through gendered responsibilities but can also be controlled with a husband's decision-making power over his wife. Both gender and a financial resource creates an unequal decision-making hierarchy from the start. Nonetheless, there is a question if or how women have had the opportunity to expand their already predetermined decision sphere after Scale – N trainings. Let us now continue with, if and how women are able to act upon knowledge that they have gathered from Scale – N nutritional trainings and in turn, how it possibly affects power relations within the households.

6 Nutritional education

The aim of this chapter is to continue to present a compilation of the empirical material to you as a reader, now with a focus around the second research question together with the theoretical concepts; if or how nutritional education contributes to women's ability to exercise choice in relation to Scale – N nutritional interventions. Since the findings from the two villages are similar, they are mainly discussed together throughout this chapter as well.

“Mama is the one that knows”

Families in Pangani and Lushoto usually spend their money on food or other necessities. After participating in Scale – N nutritional education women have increased nutritional knowledge, which they can use and prioritise “better food” for their families and themselves. For instance, they have the possibility to practice a balanced diet, new cooking and preparation methods to keep more nutrients while cooking but also different cleanness schemes. Agarwal (1997) argues that by participating in official trainings provided by an NGO strengthens rural persons, fall-back position, therefore increases the ability to bargain within a household. Let us continue and explore if this is possible to comprehend from the empirical material. Daudi, again, he expresses,

My wife is the ones that prepares [food] and therefore she knows more [...] I decide on what [food] to buy, because I am the one that is finding money; if I am busy, I will give money to my wife and tell her what to buy, usually maize or sorghum. We consider if it is good, because if you remove the shell you will also remove nutrients. Wholegrain is better; nutrients are in the outer shell.

Daudi's wife is more knowledgeable about food and is in charge of domestic activities. However, since Daudi is in control of the household's financial resource he has decision-making power when it comes to food purchases. In addition, both Daudi and his wife participated in Scale – N nutritional trainings and from his statement, it is possible to capture that he has picked up knowledge from the trainings. Even though both Daudi and his wife participated in Scale – N trainings, she is not part of deciding what kind of food to purchase. Thus, Daudi's participation has not lead to a joint decision-making in their household; the training has rather strengthened and reinforced Daudi's own power (c.f. Kabeer, 1999). As elaborated earlier, a financial resource together with his gender has already structured power relations within their household, which result in an unequal position between Daudi and his wife (c.f. Agarwal, 1997). Both of these factors together with participation in Scale – N activities strengthen his bargaining power, which simultaneously inhibits his wife from even entering in an intra-household bargaining situation (ibid.). In contrast to Daudi, Laura's family has a different way to make decisions regarding food. I meet Laura on the 20th of February, every month on this day it is an open market at the village centre in Pangani. A boy is selling ready to eat white corn, three men are slaughtering a goat, Laura, and her family lives just a stone throw away, and Laura herself sold chapatti earlier in the morning, she says,

I know most and I prepare all food [...] *Baba* usually buys the food, but both decides on what to buy. We are using millet as our main food and if there is no food, my husband can decide. If there is smaller things, like vegetables or meat I can decide.

Compared to Daudi, Laura and her husband make joint decisions regarding food, but if they are out of staple food (millet), there is no question that her husband will go and purchase it. As in all other households, Laura is the one that processes and prepares the food, and is, according to herself, most knowledgeable about nutritious food. Staple foods are considered a bigger expense and therefore fall under her husband's decision-making sphere. While she makes decisions about smaller issues, like vegetables or meat, however, meat is typically something expensive and therefore consumed on rare occasions. Meat would usually fall under her husband's expenses, but here Laura explains that she has possibility to decide. As mentioned, there is always a flow of cash in households, which can result in that Laura does not have the means to purchase vegetables. Laura lives in Pangani, where Scale – N has not introduced pocket gardening since the village suffers from severe water scarcity. It is not possible for Laura to solemnly depend on either cultivating vegetables or buying vegetables but rather a combination of the two. Laura explains that, "I am growing vegetables, like sweet potato leaves and pea leaves, somewhere else [not

their farmland], where water passes and now I am waiting for the rain to come and then I can grow it.” After participating in Scale – N nutritional training Laura has started to cultivate green leafy vegetables to enable her to have control over household consumption and through that be capable of practice a more balanced diet. It is possible to understand that Laura uses knowledge acquired from Scale – N trainings without needing to challenge her husband. Turning to Kabeer (1999) and the ability to exercise choice, Laura is able to, with the help of knowledge (resource) to choose and achieve a change (c.f. Kabeer, 1999).

All families do it differently, John and his wife have yet another way to make food related decisions. John explains,

She [wife] makes decision when it comes to food; I make decisions on what to farm. It is not important for me to make all the decisions, so sometimes we decide together, I cannot make all decisions by myself. If it happens that we disagree, we will leave the land until next season; we do not grow anything [...]. We might not speak to each other in a week, so we will just leave the farm until next time.

The hierarchy of decision-making between women and men is apparent in John’s household (c.f. Kabeer, 1999). For instance, John makes decisions on what to farm, which is considered an important and big decision while his wife makes decisions on everyday matter, such as food. However, he is one of the husbands that explicitly states that he cannot make all the decisions by himself, hence, he and his wife makes them together, which can result in a disagreement that they are unable to resolve. This results in that the family does not cultivate anything during this season, but waits until the next one. Agarwal (1997) argues that depending on resource or expenditure in question, it is possible to find both cooperate, non-cooperative and collective decision-making within a household. John shows experience on collective decision-making even though he has control over decisions regarding what to cultivate. Nonetheless, John has a greater advantage in an intra-household bargaining process, since he is a man, he has a financial income and he owns their farmland. Ownership and control over farmland is according to Agarwal (1997) the most important factor for a rural persons’ fall-back position, which provides John with a higher advantage in a bargaining process than his wife. That further enables him to overrule his wife and make decisions within their household. Even though John has a stronger fall-back position than his wife, they enter into a bargaining situation and when they disagree, he and his wife literally stops speaking to each other, which is an outcome of a failed process. In addition, it is worth noting that even though they depend on their land, John expresses that they will leave their land until next season. In subsistence farming communities like Pangani and Lushoto, there is usually no

