



Linking social wellbeing and intersectionality to understand gender relations in dried fish value chains

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Abstract

The purpose of this perspective paper is to advance a comprehensive framework to integrate gender within the study of dried fish value chains. We do so by linking three complementary areas of scholarship: social wellbeing, intersectionality, and value chains. Social wellbeing literature emphasizes the range of benefits generated through dried fish value chains (e.g., social ties, cultural values, and material goods). An intersectional perspective, however, brings attention to the relational structures (e.g., caste, ethnicity) that intersect with gender to uniquely position women and men within value chains in relation to the benefits they can generate. In developing this framework, a key point of departure from existing literature is the notion of relationality (i.e., the creation of experiences in relation to one another within a given context). The value chain analysis further reveals how such unique positions determine the wellbeing outcomes women can generate through their participation in value chains. We demonstrate the contribution of this novel framework by applying it within dried fish case examples from Bangladesh, Tanzania, and Sri Lanka. In doing so, we systematically unpack how gender intersects with other structures of oppression and perpetuate gender inequity. Our framework thus results in a ‘thick description’ of gender relations operating in dried fish value chains. The insights that emerge can inform relevant policies, decision-making processes, and programs to ensure the creation of equitable wellbeing outcomes by those participating in dried fish value chains.

Keywords Gender equity · Intersectionality · Relationality · Social wellbeing · Structural oppression · Value chain analysis

“There is no such thing as a single-issue struggle, because we do not live single-issue lives.” — (Audre Lorde 1984, p. 138)

Introduction

The purpose of this perspective paper is to advance a framework to better understand gender relations within dried fish value chains. We do so by integrating three complementary concepts — social wellbeing, intersectionality, and value chains analysis — and use this framework to reflect on three

geographically distinct dried fish value chain cases drawn from literature. We further broaden the conceptual and analytical scope of dried fish value chain analysis by bringing explicit attention to the **importance of relationality** (i.e., creation of experiences in relation to one another within a given context). Our aim fits well with the recent call for novel approaches and methodologies in the Manifesto for Marine Social Sciences¹ which encourages explicit attention on the gendered patterns and inequities along fisheries value chains. Commentary Six to the Manifesto² further elaborates on this need by emphasizing gender and the role of women as a topic that requires urgent attention. Our aim is also aligned with other calls related to critical gaps within gender research in fisheries and aquaculture, particularly with regard to the complexity of women’s experiences (Frangoudes et al. 2019; Frangoudes and Gerrard 2018;

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¹ Bavinck, M., Verrips, J., 2020. Manifesto for the marine social sciences. *Maritime Studies*. <https://doi.org/10.1007/s40152-020-00179-x>

² Frangoudes, K., Gerrard, S., Said, A., 2020. Commentary Six to the Manifesto for the marine social sciences: gender and the role of women. *Maritime Studies* 19, 137–138. <https://doi.org/10.1007/s40152-020-00186-y>

Gopal et al. 2020; Kleiber et al. 2017) and the relational aspects of gendered roles (Gustavsson 2020; Kruijssen et al. 2018). These calls are also grounded in the long-standing argument in the field of gender research about the need to identify and intervene in the root causes of gender equity to achieve gender transformative outcomes (Cornwall 2016, 2003; Dunaway 2013; Neis 2005; Nightingale 2011).

Gender equity is further recognized as a fundamental guiding principle in current global policy frameworks and programs, such as the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines; FAO 2017, 2015) and Sustainable Development Goal 5 on Gender Equality. Achieving these commitments will require the acknowledgement of women's diverse experiences and meaningful engagement with the structural oppressions that perpetuate gender inequity (Kleiber et al. 2017; Lawless et al. 2021). The framework we advance here thus has the potential to generate critical insights to inform policy and program development across scales.

This paper is structured as follows. First, we introduce dried fish value chains and what the study of gender relations in these value chains entails. Next, we explore gendered aspects of dried fish value chains in relation to the roles of different actors in value chains, the generation of diverse wellbeing outcomes, and the key constraints women face in benefiting from their value chain participation. In the following section, we examine the advances within value chain research that bring attention to gender perspectives. Here, we highlight the relevant research gaps and emerging directions broadly within fisheries social sciences. Next, we advance an integrated framework by conceptualizing the linkages and synthesizing the elements from three bodies of scholarship — value chain analysis, social wellbeing, and intersectionality — to better understand gender relations. We then use three case examples drawn from literature to demonstrate the application of the framework in systematically unpacking the complexity of gendered value chain experiences. Finally, we highlight the potential of the framework in making a novel contribution to dried fish scholarship, policy, and practice.

Dried fish value chains

Dried fish is a sub-sector within small-scale fisheries, where women make up a significant portion of the workforce, particularly in Asia and Africa (Belton et al. 2018; Hossain et al. 2015; Manyungwa-Pasani et al. 2017; Medard et al. 2019). Through their engagement in value chains, women derive significant benefits that support their livelihoods, cultures, and local economies (e.g., income, employment, food, social ties, and cultural values). These benefits underpin the wellbeing of women themselves, their families, and communities

(Belton et al. 2018). However, they face significant obstacles in fully participating in and benefiting from value chains, and particularly women from marginalized societal groups such as the lower castes, widows, immigrants, and the poor (Belton et al. 2018; Deb et al. 2015).

