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## EDITED BY

Albie F. Miles,  
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## REVIEWED BY

Pablo Pérez-Akaki,  
Monterrey Institute of Technology and Higher  
Education (ITESM), Mexico

## \*CORRESPONDENCE

Meike Brückner  
✉ meike.brueckner@gender.hu-berlin.de

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# The hidden end of the value chain: potentials of integrating gender, households, and consumption into agrifood chain analysis

Meike Brückner<sup>1\*</sup> and Karin Sardadvar<sup>2</sup>

<sup>1</sup>Division of Gender and Globalisation, Humboldt-Universität zu Berlin, Berlin, Germany, <sup>2</sup>Institute for Sociology and Empirical Social Research, Vienna University of Economics and Business (WU Wien), Vienna, Austria

The aim of this perspective paper is to reinforce the analysis of gender relations in agrifood chain research and integrate the household and the work and consumption taking place there. In the value chain discourse, approaches that integrate households and consumption as an analytical dimension exist, but the last stage often remains hidden. To take a holistic view on value chains integrating the *hidden end*, we apply feminist economic perspectives and gender analysis to agrifood chains. This paper builds on our own research while integrating it with other scholars' empirical work and the theoretical literature concerning gender and value chains. Drawing on empirical examples from both the Global North and South (e.g., on the meat, tomato, seafood, and African Indigenous Vegetables chains), we illustrate the importance of households and consumption to value chain analysis with three examples: Firstly, we demonstrate how commercialization in agrifood chains impacts consumption practices and the food-related care work of women; secondly, we discuss how market-oriented reforms to production in a globalized economy restrict control and access to food for producers; and thirdly, we illustrate that consumer appetite influences working conditions in food production and policies. The examples underscore the fact that households and consumption are not isolated components, but are embedded in a complex agrifood system. In the final part of the paper, we propose an agenda for making this hidden end of the value chain and its links to gender, the household, and consumption more visible.

## KEYWORDS

value chains, agrifood chains, feminist commodity chains, food consumption, gender, indigenous food, household

## 1. Introduction

In this reflection, we aim to shed light on the *hidden end* of global agrifood chains: the household, and the unpaid work and consumption taking place there. We focus on these dimensions of food chains from a gender standpoint, contributing a much-needed perspective on agrifood chains. We argue that neither the household as unit of analysis nor consumption as a social practice have been sufficiently studied and represented in agrifood chain research.

Scholars as well as civil society and political actors have already called for more integrative and interdependent thinking in agrifood studies and politics. Different approaches have been proposed in order to move towards a comprehensive perspective and to challenge the

production-consumption dichotomy; these include nutrition-sensitive value chains (Allen and de Brauw, 2018), post-farmgate agrifood value chains (Maestre et al., 2017), telecoupling effects (Liu et al., 2013), prosumers (Ritzer, 2015), and a focus on meal cultures in value chains (Teherani-Krönner, 2017; Musotsi et al., 2018). While this perspective is thus not new, we see the need to highlight, sort, and reassert this perspective to understand the complexity and inextricability of agrifood chains, specifically by including a perspective on households and consumption.

The purposes of this paper – to strengthen a gender perspective in agrifood chain research in general and to integrate the household and the work and consumption taking place there in particular – are inspired by our own research experiences. The first author conducted research in Kenya on locally produced and consumed vegetables called African Indigenous Vegetables (AIVs)<sup>1</sup>, in which the strong relationship between the different nodes in the agrifood chain became evident in various findings. Thus, this paper builds upon our own social scientific research (Brückner, 2020) while integrating it with other scholars' empirical work and the theoretical literature. To build our perspective and to take an integrative view on value chains, we apply feminist views and gender analysis on agrifood chains. This paper is guided by the following questions: Where and how do aspects of households and consumption unfold in the agrifood chain? And how can gender analysis help to make these visible?