opportunity for families to “skip a season”. However, John and his family have 15 acres spread out on different plots around the village; an average farm size per family in Tanzania is 2 acres (UNDP, 2014). Thus, the size of their land can be one possible explanation of their behaviour. In addition, both he and his wife participated in Scale – N trainings, he continues, “Before no one was an expert. I believe that my wife is most knowledgeable [about nutritious food].” His wife, has probably since an early age been taught by her mother on how to prepare ugali, the green leafy vegetables, *maharage*, and meat. However, it is not until she participated in Scale – N trainings that John perceives his wife as an expert. In other words, for women to be perceived by their husbands as experts regarding food, they need the support from a source that is both official and outside of the village (Seebens, 2011). As Scale – N is an official source they are therefore considered more trustworthy, rather than one’s friend or neighbour (c.f. Seebens, 2011). Someone’s power within can increase with knowledge, thus, to partake in Scale – N trainings provides participants with knowledge that enables women to make decisions in their households. Self-esteem is what Kabeer (1999) defines as the power within, when someone has a sense of agency and want to act. As women’s power within increases they can therefore participate in an intra-household bargaining process on different terms than prior to Scale – N trainings (c.f. Agarwal, 1997; Kabeer, 1999). Now, let us return to changes in food within households.

Changes in food and preparations

Women and men express that Scale - N trainings have benefitted them in terms of knowledge regarding food and cooking methods. For instance, during the face-to-face interviews, women described new methods such as to cut food into larger pieces to keep the nutrients while cooking, use of a proper amount of oil, or that it is important to boil vegetables the right amount of time for the vegetables to remain with the nutrients instead of over-boiling them. There is also a question of having a more diverse and balanced diet, to have the right quantity of both ugali and green leafy vegetables. Still, there is a gap between knowledge and a behavioural change. Seebens (2011) argues that behaviour changes depending on a husband’s willingness to maintain or lose control, thus, if husbands include their wives into making joint household decisions. Nonetheless, Scale – N teaches participants to include a different variety and more of green leafy vegetables together with fruits, than they are doing now. In Pangani and Lushoto, there is not an abundance of fruits; there are perhaps a few mangos available in the local shops. Roza lets me know she has added baobab fruit to their diet,

[...] I buy food, and then I buy millets. This time of year, there are fruits, like mangos, that I sometimes can buy. If there are no fruits at all, I prepares baobab for my children. And, I bought chickens so that I will not lose my money.

The baobab tree, also called ‘the upside down tree’, is typical for Dodoma’s dry climate. The baobab can reach up to 30 meters tall; it stores water in its massive trunk during this season to be able to endure the coming drought. Because of the abundance of the baobab, Scale – N has been teaching participants to use the fruit from the baobab tree. Roza prepares baobab either as a juice or just as it is and serves it to her children. Roza is just one out of the participants that started to include baobab in their diets, most of the informants mentions it. Hence, participants of Scale – N trainings have learned how to use available resources and added it to their daily diets. The introduction of the practice of kitchen gardening has enabled households to have closer access to green leafy vegetables. Thomas and his family live in Lushoto, which is where kitchen gardening has been implemented. Thomas is one example, he expresses,

We are eating more vegetables; because of the pocket garden, we can eat fresh vegetables during both seasons. First, my wife joining Scale – N made us eat more vegetables. Before, we were only using the local vegetables but now because of the pocket gardens, we eat fresh vegetables during both seasons, like Chinese cabbage and *mlenda*.

Thomas experiences that they now, because of the pocket garden, eat more and have another variety of green leafy vegetables in his household. Participating in Scale – N nutritional education has enabled his family to have access to fresh vegetables during the lean period as well. Doss et al. (2012) argues that kitchen gardening is one strategy that subsistence-oriented farmers use to extend their food supply throughout the year, which also is emphasised by Scale – N (see ‘introduction of kitchen gardens’). Swai, he is another Scale – N participants that express an experience in changes of food,

There are big changes, before when someone [in the family] was sick and was brought to the hospital; they told us that this person did not have enough blood. Now it is good, my child was sick, now it was only malaria but the blood was fine.

Since Swai like Thomas lives in Lushoto, his family have their own pocket garden close by to their house. This enables them to have access to green leafy vegetables and based on this, Swai experiences that one of his children is better. Swai draw the conclusion that because they eat more green leafy vegetables their child is better.

However, it is hard to strip down and pinpoint the exact cause of their better well-being. In addition, besides the households' close access to a variety of green leafy vegetables, there is also a social aspect to consider, where there is a possibility for family members to meet and interact intergenerational and pass on important skills and knowledge regarding food production (Bonatti et al., 2017a). Ruel and Alderman (2013) discusses that there is little evidence of the effectiveness of kitchen gardening on maternal and child nutrition but that "[...] positive effects are shown for several underlying determinants of nutrition, including household production and consumption, maternal and child intake of target foods and micronutrients, and overall dietary diversity." (Ruel and Alderman, 2013, p.540). Hence, kitchen gardening are one piece of the puzzle of maternal and child nutrition, and can be seen as a complement to Scale – N nutritional trainings. Another angle, inspired by Ruel and Alderman (2013), is, if or how, kitchen gardening has affected women's time and practice within households. However, this investigation is focused around women's empowerment in relation to nutritional education; thus, it is unfortunately not explored here.