Globally, about 10% of fish harvests are processed as dried fish using traditional, low-tech, and low-cost methods such as sun drying, salting, fermenting, and smoking (FAO 2020). Dried fish production and consumption systems are organized as value chains (Ahmed et al. 2007; Shamsuddoha 2007). A value chain is described as a series of nodes (i.e., activities) and actors (i.e., individuals who perform those activities) that enable procurement of inputs, transformation into outputs, and distribution to consumers (Porter 1985). Key nodes associated with dried fish value chains include, pre-harvesting (e.g., net mending, bait preparation), harvesting, processing (e.g., sun drying, smoking), and trading and distribution (Ahmed et al. 2007; Hossain et al. 2015). These value chains are often characterized by the informal nature of their organization and operation, for example, through kinship and social networks that support more casual labor arrangements and trade linkages.

Dried fish value chains, however, have received disproportionately little attention in research compared to capture fisheries and/or fresh fish value chains. Furthermore, **dried fish value chains rarely receive policy attention and are generally not captured in official fisheries statistics at national to global levels.** As a result, we have a limited understanding about the scale and significance of these value chains in supporting the livelihoods, food security, and wellbeing of local communities.³ In particular, gendered analysis of dried fish value chains is a significant research gap (Johnson et al., forthcoming). The limited research on gender dimensions of dried fish value chains are mostly concerned with the **gendered division of labor.** The case examples from Bangladesh, Tanzania, and Sri Lanka discussed later in this paper (Panels 1–3) represent the few exceptions in published literature where the analyses go beyond gendered division of labor to explore different experiences among women and men belonging to diverse groups (see Table 1).

In addition, there is a lack of published dried fish studies that take a **whole chain approach (i.e., from pre-harvesting to distribution to consumers)** and **shed light on the complexity of gender relations across the chain.** This oversight is

³ Existing studies related to dried seafood value chains (i.e., invertebrates and other high-valued products such as sea cucumber, abalone, and shark fins) are largely concerned with the economic returns associated with the trading of specialized products destined for global markets (e.g., China, Europe). Such studies are therefore less helpful in understanding the significance of dried fish value chains toward supporting local livelihoods (beyond mere economic terms) with attention locally produced, traded, and consumed dried fish products.

Table 1 Overview of case examples drawn from literature

Case example	Focus
Nazirartek, Bangladesh	Experiences of seasonal fish drying workforce that comprise local inhabitants, migratory workers from elsewhere in Bangladesh, and Rohingya refugees from Myanmar
Mwanza, Tanzania	Trading of dried Nile perch by local Tanzanian women and the women from the Democratic Republic of the Congo
Mannar Island, Sri Lanka	Fish drying and selling experiences of Tamil fishing communities whose traditional livelihoods impacted by a civil war

particularly problematic when gender inequities perpetuated within these value chains go unrecognized. For example, within dried fish value chains men often control women's access to quality products and more profitable markets, and thereby assert 'subordinate' positions for women (Matsue et al. 2014; Medard et al. 2019). To this end, the framework advanced here brings special attention to how the unique positions of women and men shape the benefits they generate from participating in the dried fish value chain.

What are gender relations?

Gender relations broadly refer to the interactions among gender groups and how individuals navigate systems of power that shape norms of behavior and expectations associated with gender identities (FAO 2017). Gender relations are highly dynamic as they are constantly being contested, negotiated, and constructed within particular contexts (Bennett 2005; Resurreccion and Elmhirst 2008). Use of the term 'gender relations' is intentional in this paper to bring attention to the relational construction of gendered roles, responsibilities and restrictions, and how they often uniquely disadvantage women. In dried fish value chains, for example, cultural norms and power hierarchies shape how women can participate in and benefit from value chains (Manyungwa et al. 2019; Medard et al. 2019; Quist 2015). While gender expresses itself differently in different contexts, certain patterns also emerge in the expression of gender across social and cultural contexts, where systems of social structures, attitudes, and practices embody power and permit oppression for women compared to men. Gender systems often perpetuates substantial inequities between women and men⁴ in their daily lives. Based on this understanding of how gender operates, gender equity means "fairness and impartiality in the treatment of women and men in terms of rights, benefits, obligations, and opportunities" (FAO 2017, p. 4).

⁴ Although our discussion in this paper refers only to the gender categories of women and men, we acknowledge the need to move beyond the gender binary. Our attention to marginalized groups in fact may have relevance for transgender, nonbinary, and intersex identities.