In order to reflect these questions, the paper is organized as follows: In the next two sections, we introduce gender as an analytical category for agrifood chain analysis and identify three reasons why household and consumption have played a marginal role in agrifood chain research and discourse. Following this, we draw on selected empirical examples from both the Global North and South to illustrate the many facets of consumption and the roles they play in agrifood chains. Situated at different nodes, these three empirical contexts offer an understanding of the important role of households and consumption in agrifood chains, illustrate the importance of looking at gendered dimensions of value chains, and demonstrate the relevance of the proposed perspective. In the final part of the paper, we propose an agenda on how to make the hidden end of the value chain and its links to gender, the household, and consumption visible.

## 2. Theoretical backgrounds

### 2.1. Gender, households, and consumption in agrifood chain research

Gender plays an important role at different nodes of the commodity chain. All over the globe, labor markets are profoundly structured by gender, resulting in considerable horizontal and vertical segmentation as well as pay gaps (ILO, 2018). Gender relations intersect with other categories of social inequality, such as age, ethnicity, race, class, religion, and sexual orientation. We understand gender in this context as a “social ordering principle” (Young, 2010, p. 265), which is neither static nor fixed, but can dynamically change over time.

<sup>1</sup> About 200 AIV species have been recorded in Kenya (Opiyo, 2014), including the commonly consumed spider plant, African nightshade, and amaranth.

The food industry in particular has been described as one that exacerbates and reproduces inequalities based on race, class, and gender (Allen, 2016; Haley et al., 2020; Weiler and Grez, 2022). Women make up one third of all agriculture workers globally (Giner et al., 2022) and they are frequently employed on a seasonal or temporary basis (ILO et al., 2007). Women tend to combine formal and informal labor on the farm; thus their flexible labor often sustains agricultural work (Prugl, 2004). In agrifood chain scholarship, gender has also been considered a category that shapes the everyday lives of actors and is deeply entrenched in food politics (e.g., Kaplan, 2011).

Focusing mainly on paid work, much agrifood chain research has overlooked the importance of the household and the unpaid work done there, primarily by women. As a consequence, perspectives that include the area of consumption, such as household practices and decision-making with regard to food, are often missing from the analysis of agrifood chains, and so do food-related care practices. While gender studies in agrifood chains have been widely recognized, approaches that conceptualize and study the household level, the unpaid work done there and the consumption practices in their complexity are not fully incorporated in the value chain discourse. In the next section, we identify three main limitations that have led to the disregarding of household and consumption.

### 2.2. Three reasons for overlooking the relevance of households and food consumption

The early stages of gender analysis in value chain research were marked by a focus only on women and influenced by development practice and policy. Over time, the research field moved to a more complex gender approach in which women, men, and gender relations were addressed. As Dunaway (2013, p. 22) highlights, households are not only important for commodity chains in terms of the added value they provide; rather, “they are the structural end points of commodity chains” (Dunaway, 2013). In recent decades, feminist commodity chain analysis has re-included the household in value chain analysis. Feminist commodity chain analysis, according to Ramamurthy (2013, p. 40) is,

a method for researchers (1) to pinpoint and investigate the different nodes of a global commodity chain in which women are key agents, (2) to understand how gender and sexual ideologies structure social relations and code value in the production and consumption of commodities, and (3) to track how value is created, extracted, and distributed in commodity circuits so as to accomplish the social reproduction of labor and of capital.

Moreover, a focus on *livelihoods* appeared (Kleiber, 2014), which allowed social, cultural, political, and ecological issues to be considered (Weeratunge et al., 2010) and challenged the narrow focus on employment and income (Krishna, 2012). “[This] approach created a broader understanding of the environmental and social context in which livelihoods are pursued and moved analysis beyond looking at more narrowly defined ‘employment’” (Weeratunge et al., 2010). Adopting livelihood approaches also held the potential to include questions of justice, that is, asking who benefits and who loses from

dominating systems, and how livelihoods are impacted by different dimensions of inequality.