When it comes to household resources, such as food allocation, husbands usually have greater privileges and are given priority of food especially animal protein rather than their wives (Farnworth et al., 2013). This is one gap identified by Scale – N, which is believed to be caused by lack of knowledge about different nutritional needs that household members have, e.g. a lactating woman or a child's first 1000-day window both require more nutritious food and energy during these phases (Bundala et al., 2017). However, Agarwal (1997) argues that food allocation norms are often based on perceptions about contributions that result in who deserves what within a household, here quantified by men in FGD in Pangani,

[...] and Antony will be the one that gets the food first. Antony is the head of the household; he deserves all the respect, besides that it is our tradition that the man should be served first, so he will get the good parts of the meat.

In this fictional Dodoma family, the participating men say that Antony is the one that should be served first and at the same time gets the best part of the meat, which means that their children and Veronica have a secondary claim to said resource. The men speak from their own experience; they perceive that they, as men and therefore the head of the households deserve the finest food. This implies that a husband's needs and contributions to their household are bigger than that of their wives. For instance, a woman's domestic work does not contribute to a family's monetary wealth as her husband's work does if he has entered the labour market. Thus, her work does not contribute to a cash income nor is it visible outside of their household, which is often seen as less valuable (Agarwal, 1997). Norms and social perceptions

are factors that Agarwal (1997) argues have the possibility to strengthen or weaken a person's bargaining power. In this case, food allocation norms are from the start biased against women and therefore strengthen Antony's and weakens Veronica's bargaining power in the same intra-household process (ibid.). Nonetheless, it is possible to negotiate both perceptions and norms, let us continue discuss food allocation with Roza as an example. Roza shares what happens in her household,

Now I have learned, meat food, before I prepared good parts for my husband,
but now it goes to our kids. Myself, I eat meat 2-3 times per month. I can stay
for a long time with not eating meat [...]

By participating in Scale – N nutritional trainings Roza has started to prioritise her children rather than her husband, hence, by participating in Scale – N activities her bargaining power has strengthened and Roza can achieve a change in her household (c.f. Agarwal, 1997). However, even though Roza prioritises their children, she has third claim to household's resources since she prioritises her husband over herself. Turning to Kabeer (1999) and her discussion about power within, and that knowledge acquire from Scale – N nutritional trainings can increase ones' sense of agency or power within (as elaborated earlier). Besides Roza's increased knowledge of food and nutrition and Scale – N further support her when she is reprioritising food distribution in the household (c.f. Agarwal, 1997). Roza is one example that by participating in Scale – N trainings enabled her to change food habits within her household. With the help of a resource (nutritional knowledge), Roza is able to act and achieve a change in food allocation within her household. Nonetheless, Kabeer (1999) argues that this behaviour, of mothers prioritising their children and husbands can be seen as chosen by women themselves. Underlying explanations are hard to untangle, nonetheless, this can be explained by turning to Bourdieu (1977) and 'doxa'. Both women and men perceive that 'this is the way it is', hence, Roza has internalised a behaviour that puts her, as a woman and mother, in a subordinate position and of her lesser value than her husband, which can undermine her own well-being (c.f. Kabeer, 1999). Chant (2016) argues that there is a belief or perception in development practice that girls and women are on average more altruistic than men. However, this can be interpreted in multiple ways; for instance, Agarwal (1997) argues that girls are socialised into being a nurturing caregiver, probably because they are more likely to be dependent on their children later on in life than their spouse. Coming back to Roza, on the one hand, by prioritising her children and husband for their welfare can be regarded as an act of altruism. On the other, by prioritising her children and husband she is giving up her immediate welfare for future security, which can be considered as an act of self-interest (Agarwal, 1997). In this patriarchal society a woman is dependent upon her sons for both social and

economic support later on in life. In other words, she invests in her children now to tie them closer to her so that they can provide help in the future, if needed (ibid.). Returning to food allocation and the issue of nutritional status, by prioritising children and her husband results in that Roza is left with food of lesser nutritional value. However, meat is not the only nutritious food there is. In Roza's family they, "eat ugali with *mlenda*, and sometimes we can also have mango. During the rainy season we eat pea leaves and local amaranth, just yesterday we ate it." Even though, Roza does not prioritise meat for herself she still expresses that she prepares and consumes food from different food groups, i.e. practicing a balanced diet, which has the possibility to enhance her own nutritional status.

Besides introducing other green leafy vegetables and new techniques of food preparation, Scale – N has as well been focusing on water, hygiene and sanitation (see figure 2). One possible reason for experience a change of well-being with their children or themselves can be a higher level of cleanliness in households. Thus, changes in household practices can include hygiene as well as food preparations. Laura in an example, she expresses,

When you are coming from the toilet you have to wash your hands with soap, before touching anything, baby or food. I am practicing it, both, if we do not have any soap at home we use ashes, and I am cooking vegetables the way I was taught.

Laura started to practice improved hygiene after attending Scale – N training, she has applied new techniques regarding both food and hygiene. Martha on the other hand mostly discuss about new cooking methods. Martha expresses, "They [Scale – N] also taught us how to cut vegetables and use oil, before I never used oil. I buy oil from the shops or we produce sunflower to make oil out of it." As she points out, use of oil has never been part of her cooking technique prior to Scale – N trainings. However, Bonatti et al. (2017b) reports that there is rather an overuse of oil when preparing food, since the use of oil perceived by villagers to be a sign of wealth. Nonetheless, there has been changes within Martha's and Laura's household after the nutritional trainings. Both of them have acquired knowledge through Scale – N and adopted new preparation and cooking techniques, thus, both have the power to exercise choice with knowledge and can achieve change (c.f. Kabeer, 1999). Martha and Laura are examples of how participating in Scale – N trainings has increased their power within and therefore their power to and the ability to use oil when preparing food as well as sanitation and hygiene. By official support by Scale – N and their educational training there has been an increase in women's leverage in intra-household bargaining process. Even though participants express that they now know more about the nutritional value of food, there is still a question if or how to keep

and use the newly acquired knowledge within households. Men are often not targeted when it comes to nutritionally sensitive programs (Ruel and Alderman, 2013). However, empirical evidence shows that successful nutritional projects involve men as well (Doss et al., 2012). Hence, let us continue with discuss targeting men in nutritional projects such as Scale – N.