Developing a fuller understanding of gender relations requires greater focus on who suffers mostly from gender inequity within dried fish value chains. This means focusing on the position of women with attention to particular contexts within which dried fish value chains are embedded. The term 'context' is used in this paper to refer to the unique array of dominant social structures (e.g., ethnicity, caste, culture, and religion) that operate in intersection with gender inequity within value chains. By focusing on women, we do not suggest that the wellbeing of men in dried fish value chains is without issue. Rather, our focus is on the systematic structures (e.g., caste, ethnicity, and patriarchal social practices) that uniquely position women compared to men and yet remain poorly understood. Focusing on women also does not mean leaving men behind. Gender analysis entails consideration of the relationships between gendered subjects and the power relations therein. Therefore, understanding the position of women in value chains involves a consideration of their relations with men. Moreover, women's participation in value chains supports the livelihood strategies that contribute to the overall wellbeing of households through, for example, improved family income, access to nutritious food, and education for children (Bennett 2005). Addressing the issues faced by women in dried fish value chains by responding to the systemic issues that perpetuate unequal gender relations is thus critical in creating lasting wellbeing for families and communities who host these value chains, as well as for women themselves. We explore these aspects in detail in the next section.

Gendered aspects within dried fish value chains

Gendered roles and contributions

Dried fish value chains are often deeply gendered because of the strong gendered division of labor that exists within them (Belton et al. 2018; Roy et al. 2017). Women predominantly occupy the fish drying node of the value chain, because the activities associated with this node are considered female tasks (Hossain et al. 2015). For example, sorting, gutting, cleaning, salting, and drying (on mats or drying racks) are

tasks typically performed by women (Hossain et al. 2015; Samanta et al. 2016). Women also participate in dried fish trade in local and domestic markets and in nearby villages (selling on-foot). For example, women in Tanzania, Congo, and Malawi, play prominent roles as dried fish traders, including cross-border trade (Manyungwa-Pasani et al. 2017; Medard et al. 2019). In contrast, fish harvesting, hanging fish to dry on tall scaffoldings, weighing and bagging, and trading in distant markets are generally perceived as masculine tasks and thus, are performed by men (Belton et al. 2018). Sometimes, the roles women perform overlap. For example, they process and also trade dried fish or they harvest some of the fish they process. In most households, women also perform pre-harvesting activities such as net cleaning, mending, and bait preparation (Samanta et al. 2016).

Generation of wellbeing outcomes

Supporting wellbeing involves the generation of diverse outcomes that include material as well as non-material benefits (e.g., income, food, social ties, and cultural values). Women, through their participation in dried fish value chains, derive significant benefits in diverse and complex ways. Moreover, fish drying may be among the limited options available for women to earn an income within the communities who host dried fish value chains and they often use this income toward supporting household coping strategies (Quist 2015). For example, the women working in dried fish value chains in Nazirartek, Bangladesh depend on their earnings for day-to-day survival in face of poverty (Belton et al. 2018). Dried fish is also an essential ingredient of local diets and a source of vital nutrients such as proteins, omega-3 fatty acids, and Vitamins A and B₁₂ (Byrd et al. 2021). Dried fish therefore plays a vital role in the food and nutrition security, particularly of low-income families.

In addition, dried fish value chains strongly support caste-based ways of life and cultural identities of those who are involved — sense of place, kin relations, and sense of belonging (Belton et al. 2018). Cultural traditions such as the inter-generational practices of sharing and reciprocity also hold significant value and meaning to the women in dried fish value chains (Berenji 2020). Cultural continuity, however, may reinforce and maintain deeply gendered roles and discriminatory practices that embody gender inequities in context-specific ways (e.g., cultural norms that restrict women's participation as traders) (Manyungwa-Pasani et al. 2017). Understanding the complexity of how women benefit through their participation in dried fish value chains thus

require attention to both material and non-material benefits and how they support or undermine their wellbeing.

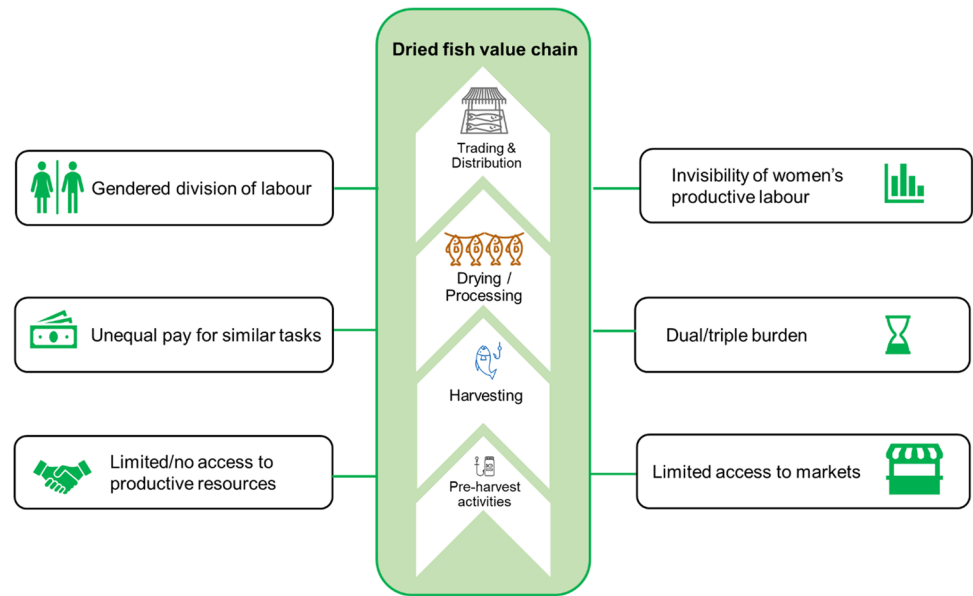
The material and non-material benefits supported through dried fish value chains are dependent on the contexts because these benefits are often created in socially and culturally distinct ways in a relational manner. For example, Belton and colleagues (2018) report the apparent vulnerabilities between women working in Daspara and Nazirartek, two main fish drying sites in Bangladesh. In Daspara, women participate in fish drying activities mostly out of sense of community identity (i.e., working for extended families and neighbors) and earn an income to support their own needs such as buying jewelry and cosmetics. In contrast, women employed in fish drying activities in Nazirartek mostly belong to marginalized groups (e.g., Rohingya refugees, migrant workers), who are extremely poor and the day-to-day survival of their families is dependent on their incomes from value chain participation. Therefore, the nuances of socially and culturally distinct ways of value creation requires attention in understanding how women's wellbeing is supported through dried fish value chains.