Yet the integration of a gender perspective into agrifood value chain analysis was and still is often guided by the goal of including women in agricultural production and empowering them economically. Thus, the first reason why household and consumption have been neglected, we argue, is this productivist framing, which has inevitably led to a focus on economic dimensions and empowerment narratives that fall short of including multiple aspects of life, such as social wellbeing, community cohesion, local and cultural ties, or individual agency and self-determination. Predominant research themes on the subject of agrifood chains have been bargaining and management power. Such approaches are important because they tackle the position and decision-making power of workers in the value chain, yet this focus remains restricted to an economic view. Studies have shown, for example, that the universalist assumption of increasing economic gains or agricultural productivity is not the only desirable goal for workers. Instead, in some cases, community building, education of children or gaining respect are more important (Cook, 2020).

A second reason we identify is the way the household has been conceptualized and addressed in value chain research. Engagements with the household have concentrated largely on poverty alleviation. This poverty-driven take on the household – again based on monetary criteria – has delivered important findings but kept the work and the consumption taking place on the household level invisible. Emphasis has been further placed on decision-making processes at the household level, mainly in relation to access to resources and services. By studying the share of household labor, care work has been implicitly addressed with this approach, although care work has frequently been framed as a burden that leads to time poverty. The knowledge, creativity, and skill needed for this work is often not considered, nor is the life-sustaining and fundamental role of care and domestic work for society.

A third shortcoming that leads specifically to the neglect of consumption and meal cultures in the value chain context is the focus on nutrition security and nutritional outcomes, which are quantifiable and measurable but do not grasp the socio-cultural relevance of food preparation and processing. Taking nutrition as a focal point shifts the focus to aspects of consumption, such as healthy diets, hidden hunger (Kimura, 2013) or recipe development and offers the potential to adopt a broader view on agrifood chains. This “nutritional fix,” however, rarely touches upon such topics as the gendered care work that is necessary to implement nutrition-sensitive value chains or the meaning of food.

Against this backdrop, we propose that the procurement, preparation, and consumption of food should be understood, on the one hand, as labor- and knowledge-intensive, and on the other hand, as social and cultural practices that shape individual and group identities. We believe that such a holistic perspective provides opportunities to anchor household and consumption practices into the value chain discourse. While feminist approaches have made a strong contribution by adding the household to the dominant perspectives, the many facets of consumption and the role they play in the value chain, we argue, still need to be included more in agrifood chains. In the following, we illustrate this argument with three empirical examples that show how households and consumption can play a vital role in the agrifood chain.

## 3. Empirical illustrations

### 3.1. The impact of food commercialization on consumption and local meal cultures

As described above, agrifood chain scholarship is dominated by studies on production-related aspects. Less attention is given to food’s “inside meanings” (Mintz, 1985) and to questions of how food products are culturally and locally bound, for example by practices of food-related care work and consumption. As Collins puts it: “Wherever a global commodity chain touches down, it intersects with local social relations” (Collins, 2013, p. 32). These aspects are particularly relevant from a gender perspective, as these kinds of work and practices are deeply gendered. There have been insightful examples of research that pays attention to these factors (Dowty and Wallace, 2010; Toussaint et al., 2022), but they have not yet been fully adopted by the larger agrifood chain discourse. Therefore, we argue that the symbolic meaning and value of food, as well as the social and cultural practices that shape consumption, are important and fruitful perspectives of agrifood chain analysis.

“Today it’s a rich peoples’ food!” said one participant in the study on African Indigenous Vegetables in Kenya. Numerous respondents told us that the vegetables, which were formerly produced for household consumption or grown wild, have become more expensive as production becomes commodified, hence influencing consumers’ livelihood. As the vegetables are currently becoming more popular, and a lucrative market is developing, especially in urban areas (Henze et al., 2020), consumers fear that the fact that profit can be made from AIVs may have an impact on their quality and accessibility. The commercialization of AIVs has wide-ranging consequences for biodiversity and food sovereignty (Brückner, 2020). It also strongly affects consumption and meal cultures and the ability to eat food that is satisfying, flavorful, and corresponds with culinary preferences. The complex colonial culinary history of Kenya has already shown that local foodways are at risk when power relations in the global agrifood system change (Brückner, 2020). Cases in point include the introduction of new staple foods (e.g., maize) in the sixteenth century and the transformation of agricultural production systems during British colonialism.