To include husbands

As shown, domestic work is a woman's duty, since childhood daughters are taught by their mothers how to prepare, process and cook food while sons learn other traits. The Scale – N project started off with only targeting women but in the ongoing process started to involve husbands as well. None of the male informants have according to themselves, had any prior training or knowledge regarding food nor about nutrition, which was also identified by Scale – N survey (Bundala et al., 2017). The lack of nutritional knowledge was particularly highlighted by one of the men FGD Pangani, when probed into what they meant regarding nutrition and food, I got a more thorough explanation "[...] this food is what the elders ate; it is something from our grandparents. Before we were just taking food without knowing, but after the trainings we know how the food functions in the body." The male participants express that Scale – N has provided them with knowledge regarding nutrition and why/how, the body requires nutrients. Women on the other hand, usually get basic information regarding nutrition and health during pregnancy at local RCH clinics in Lushoto and Pangani (Bundala et al., 2017). Villagers themselves perceive RCH clinics as something for women and children and therefore resulting in a low attendance by men (ibid.). Scale – N argues that this is one reason why households have a low adoption of the best practices regarding food (ibid).

Chant (2016) and Grosser and Van der Gaag (2013) argues, that there is a need to involve and work with the relatively powerful and less powerful, in other words, to target wives and husbands together. According to Doss et al. (2012) successful strategy is to target husbands (and community leaders), "[s]uch an approach avoids isolating women or angering men, building a better social environment for women's success specifically and community success more generally" (Doss et al., 2012, p.3). In other words, nutritionally sensitive interventions should incorporate men into traditionally female oriented projects, to create a better understanding between wives and husbands. In addition, O'Brien et al. (2016, p.277) argues that since husbands have "important roles in household decisions, [...] targeting couples for training, it is important for women's empowerment in agricultural technology adoption." Thus, to enable women to make decisions regarding food it is important to include men in nutritional trainings. When comparing transcripts from FGD with women and men

respectively, it is apparent that they perceive things differently. FGD is still focused around Veronica and Antony as a typical Dodoma family, which are used to enable participants to draw on experiences from their own lives but exemplified on this fictional family. Let us first consider men in Pangani, they agree that, “the one that got the nutritional training will bring it home [the technology/knowledge] and they will discuss together and then they will agree together and apply the new way of eating.” While women FGD in Pangani say that, “even though it was Veronica that was the one that heard about it, and brings home the technology, Antony will be the one that decides and tries it first”. Men and women FGD express different realities, and what is interesting here is in their difference of perceptions, rather than to get closer to a single ‘Truth’. The women FGD express that their husbands have power over themselves in a situation like this. This authority position is possible to comprehend through their decision-making power, which they possess even when it comes to food and nutritional knowledge within their households (c.f. Kabeer, 1999). However, the gendered responsibilities tell us that food related decision belongs to the wives decision-making sphere but the participating women experience that their husbands are in a dominant position and overrule them regarding all decisions (c.f. Kabeer, 1999). While the men FGD argues that it is a joint decision and it does not matter whether it is their wives or themselves that participated in Scale – N trainings. In addition, the participating men perceive that they have a more unitary household, where spouses have a joint interest and equal parts of making household decisions. Whereas women perceive the situation differently, they lack both power within and therefore power to, to even enter an intra-household bargaining process with their husbands.

I meet Mmoti by his house, just between their morning meal and when his children leave for school. We settle down in the shades provided by his brother’s house, as many others in Lushoto and Pangani, brothers live close to each other, since the son of a family remains while the daughters move away after marriage. Mmoti explains,

No, I have never participated in anything like this before. I learned about nutrition and the effect of losing nutrition for babies and mothers. If a baby lacks vitamin, s/he is not growing physically or mentally. This was new knowledge for me.

Mmoti demonstrates on what he picked up and learned from Scale - N nutritional trainings, such as the importance of the 1000-day window (Ruel and Alderman, 2013). This is also apparent with Charles, “We were taught [by Scale – N] to take vegetables regularly to our meals, also to give children meat, they need to grow. So, when we have meat we have to prioritise and give it to our children.” Hence, Charles

has picked up knowledge, especially regarding children's nutritional needs. When a husband understands when and why a child has other nutritional needs and starts to prioritise their children (or even wives) instead of themselves food allocation norms start to transform (as elaborated earlier). Raising husbands' knowledge can then be the first step towards a change in food allocation norms, which hopefully are not biased against the sex of the child.

Tito participated in Scale – N trainings three times and he expresses that when, “[...] children lack blood, they need better food, we changed and now our children are okay.” Tito experienced that changing food is the reason why his child is better off. However, it can also depend on that they have a better cleanness and washing routine than before. Tito has probably no experience with food preparation nor a say in the matter, since all of this takes place within a woman's sphere. Thus, his wife has the possibility to make changes (without being able to strip down and pinpoint to exactly what it is that has affected their children's well-being) without Tito being included and use the power he has over his wife (c.f. Kabeer, 1999). As mentioned earlier, Seebens (2011) argue that official training provided by an organisation from “outside of the village” is a more trustworthy source than information provided by a friend or a neighbour. Husbands then trust their wives' knowledge more, which enables wives to enter a household bargaining process that can result in joint decision rather than only his decision. Another question is that, if or how a woman has the ability to make decisions on what to cultivate, which generally is within a husband's decision-making sphere. Scale – N has included production of food crops into their nutritional educational material since farming is the main activity as well as source of income in Lushoto and Pangani (see figure 2). However, it is not possible to untangle if or in what extent women are part of decisions regarding what to cultivate after participating in Scale – N trainings.