Selected constraints that perpetuate gender inequity

Despite the diverse benefits mediated through social and cultural relations, women face significant constraints within dried fish value chains that perpetuate gender inequities and undermine their wellbeing. Existing dried fish scholarship, however, does not provide a complete account of these constraints. We supplement existing (limited) dried fish research with insights drawn from small-scale fisheries research to explore the key constraints faced by women (Fig. 1). We do not suggest that the constraints we discuss are the only ones impacting dried fish value chains, nor do we attempt to compare dried fish value chains to other value chains. Rather, our focus is to examine how these constraints often undermine women's ability to equitably benefit from value chain participation for the purpose of assessing the robustness of existing gender-based value chain approaches.

Gendered division of labor within value chains is particularly problematic when it allocates certain tasks and statuses to women and men in ways that it perpetuate disparities (e.g., women being restricted to lower-paid tasks, limited access to and control over resources) (Dunaway 2013). Moreover, stemming from the traditional androcentric viewpoint where fisheries is perceived as a masculine domain, the tasks performed by women are not systematically captured in official

Fig. 1 Selected constraints faced by women in dried fish value chains



fisheries statistics (Bennett 2005). While there have been growing efforts to promote the collection of gender-disaggregated fisheries data, women's productive contributions along fisheries value chains in terms of labor and time still remain largely invisible (Gopal et al. 2020; see Harper et al. 2020 for a notable exception where the authors assess the global contribution by women to small-scale marine fish harvesting). This oversight is exacerbated by existing fisheries policies. Most national policies, as well as some global policies such as the 1995 FAO Code of Conduct for Responsible Fisheries, are often criticized for gender-blindness as they do not pay attention to women's roles or their unique challenges (Williams 2010). Consequently, women lack the recognition they deserve as legitimate value chain actors despite the important roles they fulfill.

Additionally, women in diverse value chain roles often face the dual burden in having to carve out time to perform their tasks in the productive domain while also performing traditional caretaker roles within extended families as wives, mothers, and caregivers in the reproductive domain (Gustavsson 2020; Lentisco and Lee 2015). The burden can even triple when women are involved in community-level activities, such as attending committee meetings, social events, and ceremonies. Unequal pay is also common in these contexts, where female workers are paid lower rates than their male counterparts for similar tasks, or not paid at all when the tasks they perform are considered part of their household duties (Yingst and Skaptadóttir 2018). Women may also have limited or no access to and control over productive

resources, such as financial credits, technology, and transport (Torre et al. 2019). They may also face discrimination in accessing dock-side auctions and markets, for example, when markets are reserved exclusively for male traders or when women are only allowed to purchase inferior quality raw fish (Fröcklin et al. 2013; Matsue et al. 2014; Medard et al. 2019). Such constraints severely restrict their ability to fully participate in and benefit from these value chains.

Overall, better understanding gender inequities within dried fish value chains requires explicit attention to the underlying structural barriers, such as power hierarchies and gendered practices embodied in value chains. The need to engage with the root causes of gender inequities is a point stressed by feminist scholars for decades, especially in the context of globalized value chains (Cornwall 2016, 2003; Dunaway 2013; Neis 2005; Nightingale 2011). Such an approach to addressing inequities could also lead to significant value chain-level gains (Kruijssen et al. 2018). For example, removing barriers in accessing credit services for women may help them purchase better quality raw fish, acquire efficient drying stands, and access new markets. These changes could improve product quality and boost production volumes while improving the performance of the entire value chain and subsequently generate better outcomes for everyone involved. What insights can we draw from the existing value chain literature to understand gender inequity issues? We address this question in the following section.