The socio-cultural significance of AIVs for everyday consumption in Kenya is fundamental and the consequences of commercialized production systems need to be critically examined. So far, AIVs are mainly sold on domestic markets (Mwema and Crewett, 2019). While new and emerging markets could create economic benefits for farmers, they could also have a profound effect on the everyday foodways and the local population’s ability to eat food that is satisfying. This could especially affect those who obtain food on a limited budget, making it financially difficult for low-income households to eat AIVs. Our study (Brückner, 2020) indicated that the price increases forced some consumers to eat so-called exotic leafy vegetables, such as kale and cabbage, which were introduced by colonial rulers, instead of the traditional AIVs. One coping strategy has been to mix exotic and local vegetables in order to preserve the taste as it is known. Another strategy has been to search for markets where the local varieties are less expensive. This change in provisioning has strong gendered implications, as women are mainly responsible for obtaining AIVs, and they need more time to travel to distant markets and more ways

adjust their cooking practices. In summation, the combined process of the increased marketization of AIVs locally and increased recognition of the local vegetables internationally could deny access to traditional and local food, ultimately influencing the social and cultural bonds that communities have created around AIVs.

### 3.2. Changes in production modes on the value chain and their impacts on food access for producers

The second empirical illustration shows that changes in commodity chains can affect control and access to food on the part of the food workers themselves. As Ferolin (2014) shows in her research on the neoliberal modernization of the fishing industry in the Mindanao region of the Philippines, market-oriented reforms may encompass such areas as production, environmental consequences, the work of the fishers, and their own access to and control of food. The fishing industry on the island of Mindanao has been subject to enormous change: “Within less than two decades, the country’s productive systems were transformed into food-extractive enclaves producing cheap consumer commodities for Japan, Western Europe, China, and the United States” (Ferolin, 2014, p. 156).

According to Ferolin (2014), the costs of this transition were externalized both to the environment and to the peasant households in multiple ways, including: (1) The link between aquaculture and damage to nature, including loss of biodiversity and pollution of drinking water: as it is women who do most housework, and housework has become harder as a consequence, women are more affected by these changes; (2) Changes to the gendered structures of work: women remain primarily responsible for unpaid housework, but at the same time have to contribute more in paid work; and (3) The loss of food security: peasants’ access to food, both in terms of quality and quantity, deteriorates and malnutrition increases.

As a consequence, in a recent study on Asian fishers, Dunaway and Macabuac (2022, p. 1) poignantly ask: “Why are the Asian peasants who produce and export so much of the world’s food the hungriest people in the world?” Their ethnographic research looking at the fishers’ livelihoods and including unpaid domestic work reveals “that women’s work is central to household provisioning, often generates greater income than that earned by males, and provides visible and hidden inputs into the exports that enter global seafood commodity chains” (Dunaway and Macabuac, 2022, p. 260). Yet, at the same time, women’s access to resources and their share of the household pool remains lower than men’s.

Regarding the issue of food access, comparable impacts can be observed when it comes to quinoa, a traditional crop of the Andean highlands region that has entered the globalized agrifood market. In Peru, for example, local producers gained purchasing power and were able to buy food and other consumer goods in stores that had been inaccessible before. However, these new foods were less nutritious, and this development influenced their diet negatively (McDonnell, 2016). Studies indicate that the consumption of quinoa has declined, having been substituted by wheat products (Hellin and Higman, 2005). These empirical examples illustrate how the consumer end is very relevant when it comes to workers’ sovereignty on global agrifood chains: They show how global capitalism changes the systems of production, how this impacts the producers’ consumption and domestic work, and how these impacts are gendered.

### 3.3. Consumer appetite and its impact on employment conditions in the value chain

The third empirical illustration looks at the importance of consumption from yet another angle: In addition to the food cultures among producers and in local households, another aspect that is important to agrifood chains encompasses the consumption cultures and preferences on part of the consumers. Global consumer appetite – that is, increased demand for a specific food product – is influential in shaping the employment conditions of the workers producing the food, and, as we will show, even state policies.