In some of the households, the division of decision-making does not apply to them, a husband decides about everything including food (what to purchase or prepare). This can as well be tied to earlier discussion about being an ‘expert’ or not (see ‘*Mama* is the one that knows’). Even though wives learn from early age how to prepare and cook food, it is not until they participate in Scale – N trainings that they are perceived as experts in and about nutritious food. Aregu et al. (2010) and Farnworth et al. (2013) argues about the positive impact on targeting wives and husbands in couples training. Aregu et al. (2010) argue that couples' training with dairy farmers in rural Ethiopia results in a more equal workload between a wife and husband. Participants of the couple trainings expressed that it, “allows partners to understand, assist and appreciate each other technically so that they gradually build up their knowledge together, [...] It also helps in breaking taboos about the traditional gender division of labour and contributes to bringing about gender equality.” (Aregu et al., 2010, p.42). While Farnworth et al. (2013) discussed that by only targeting

women has the possibility to create a distrust between spouses, but by involving husbands in trainings lead to husband's not feeling ashamed to conduct typical female tasks within the household. Thus, targeting spouses together has helped participants to create an understanding of the other's point of view, and through this, they have shown a behavioural change. In addition, participants believe that the traditional gendered division has the possibility to be transformed by couples' trainings. Returning to Scale – N, it shows that by targeting husbands as well it can affect the double workload as women face in Pangani and Lushoto. Let us now turn to and discuss what kind of pathways nutritional education can create within the household.

7 Pathways to empowerment

The earlier two chapters have focused on intra-household decisions and if or how nutritional education contributes to women's ability to exercise choice, both in relation to food. The aim of this chapter is to take the empirical material a step further and through an inductive process focus on what kind of pathways to women's empowerment nutritional education can create within households. In other words, how Scale – N nutritional education influence women's empowerment within households.

Women's empowerment as a mean to an end?

Transforming gender relations is a process that requires strategic collective action both in the public arena as well as the private, it requires from power over towards power within and power to (Chant, 2016; Farnworth, 2013; Kabeer, 1999). Kabeer (2001, p.21) argue that while agency is often operationalised as decision-making "it also encompasses the meaning, motivation and purpose which individuals bring to their activity, their sense of agency or 'the power within'". In general a husband has power over his wife, but when a wife can, with the help of education increase her self-esteem or power within, it enables her to act and exercise choice to achieve a certain outcome (c.f. Kabeer, 1999). It is possible to reflect if improved nutrition is a consequence of women's empowerment or rather if women's empowerment is a consequence of improved nutrition. However, for this thesis it is not important to reach a right or wrong answer, but rather to understand how it affects each other.

Herforth and Harris (2014) argue that knowledge regarding nutrition and health is one out of the four key components to create an enabling environment to generate pathways to women's empowerment. Hence, knowledge is one factor that is re-

quired for women, for them to be able to exercise choice regarding healthy and nutritious food within the household. When considering pathways to women's empowerment it is as stated above, when 'power over' changes and is channelled into power within and power to. With this empirical material, it is possible to comprehend multiple potential pathways to women's empowerment. For instance, when women practise a more balanced diet it increases household members' energy levels or, that through the adoption of pocket gardening it increases/secure access to green leafy vegetables during the lean period, which contributes to caring capacities and practices within the household (Herforth and Harris, 2014; Ruel and Alderman, 2013). However, to cover and provide a thorough explanation of all is too vast for this thesis; thus, here are three pathways drawn from the empirical material.

To challenge the food allocation norm

Let us start with knowledge, since this investigation considers knowledge as a resource, which is one factor that enables women to strengthen their fall-back position in an intra-household bargaining process (c.f. Agarwal, 1997). Roza, Charles and Mmoti have all been brought up as examples throughout this thesis regarding food allocation in their households. Roza has started to prioritise meat for her children rather than her husband (see 'changes in food and preparations'). Charles and Mmoti are husbands that participated in Scale – N trainings and by participating, they have learned of the implications when a child lacks essential macro- and micronutrients in its development phases (see 'to include husbands'). The premise here is that through knowledge from Scale – N results in that Roza has an increased self-esteem/power within and therefore power to exercise choice (c.f. Kabeer, 1999). In other words, she has the ability to make decisions about who gets what and how much food in her household. However, at the same time as Roza has reprioritised food allocation, it is possible to believe that Charles and Mmoti, as husbands, accept this behaviour since they have participated in nutritional training by Scale – N, which have enhanced their knowledge. To be clear, neither Charles nor Mmoti are married to Roza, they are examples of what is possible to draw from the face-to-face interviews. Nevertheless, enhanced knowledge regarding food enables participants to dispute the prevailing food allocation norm that exists in Pangani and Lushoto. Hence, the social perception about needs and deservedness is challenged in families and pushes prevailing norm about who deserves what and how much. Roza has, as shown, started to prioritise her children rather than her husband on the occasions when she prepares and serves meat. Although, nutritious food is not exclusively animal protein, it can also be milk or egg consumption (or the quantity of it) or that families started to practise a more balanced diet and include food from

different food groups. When women such as Roza act against said norms, and prioritise their children and/or themselves it is considered an achievement based on how women's empowerment are broken down into theoretical concepts. In practise, it results in that food allocation is based on a member's actual needs, such as a child's early development rather than perceptions about needs (c.f. Agarwal, 1997). When Roza challenges traditional food allocation and prioritises meat for their children or herself, it provides them with more energy that in turn affects energy expenditures (c.f. Herforth and Harris, 2014). Hence, with a higher level of energy it is possible to believe that women have the possibility to conduct other activities or businesses than before. However, it is difficult to predict how or on what women themselves want to "spend" their extra energy. Let us continue with energy levels but in a slightly different way.