Advancing gender perspectives in value chain research and policy

Value chains were first conceived in the 1980s as a form of industrial organization in transforming inputs into outputs (Porter 1985). Since then, value chains have gained traction as an analytical framework and a tool for empirical study among researchers and practitioners from diverse disciplines (Bush et al. 2019). This wide adoption has resulted in the development of a diverse array of methodological and disciplinary approaches under the banner of value chain analysis, such as global commodity flows, economic performance, and technology and innovation (Belton et al. 2015; Reardon et al. 2012).

The adoption of a gender perspective in value chain analysis is not entirely new. Looking beyond fisheries value chains, international donor-led organizations have integrated gender into various policies and programs aimed at different sectors such as agriculture and horticulture under various themes (e.g., gender mainstreaming, women's empowerment, and inclusive development). These efforts are grounded in a variety of applied frameworks informed by diverse topics such as gender equity, human rights, and sustainable development (see Bolwig et al. 2010; Coles and Mitchell 2011; Laven and Verhart 2011; Riisgaard et al. 2010; Stoian et al. 2018). Although these frameworks and analyses have brought substantial attention toward gender inequities in global value chains, they are largely concerned with women's economic empowerment through technical interventions (e.g., new markets, technology upgrades, and training) with less attention toward diverse benefits generated beyond economic terms. Of particular importance to this discussion is the FAO's report on Developing Gender-sensitive Value Chains: A Guiding Framework (FAO 2016). While this framework integrates the considerations of access to productive resources, and power and agency into value chain analysis, the framework does not fully capture the complexity of gendered experiences, particularly the diversity among women and the breadth of value chain benefits beyond economic gains.

'Social upgrading' has also become an emerging theme associated with global value chains, where the focus is on workers' rights, entitlements, and working conditions (e.g., wage levels, working hours, hiring arrangements, and discrimination) (see Barrientos et al. 2011; Gereffi and Lee 2016). Most importantly, the workers are viewed here as 'social actors' whose quality of work is dependent on conditions such as equity, freedom, and human dignity — aspects that span beyond economic or material terms.

The work of Dunaway and colleagues (2013) on gendered global commodity (or value) chains is helpful in unpacking the complex ways in which women embed value in value chains. Among the critical insights these scholars offer on how women's work can be woven into global value chains, two considerations are of particular relevance to this discussion. First, the close linkage between the productive and reproductive spheres associated with value chains requires attention if we are to fully understand the value of women's overlooked contributions (e.g., unpaid family labor, underpaid casual labor) (Dunaway 2013). Second, households — as the sites where most women's value chain tasks take place (and not in factories) — sustain most value chain activities by feeding different forms of women's labor (e.g., family labor, part-time casual labor), and other inputs (e.g., equipment, capital) (Dunaway 2013). This type of home-based work, however, also allows for gendered norms, practices, and power hierarchies at the household level (and collectively at the community level) to have a bigger influence on how women can participate in and benefit from value chains (Lawless et al. 2012). For example, gender-restrictive cultural norms related to access to and control over household resources, lack of autonomy, and lack of mobility for women within patriarchal societies directly influence their ability to produce quality products and sell them in distant markets, thus, their ability to benefit from value chain participation (Manyungwa-Pasani et al. 2017; Matsue et al. 2014). Although the focus here is largely on economic value addition across the chain, paying attention to different ways and places where women participate in value chains is helpful to understand the nuances of value addition and the challenges women face in doing so.

Within fisheries and aquaculture literature, various terms such as 'gender-based', 'gender-sensitive', and 'gender-inclusive' are interchangeably used to indicate that the value chain analyses engage with gender. These forms of analyses use sex-disaggregated data (i.e., accounting for women and men separately) and other gender-related indicators (e.g., labor statistics, household socio-economic status). Emerging fisheries social science scholarship draws attention to the critical need to examine gender equity issues in context-specific ways, which includes a growing effort to streamline data collection methodologies that illuminate women's roles and contributions in fish value chains (see Hidden Harvests Project, Advancing Gender in the Environment Initiative (AGENT) initiative, SSF Guidelines implementation). For example, Stacey and Govan (2021) emphasize the gender discriminatory practices (e.g., exclusion based on 'acceptable' behavior

around the amount of time women can spend away from home) and gender-based constraints (e.g., different workloads for women and men) among several other critical factors that determine the ability of men and women to benefit equitably from livelihood opportunities (also see Barclay et al. 2021). Through the development of the framework advanced in this paper, we aim to contribute to this dialogue by broadening the scope of value chain analysis to bring critical attention to how women and men are uniquely positioned within the structures of oppression operating within value chains.

In developing a novel framework, our point of departure from existing literature is the notion of 'relationality'. Relationality refers to the creation of experiences in relation to one another within a given context. Attention to relationality not only reveals the socially and culturally distinct ways people benefit from value chain participation but also illuminates how such benefits are shaped by the intersecting social structures (e.g., caste, ethnicity, and culture). Therefore, we focus on the concepts of social wellbeing and intersectionality — both of which underpin the notion of relationality — in ways that have not previously been linked with value chain research. Our new framework thus challenges the conventional approaches to studying gender in value chain research.