The groundbreaking study on the working and employment conditions of female workers in the transnational tomato food chain by Barndt (1999) illustrated the dynamic relationship between consumption and production. In her ethnography, Barndt maps the journey of tomatoes that are produced and harvested in the Global South on Mexican farms and sold to North America. Barndt’s analysis demonstrates that changing consumer preferences to consume tomatoes year-round change the nature of production and shape the working conditions. In this case, transnational agrifood companies flexibilized and feminized the work in order to ensure “just-in-time” production. Indigenous resources such as land became appropriated (Barndt, 1999, p. 67). At the same time, however, consumer appetite can force actors to introduce sustainable standards, as can be seen in the case of organic tea production. Here, consumers’ increased appetite for organic tea has given producers the opportunity to work locally and strengthen their networks, although more ambivalent impacts of organic certification can be observed as well (Qiao et al., 2016).

Further examples could be observed during the COVID-19 pandemic. The meat industry in Germany, for instance, saw increased demand during the pandemic. Workers in the industry, many of them migrants, the majority male, faced “multiple precarity” with regard to their employment and living conditions (Birke, 2022, p. 44–45). The different work tasks of slaughtering animals, breaking up the various parts of the meat, and cleaning it are distributed by gender. When there were severe COVID-19 outbreaks in different German slaughterhouses in the spring of 2020, which were partly due to the poor conditions of accommodation and work across the industry, the public reacted strongly (Erol and Schulten, 2021; Birke, 2022). Eventually, the legislation was changed to restrict the use of external labor in the industry (Schulten and Specht, 2021).

Another case in point is harvest work in Germany. The availability of flexible labor in high-income countries in Europe has diminished since the 1990s, among other reasons because many female rural workers turned to other labor markets (Küppers, 2021, p. 10). In Germany, much farm work is done by migrant contract workers from Eastern European countries (Küppers, 2021, p. 1). While these workers were not allowed to cross the border into Germany at the beginning of the pandemic, the fear in the country of what might happen to the harvest, especially the asparagus harvest, led to political changes. Influenced by the agricultural lobby, lockdown restrictions were loosened for these workers in April 2020 and charter flights were organized to transport workers from Romania to Germany (Küppers, 2021, p. 11). It is not by accident that this discussion became particularly prominent at the start of asparagus season, as Küppers (2021) has shown: “As a symbol for German haute cuisine, asparagus is often treated as a national treasure” (Küppers, 2021, p. 11). Thus, the consumer appetite for

asparagus and the value attributed to it eventually changed the policies for harvest workers in Germany during the pandemic.

This set of examples illustrates the impact of food cultures and consumption on the part of the consumers and shows how they impact policies as well as the livelihoods of migrant workers of different genders in precarious labor markets.

#### 4. Discussion: towards a holistic agenda that includes gender, households, and consumption

This perspective paper has argued that households and consumption are important yet often hidden parts of the value chain. By using a gender approach to value chain analysis, we have shown the relevance of the household and the work and consumption taking place there for the value chain empirically by looking at three different facets of consumption. Our first example illustrated how commercialization in agrifood chains impacts the traditional consumption practices, household labor, and food-related care work of women. The second example showed how market-oriented reforms to production in a globalized economy restrict the control of and access to food on the part of those producing it on a local level in gendered ways. The third example, looking at consumption from a different angle, highlighted how consumer appetite influences working conditions in food production and, indeed, policies.

To answer our two guiding questions – where and how do aspects of households and consumption unfold in the agrifood chain and how can gender analysis help to make these visible? – the examples demonstrate that consumption, *the hidden end of the value chain*, can have a variety of effects on different nodes in the agrifood chain. Dynamics and developments in the consumer segment have repercussions in terms of social inequalities. These inequalities stretch from the field to the kitchen, making culturally relevant food inaccessible or increasing the workload for both producers and consumers. By assessing gender as an analytical category and by applying feminist perspectives to agrifood chain analysis, the household, the gendered work being done there, and the consumption happening there can be highlighted.