Better health and well-being

Scale – N has introduced new preparation techniques in their nutritional trainings; women have learned and applied it at home, such techniques as to cut ingredients into larger pieces, which will keep the nutrients while cooking, or that there is a need to boil vegetables the right amount of time instead of over-boiling them. Scale – N has also introduced new reheating methods for the dried green leafy vegetables that enables nutrition to be preserved in the food while cooking. Besides strictly nutritional information Scale – N trainings also include that of water, sanitation and hygiene. Hence, Scale – N interventions have focused on cleanliness both on a personal level as well as in relation to food. For instance, women expressed that they have a better private washing scheme after visiting the restroom as well as washing hands, utensils and rinsing vegetables before preparation and cooking. The premise here is that women are practicing new preparation techniques together with a more thorough cleanliness scheme as they have stated, which enables them to build up a physical and mental strength.

Scale – N has increased women's power within and enabled them to change food related habits (as exemplified above). Knowledge together with the support from Scale – N is a precondition of a woman's self-esteem (c.f. Kabeer, 1999). As shown, there has been a change in food, which in turn provide household's member with a higher level of energy which results in better health and well-being, that either can be spend on caring capacity, to start or to intensifying an already established business or agricultural activities. A higher level of energy can also affect and increase a woman's voice, which strengthens her fall-back position, thus, enabling her to enter an intra-household bargaining process that she would have been denied earlier. In addition, better health and well-being are applicable on all household members, the mother as well as the father and their children, but for this pathway it is more

important to discuss pathways to women's empowerment rather than the fathers or children (since husbands, generally, are never in a disempowered position from the start). As with the previous pathway, it is impossible to determine if or how an individual woman wishes to use this energy. Nonetheless, when women have power within it leads to power to act and achieve certain outcomes (c.f. Kabeer, 1999). Let us now turn towards husbands and consider a husband's power over his wife.

From power over

Scale – N has, as mentioned, included men into the nutritional trainings, which has enhanced their knowledge regarding food and nutrition, also since participating in trainings, Swai and Thomas have adopted the practice of pocket gardening, which have according to themselves, resulted in better well-being for their children. Aregu et al. (2010), Chant (2016) and Grosser and Van der Gaag (2013) argues that targeting men as allies create a higher understanding of wife's and husband's workload and responsibilities. In other words, it is important for nutritional development programs to work with the relative less and more powerful, in other words, with women together with men. Targeting spouses opens a knowledge exchange between them that can support long-term effects on social norms and perceptions (Aregu et al., 2010). To include men in nutritional education creates an understanding regarding food and nutrition for husbands to understand about what is "good food" or not. Thus, being more willing to lose control over decisions regarding food and to trust their wives when they make decisions regarding food (c.f. Seebens, 2011). Turning to Agarwal (1997) and intra-household bargaining, educating husbands would then both ease control and strengthen women's bargaining ability for them to make joint decisions. In addition, husbands' authority power over their wives has the possibility to be challenged in all terms regarding food, inside and outside households, to enable joint decision-making on what to cultivate on their farmland. However, it is important to be aware that there is a possibility for the gendered roles to be enforced rather than questioned and contested, since the inclusion of men is done on the premise that they have decision-making power over their wives.

These three pathways to women's empowerment, which are described above are both similar and different from each other. In the first pathway, knowledge is treated as a premise to challenge food allocation norms within households, while in the second pathway knowledge is treated as a tool to change food preparation methods. Nonetheless, both pathways focus on women and, how knowledge can create a power within that leads to power to, which enables women to act and exercise choice to achieve a deliberate outcome. The latter pathway has shifted focus to consider knowledge in relation to men, to include them in trainings that are within the female norms and responsibilities and therefore female-oriented programs.

8 Concluding discussion

The aim of this thesis has been to explore and understand the relationship between women's empowerment and nutritional education on household level, in two rural villages in Dodoma region. Here I summarise the findings and discuss what implications it can have for development programs as well as future research.

To understand women's empowerment

This investigation is about food and women, to understand women's empowerment in relation nutritional education, exemplified with the Scale – N project. Numerous studies have investigated women's empowerment in relation to food and nutritional security. With empirical examples from central Tanzania, this study contributes to that same thread of scholarly research. To enable women to exercise choice in relation to food, I argue that there is a need to have a gender sensitive approach where both wife and husband are targeted in nutritional interventions.

Pangani and Lushoto are both subsistence-oriented farming communities, where households are guided by prevailing norms on who does what within households. Predetermined gender roles and responsibilities are obligations that are perceived by villagers as the 'natural way' of living and are not questioned nor disputed (Bourdieu, 1977). Spouses have decision-making power and are generally able to act within their own spheres without being questioned by the other (*ibid.*). When women and men comply with this gendered workload they are both enforcing and reproducing said pattern. For instance, women are expected to be in charge of domestic activities while men are supposed to conduct farming activities and to secure a financial resource for their families, which are internalised behaviour and are perceived by villagers as 'the way things are' (*c.f.* Bourdieu, 1977).