Toward a 'thick description' of gender relations

Geertz's (1973) notion of thick description of the contextual details and social meaning that individuals ascribe to their own experience is a useful reminder when thinking through gender relations in dried fish value chains. As discussed above, addressing the gap in relation to gendered analysis of dried fish value chains requires further development of existing frameworks with attention to relationality. Below we introduce the three bodies of scholarship and synthesize the key conceptual elements that help examine gender relations in dried fish value chains. In doing so, we draw attention to the opportunities and limitations in applying these concepts in a more integrated manner.

Value chain analysis: overlapping nodes and the notion of 'value'

Although women predominantly occupy the processing (drying) node of dried fish value chains, they also perform multiple roles as traders, fishers, and provide support with

pre-harvesting activities such as net cleaning and mending (Belton et al. 2018; Manyungwa-Pasani et al. 2017; Medard et al. 2019). In doing so, the nodes they operate in overlap, for example, the women who dry and trade fish in Malawi operate in both the processing and trading nodes (Manyungwa et al. 2019). Therefore, taking a whole chain approach from pre-harvesting to post-harvesting and trading will help gendered analysis account for the gendered roles across the value chain. The whole chain approach is particularly important because of the power dynamics along the chain that shape the differences in benefits they are able to create. For example, the traders and retailers close to the consumer end tend to capture more returns than the processors (Purcell et al. 2017). Understanding these aspects is crucial to assess the opportunities to foster gender equity and empower women (e.g., women's entrance into more profitable markets where they previously faced barriers to participate in).

Given the industry-centric roots of value chain analysis, value creation across the chain brings attention to incremental value addition in financial terms (Porter 1985). However, emphasis on the term 'value' here opens up an opportunity to rethink the idea of value creation by going beyond financial (economic) terms. In fact, the need to broaden the concept of value has gained attention in recent fisheries literature. For example, Fabinyi and colleagues (2018) argue that the analysis of seafood chains should explicitly consider the social dimensions of value, such as reciprocity, sharing, and autonomy toward achieving more equitable and sustainable value chain outcomes. Applied within dried fish value chains, the analysis should bring explicit attention toward the non-financial and non-material aspects that may hold more or equal value to those who depend on these value chains, often in context-specific ways (e.g., kinship ties, cultural identities, and inter-generational values). A broader and a more contextualized understanding of the notion of value creation is therefore critical in the gendered analysis of dried fish value chains. The concept of social wellbeing presents a complementary framework for developing such an understanding of the complexity of value creation along dried fish value chains.

Social wellbeing: meanings and social connections that lie beyond material benefits

The social wellbeing concept emphasizes the multiple ways that people perceive and pursue wellbeing by going beyond material terms (McGregor 2008; Weeratunge et al. 2014). This concept has been widely applied to examine the diversity and complexity of wellbeing generation in fishing

communities (Coulthard 2012; Johnson 2018; Koralagama et al. 2017; Weeratunge et al. 2014). Social wellbeing is defined as “a state of being with others, where human needs are met, where one can act meaningfully to pursue one’s goals, and where one enjoys a satisfactory quality of life” (McGregor 2008, p. 1). The concept of social wellbeing is well-suited to understand how women generate benefits through dried fish value chains. This is because, by definition, social wellbeing emphasizes relational construction of wellbeing within particular contexts (Coulthard et al. 2011). In other words, people’s roles, responsibilities, rights, expectations, and outcomes are defined in relation to one another (White 2008).

The concept of social wellbeing provides a three-dimensional view that encompasses the linked dimensions of material, relational, and subjective wellbeing (McGregor 2008; Weeratunge et al. 2014; White 2010). The material dimension is related to people’s practical welfare and standards of living (e.g., money, wealth) whereas the relational dimension includes social relations that determine people’s scope for action or influence within a given setting (e.g., social ties, power dynamics). People’s own perceptions about what they have and can do include the subjective dimension (e.g., values, perceptions, and trust). Both relational and subjective dimensions are less quantifiable, however, as they arise from meanings and social connections that may bear significant value within the contexts they are created. Likewise, the benefits generated through dried fish value chain participation may also span across the material (e.g., income, employment, and food); relational (e.g., kinships, cultural identities, and collective action); and subjective (e.g., values, perceptions, and visions about future) dimensions (Belton et al. 2018; Berenji 2020; Medard et al. 2019; Quist 2015). The interconnectedness of these dimensions also highlights the complexity of wellbeing creation in the face of various constraints (e.g., dual burden on women despite increased earnings).

A broader conception of wellbeing creation helps bring attention to how women themselves benefit from value chains. For example, improved mobility to travel to distant markets and freedom to make decisions within households about how to allocate the income they earn (e.g., further improve to dried fish activities and support children’s education) may bring empowering experiences for women as a result of their participation in dried fish value chains. These aspects are critical as they may signal shifting gendered norms and expectations that patriarchal societies tend to impose on women (i.e., obligation to prioritize the wellbeing of family and the community over women themselves) and provide insights on how value chains can support gender transformative experiences.