Based on three points, we would like to suggest a holistic agenda for making the hidden end of the value chain and its links to gender, the household, and consumption more visible. First, consumption has to be conceptualized as an integral part of the agrifood system. A shift is required in how consumption and its place in the chain is conceptualized: Consumption is not an isolated component; rather, it is embedded in a complex agrifood system. A fragmented look at individual nodes in the chain hides social practices and power relations. Moreover, the place where this consumption is embedded – the household – has to be taken seriously, and “lifting the roof off the household” (Seager, 2019) is essential. Therefore, collaborative and transdisciplinary exchanges along the entire value chain promise rich and integrated perspectives for agrifood research. Here, the concept of *livelihoods* (Wichterich, 2004; Weeratunge et al., 2010; Krishna, 2012) can be of help: Looking at the livelihoods of people in the value chain, instead of only paid employment or economic aspects, helps to grasp the broader context of the chain and the *hidden end*.

Second, the application of gender analysis with a broad conception of gender represents a crucial element in the proposed agenda. Gender

analysis enables an investigation of how practices and social hierarchies in agrifood chains are gendered. Often, this implies shedding light on the situation of women, who tend to be overlooked in mainstream knowledge production, making it an important task for feminist research. It is vital to consider gender as an analytical category, and gender-disaggregated data needs to be collected (Selva and Janoch, 2022). However, “gender” cannot be equated with “women,” and contemporary gender analysis also needs to include men and masculinities, as well as other genders. As examples for future studies, research that adds the concept of “hegemonic masculinity” (Connell, 2005) to the discussion is inspiring. McCarthy et al. (2020), for instance, investigate constructions of masculinity and male power in labor standards and welfare programs in value chains, while Patel-Campillo (2012) looks at gender relations, including women and men, to understand the relationship between production and consumption. Taking up this research can impact future studies, enabling them to address the gendering of agrifood practices while challenging not only constructions of femininity but also of masculinity.

At the same time, researching gender also means going beyond a binary gender construction. Including non-binary concepts of gender can broaden the picture as a supplemental research perspective, taking into account that gender is a fluid and socially constructed category and that the dichotomy of “male” and “female” does not grasp social reality in its entirety. Additionally, social inequalities beyond gender and its intersections have to be incorporated into a holistic agenda.

Third, in order to reach a holistic understanding of agrifood chains, which considers economic as well as cultural and social dimensions, we encourage a stronger exchange between different disciplines. Fruitful cooperation could take place, for example, between economics, sociology, political science, anthropology, geography, and gender studies. In some of these fields, the household, with the unpaid work being done there and the consumption of food happening there, have been extensively studied. Conceptual and empirical insights from these disciplines can build a basis and support a greater understanding of the complexity of the hidden end of the value chain. Unpaid work, such as food-related care work, needs to be recognized an indispensable economic contribution to agrifood chains. At the same time, in order to focus on the socio-cultural experience and preference of food, including the topic of food and the body (Abbots and Lavis, 2016) and the visceral and sensorial encounters with food (Edwards et al., 2021), could be fruitful for agrifood chain research. This focus would allow greater recognition for cooking as a social and political practice that creates a tasty meal. It may also offer the potential to investigate whether value chain interventions – such as new recipe development – correspond with culinary preferences. In addition to important economic and dietary foci, such socio-cultural aspects would further broaden the perspective and create new knowledge relating to agrifood value chains.

On a final note: As we describe specifically in section 3.3 how certain products flourish due to consumer demand, it should not be forgotten that this food is offered and promoted by a powerful capitalist agrifood system. By shifting the focus to consumption, we do not intend to promote the “responsibilization” of consumers; instead, we want to highlight how the global corporations’ control over the food system can create food and social inequalities, often in the name of consumer demand. This also needs to be considered in future efforts: Systemic change is needed, rather than change on the individual level.

## Data availability statement

Arguments made in this article are based on already analyzed data for other publications. The raw qualitative data presented in this article is highly sensitive. Requests to access these datasets should be directed to the corresponding author.

## Author contributions

MB and KS developed the concept for the article together and equally involved in writing the paper. MB conducted and analyzed the research for the quoted empirical case study, and had the lead role in coordinating the submission process and manuscript formatting. All authors contributed to the article and approved the submitted version.

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