From face-to-face interviews and FGDs it is possible to capture that women have the ability to act upon knowledge acquired from Scale – N nutritional trainings. For instance, Roza has adopted the use of baobab and introduced it to her family's diet,

Laura has introduced a “better” hygiene practice, and Swai’s family as well as Thomas family have started practicing pocket gardening, which provides them with green leafy vegetables during the lean period. Martha, Jaqueline, Sara, Ester and Grace, have in general, power to make decisions in relation to food preparations or what foods to purchase. However, the gendered responsibilities have already provided them with a decision-making power within the domestic sphere; thus, it is rather a question of a non-decision power (Kabeer, 1999). Agarwal (1997) argues that gender frames intra-household bargaining possibilities, thus, women have a subordinate position in relation to their husbands in a bargaining process from the start. Possibilities to participate in an intra-household bargaining process are determined on a members’ fall-back position, which in turn depends on factors that can either strengthen or weaken someone’s position (Agarwal, 1997). Perceptions and social norms are factors that strengthen or weaken a members’ fall-back position, as well as support from the State and/or NGOs (e.g. Scale – N). Thus, when women participate in activities and acquire knowledge from an official source provided by a project like Scale - N their husbands perceive them as experts in food. For instance, with John, both he and his wife have participated in Scale – N activities and he expressed that it is not until now that his wife has become an expert in food. Thus, Scale – N has provided his wife with both knowledge and credibility and himself with knowledge, which enables his wife to change food related practices.

By participating in Scale – N trainings, Roza and Laura gain new or a greater amount of knowledge that builds up their power within, which can be crucial in having the possibility to exercise choice and achieve a change (c.f. Kabeer, 1999). However, another question is, if or how Scale – N’s nutritional education has affected women’s ability to decide what to cultivate, which is unfortunately not possible to untangle in this investigation. When men participate in the same nutritional trainings as their wives, Mmoti and Charles express that they understand what kind of nutritional requirements a child or pregnant women has during different development phases. Hence, participating in nutritional training increases husbands that results in that they do not question a reprioritise of food. As shown, food-related practices have started to change within households in both Pangani and Lushoto, and Scale – N nutritional education has affected household activities in different ways. A question remains, if food related changes will continue but also increase and turn into transformative gender roles, to further qualify and understand women’s empowerment in relation to nutritional education within households. At the same time to investigate spill over effects, if Scale – N knowledge has been able to be passed along to neighbours, which have not participated in the trainings, to explore if Scaling – Up of nutrition are increasing amongst Tanzanian living in the rural areas.

Throughout this thesis, women are in generally described as without having a voice and considered to be weak compared to their husbands, since they do not have

power to make choices regarding all aspects of food, especially on what to cultivate. This is not my intention but they live in an unequal structure, where they have a position that are defined by societal norms, which are affected by their gender as well as other factors. The oppressed woman is unfortunately a standard narrative in development practice (Arora-Jonsson, 2014; Okali, 2012). Empowerment is, as mentioned, to have the ability to exercise choice, to achieve certain outcomes based on resources. Research has shown that targeting women is not enough but there is a need to include men as allies in nutritional development programs (e.g. Aregu et al. 2010; Chant, 2016; Grosser and Van der Gaag, 2013; Kiewisch, 2015). Hence, lessons to be learned when it comes to nutritional education and women's empowerment are to target spouses, since husbands have important roles in household decisions (O'Brien et al., 2016).

At last

Finally, food is regarded by villagers as a female's responsibility, nevertheless there is a necessity to include and target men in nutritional educations such as Scale – N. Still, having said this, women cannot be forgotten and nutritionally sensitive interventions should not switch to only targeting men. However, to understand women's empowerment in relation to nutritional education Agarwal (1997, p.2) argue that “models and policies could go awry if intra-household dynamics are assumed (as they often are) to exist in isolation, without examining the extra-households socio-economic and legal institutions within which households are embedded [...]”. Therefore, further researched would be required to look beyond the household and on to the market, the community and the State. However, this thesis is unfortunately not the time nor place for such a thing.

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Appendix A – Interview guide face-to-face

Introduce myself and my research assistant, the purpose and aim of the research, inform the s/he that the interview is confidential, get a verbal consent, ask for permission to use audio recorder and see if the informants has any question before starting. Note: this is a general interview guide and these questions are the base from what I started from, every interview is unique and the questions have been adapted for each situation.

Scale – N trainings

1. Have you participated in a Scale – N training?
 - i. If no, continue on to next section – *food/daily diets and nutrition*
2. How did you hear about Scale – N? From whom and in what way did you hear about it?
3. Have you participated in something like this before?
4. What did you learn from the trainings?
 - i. What did you do?
 - ii. Was it new for you?
 - iii. Why did you go there?
5. Can you apply what you have learnt at Scale – N at home?
 - i. If yes, what have you changed?
 - ii. If no, why not?

Farming activities

6. How much land is owned by wo/men in this household?
7. How much land is farmed by wo/men in this household?
 - i. Who decides what to cultivate?
 - ii. What happens if you disagree?
8. What do you produce on the land? And, for what purpose? (*Subsistence, subsistence + selling?*)
 - i. Can you sell land without asking your husband/wife?
 - ii. Can you buy land without asking your husband/wife?
9. Do you have any animals? If any, what kind?
 - i. Can you sell animals without asking your husband/wife?
 - ii. Can you buy animals without asking your husband/wife?
10. Do you grow your own vegetables (i.e. pocket garden)?
 - i. If no, why not?

- ii. If yes, what kind of vegetables do you grow?
 - iii. Who decides what to grow?
- 11. Is there any village commons that you use together? (*farming land, water tap, forest, fallows etc. ...*)
- 12. Can you get any help from your neighbors or others in your family that don't live with you? Do you do any activities together? (*During farming season, fetching water, taking care of children, for harvest, loaning money...?*)
- 13. Do you meet your neighbors? When and why?