Despite the creation of multiple benefits, value chains embody pre-existing structural oppressions that lead to

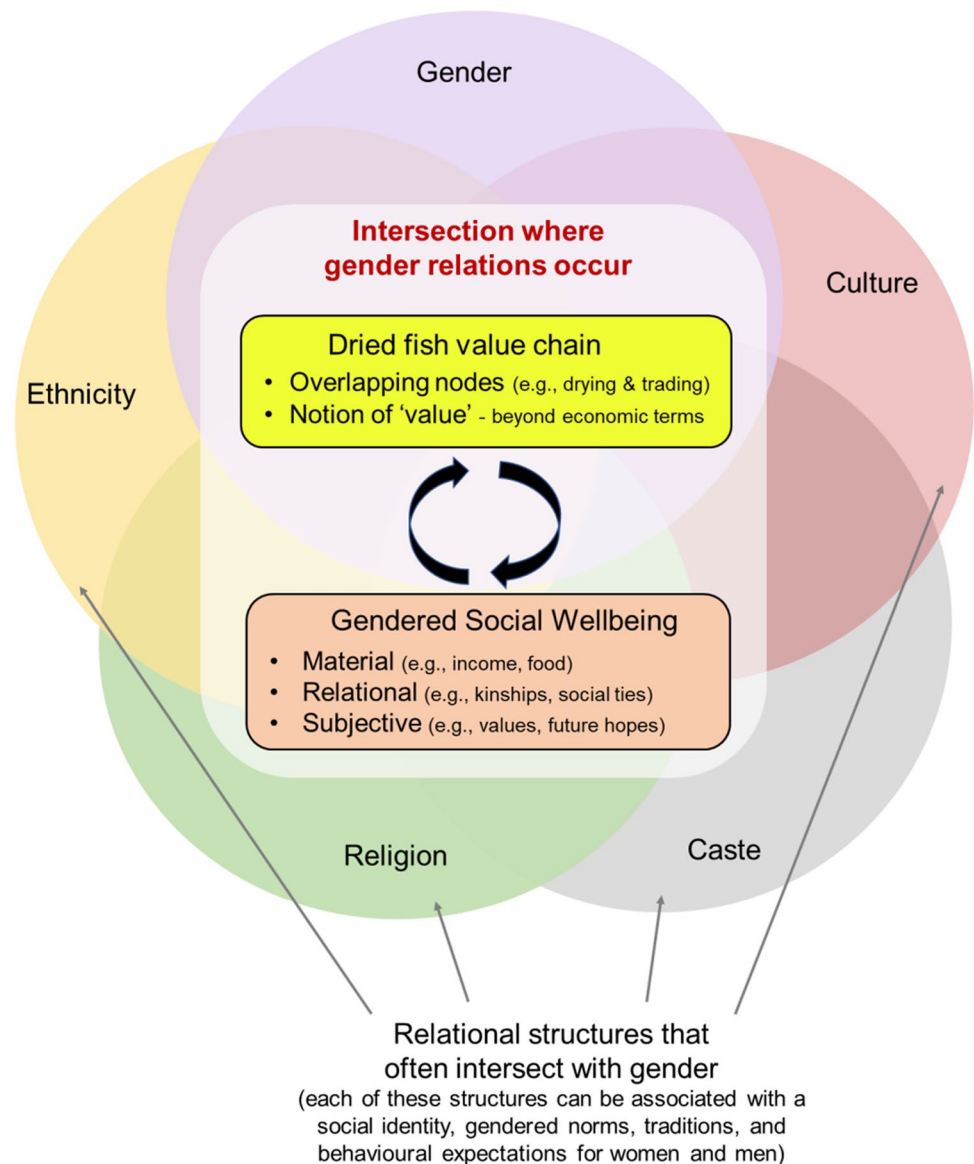
power hierarchies such as the ethnic structure and the associated gender norms and practices and similarly the caste structure. For example, in Daspara village in Northern Bangladesh, women are obligated to participate in an inland fish drying operation out of sense of duty associated with their cultural identity even though they are paid about half of the daily wage rate of men (Belton et al. 2018). Women are prohibited to visit Dublar Char (an island off the Sundarbans reserve forest in Bangladesh), due to religious beliefs that discriminate against women’s entrance to the island (Belton et al. 2018). Understanding such intersecting oppressions require an approach that goes beyond the simple notion of gender. Intersectionality is an appropriate analytical framework in this regard (Crenshaw 1991, 1989). Intersectionality augments the social wellbeing framework well because the notion of relationality underpins both these frameworks.