Food and daily diets

- 14. What is a nutritious diet for you? (*let the informant make a list*)
 - i. What does it mean?
 - ii. How can it be achieved?
 - iii. Do you and your spouse receive different kinds of information about nutrition?
- 15. Out of these ingredients/foods, which ones can you eat in your home? And, why?
- 16. What do you mainly eat? And, why?
 - i. What did you last eat and when was it?
- 17. In your opinion, who in the household is most knowledgeable about what foods are good for children? Why?
- 18. Who usually makes food purchases in your household?
 - i. Where do you buy this food?
- 19. How does your household usually decide what foods to buy?
 - i. Who is involved in these decisions?
 - ii. What factors influence these decisions?
- 20. How do you decide which food you are going to eat in the house?
 - i. When you decide what food to eat in your house, do you consider whether this food is 'good'/healthy for you? That is, do you think about nutrition when you are thinking about household food decisions? If yes, how so?
 - ii. Has this changed anything after participating in Scale – N activities?
- 21. Who prepares and cooks the food? And, why?
 - i. Is it for your own need, to sell at the market or to exchange for something else?
- 22. What different roles and duties do wo/men have within the household?
- 23. What do you think is the most important role/duty a wo/men has within the household?

24. What different jobs do wo/men have within the household?
 - i. Can you list these work eg. off farm work, domestic work, farm work for subsistence purposes, farm work for generating income.
 - ii. Which one of these are most important for your and your family?
25. Given your economic situation today, how does this affect your and your household's diet/ food security:
 - i. Can you eat enough food and the food that you want to eat? Why/ why not?
 - ii. Can you do this throughout the year?
 - iii. Has this been affected by your participation in the trainings? If so, how?
26. Have you changed anything after participating in Scale – N trainings?

About money and decisions made using it

27. Do you work outside of the household?
 - i. If yes, with what?
 - ii. If no, from where/who do you get money?
 - iii. Which one of all activities are most important?
28. Do the members in your household keep their incomes separately? Who is typically in charge of managing the cash?
29. Who in your household contributes the most income to household expenditures?
 - i. What about household food purchases specifically?
 - ii. What about healthcare expenses specifically?
 - iii. Has this division been affected in any way by Scale-N? How? *(To interviewer: e.g. if the woman earns more now perhaps the man withdraws some of his funds)*
30. When you have money what do you spend it on then? And, why?
 - i. Who decides on what you spend money on?
 - ii. Who pays for common expenses within the household?
31. Who takes care of the children? And, why?
 - i. Who takes care of the children when they are sick?
 - ii. Who pays for school fees? Who pays for medicine when they are sick?
32. How much of your time is going to work in the home?
33. Who makes decisions at home?
 - i. Decisions concerning how many children, schooling, where to live?

- ii. Is it important for you to make decisions?
- 34. What happens if or when you disagree?
 - i. When it comes to issues regarding children?
 - ii. When it comes to issues regarding food crops and cash crops?
 - iii. When it comes to issues regarding what animals to buy?
- 35. Access to credit – can you apply for a loan? How?
 - i. Do you have any loans? If yes, why?
 - ii. If you take a loan, is it only for yourself or someone else as well?

Last remark: Do you have any questions or comments for me?

Short background of informant:	
Name:	Contact:
Age:	Gender:
Place of birth:	Educational level:
Marital status:	No. of children:
Ethnic group:	No. of household members:

Appendix B – Guide to focus group discussions

Introduce myself and the research assistants, the purpose and aim of the research, inform them that the focus group is confidential, get verbal consent, state that it is okay for them to leave if they feel like it, ask for permission to use audio recorder and see if the informants has any question before starting. Push on – feel free to talk to each other and there are no right or wrong answers!

I would like to ask you about how decisions are usually made in households in your community, focusing on food preparations and eating habits. I'd also like to ask you about who is generally responsible for food-related tasks.

1. Can you give some examples of what are 'good' and 'healthy' foods?
2. How do you know these are 'good' foods?
3. In a typical household, who knows most about nutrition? Why?

Now, let us take the example of a very typical couple that is busy with farming activities in this village. Let us call them Veronica and Antony. Veronica and Antony live with their children, a twelve-year-old girl, a nine-year-old girl, and a seven-year-old boy. In this table, you can see that I have listed all of the household members who could be involved in food-related work or decisions.

4. Now imagine that it is time to prepare a meal for the family. Who is involved in preparing the meal? *(Pause for response)*
 - i. What do you think of when you decide what to prepare and how?
5. Which of the following factors are most important for choosing what to prepare and why? *(Even if all of them are taken into consideration, please ask the respondents to select one or two that are most important)*
 - 1) *the time it takes to prepare the food;*
 - 2) *how difficult (physically demanding) it is to prepare the food;*
 - 3) *the quantity of food available in the home;*
 - 4) *the amount of money available for purchasing foods;*
 - 5) *the diversity of different foods available for use (either produced or through purchase);*
 - 6) *the availability of cooking fuel (which?);*
 - 7) *the availability of water or other inputs (which?) for food processing;*

- 8) *to get a balanced diet;*
- 9) *to change from the regular foods;*

6. Still thinking of our typical couple, Veronica and Antony: How do they decide what kind of food(s) to buy?
7. Whose responsibility would it be to provide money for food related expenses? (*Pause for response*).
 - i. Would that depend on the type of food expense (e.g. buying grain vs meat)?
 - ii. Who makes decisions on the budget for food?
8. Who would go to the shops/market to buy food: Veronica and Antony or another household member?
 - i. Would this person be able to decide on his or her own when to go to the market or would s/he have to ask somebody for permission first? If so, who would that be?
9. Now imagine that it is mealtime and a meal has been prepared, who from this typical family would decide how to distribute food among household members?
 - i. Who will serve the food to household members?
 - ii. Who will get food first? Why?
10. What if Veronica and Antony found out about a new food or practice related to healthy eating. Whose decision would it be to try eating this new food in the household? Would it matter whether it was Veronica and Antony who first heard about it?
11. Veronica and Anthony has several chickens at home, do they keep them mainly for selling or for eggs (and then for their own consumption)?
12. Still imagine Veronica and Anthony as a family, and they as many others families, they pool their income together.
 - i. What does that mean practically?
 - ii. Who are in charge of the cash?
13. What happens when Veronica and Anthony disagrees?

Last remark: Do you have any questions or comments?