Intersectionality: intersecting structures of oppression

Intersectionality highlights how systems of power and oppression such as sexism, racism, and classism intersect and shape people’s lived experiences within a particular society (Crenshaw 1991, 1989). Furthermore, intersectionality acknowledges that gendered roles are inherently intertwined with structural oppressions (e.g., caste, ethnicity, age, and education) (Cooper 2016). Such conditions, in turn, reinforce and maintain gendered power hierarchies and norms of behavior resulting in differentiated experiences (Cooper 2016). By definition, intersectionality brings explicit attention to marginalized and disadvantaged groups (e.g., women, ethnic minorities, and indigenous peoples). Intersectional approaches have been widely used by feminist scholars across disciplines to grapple with the complexities involving experiences of discrimination and oppression faced by different societal groups (CRIA 2006). Within fisheries gender research also intersectional approach is increasingly been applied to bring attention to the diversity of women’s roles and contributions in coastal communities (Ferguson 2021; Hapke and Ayyankeri 2018; Khan et al. 2018; Lokuge and Hilhorst 2017; Yingst and Skaptadóttir 2018). The application of an intersectional approach thus adds further analytical rigor to value chain research by providing thicker analyses that simultaneously consider gender and other intersecting structural oppressions.

Figure 2 illustrates a novel and integrated framework which links gender, wellbeing creation, and intersecting structural oppressions within dried fish value chains, with an overarching focus on relationality. This framework improves the conceptual and analytical focus of existing approaches to analyze gender in value chains. Specifically, the dried fish value chain operates at the intersection of the structures of gender and other oppressions (e.g., caste, culture, ethnicity,

Fig. 2 An integrated framework to understand gender relations in dried fish value chains (The array of social structures operating within a given value chain may vary by the context where it is embedded in.)



and religion). The analytical focus here is simultaneously on gender and other structures of oppression that exists within a given value chain context. Social structures that comprise the framework may vary by context because the array of structures operating within a given value chain defines the relevant relationalities. For instance, if caste-based identities are not prominent within a given society, then caste structure can be excluded from the framework. Similarly, the framework can be modified to include any additional structures (e.g., political affiliations, marital status, and sexual orientation) that may create oppression. Gendered social wellbeing is constructed within the same intersecting relational structures. Dried fish value chains support social wellbeing materially as well as relationally and subjectively. A two-way linkage exists between the value chain and social wellbeing as improved wellbeing leads to better value chain outcomes. For example, mutual trust and information sharing mediated

by established social ties (relational wellbeing) may provide with access to good quality fish and profitable markets.

Examining experiences within dried fish value chains from a gender relations perspective

Our aim is to advance a framework to better understand gender relations within dried fish value chains. We use this framework to reflect on three geographically distinct dried fish value chain cases from Bangladesh, Tanzania, and Sri Lanka (Panels 1–3). These case examples have been drawn from literature and are particularly helpful in demonstrating the key insights that emerge from the application of the framework. Insights from these cases are somewhat limited yet they provide a foundation as well to further build comparative insights from a wider range of empirical cases

across Asia and Africa using a common approach to understand gender relations in dried fish value chains.

Panel 1: Dried fish in Bangladesh

(developed based on Belton et al., 2018 and Hossain et al., 2015)

The seasonal and casual fish drying workforce in Nazirartek, Bangladesh's second largest fish drying yard, is made up of three diverse groups. These groups include: 1) the local inhabitants of the area, 2) seasonal migratory workers from elsewhere in Bangladesh, and 3) Rohingya refugees, a Muslim minority group from Myanmar. Both the groups 1 and 2 have Bengali (Bangladeshi) origins. Rohingya families are the most socially disadvantaged among these groups due to their undocumented refugee status in Bangladesh. For example, Rohingya families are disqualified to receive humanitarian relief and children are prohibited to attend school. Dried fish value chains often present the only employment opportunity for Rohingya women who account for about half of the total female workforce in Nazirartek.



Women employed in Nazirartek fish drying yard
(Credit: <https://driedfishmatters.org>)

Nonetheless, the increased availability of labour due to Rohingya migration has squeezed the wage rates for all dried fish workers, reportedly causing resentment between Rohingya and Bengali workers. The supervisory roles are often held by men who belong to the local inhabitant group. About one third of Rohingya women dried fish workers are widowed, abandoned, or divorced. Rohingya women experience a disproportionate denial of work by supervisors

compared to Bengali women. Rohingya women are also at risk for sexual violence and exploitation at work due to lack of protection from husbands or male family members. Although all these workers are extremely poor, the levels of deprivation seemingly vary among the women from the three different groups — Rohingya women are the most deprived and Bengali women from local groups are the least deprived.

In all three case examples, the value chains support the social wellbeing of workers by providing income, employment, and subsistence (material wellbeing). In addition, working alongside a large number of women from the same group (e.g., caste groups, ethnic groups) brings a strong sense of belonging and nurtures social connectedness (relational wellbeing) as well as the hopes and aspirations around women's ability to support themselves and the survival of their families (subjective wellbeing). However, in generating these benefits women face wide-spread ill-treatment, discrimination, and exclusion that arise when gender intersects with other structures of oppression.

Understanding how structures of power and oppression intersect helps systematically unpack women's complex experiences in dried fish value chain in Nazirartek, Bangladesh (Panel 1; Belton et al. 2018; Hossain et al. 2015). Such structures operating within Nazirartek's value chain include: racism (Rohingya vs. Bengali ethnic origins), localism (local

inhabitant groups vs. migratory workers with Bengali and Rohingya origins), and marital status (precarious position of widowed, abandoned, or divorced women). Moreover, the designation of supervisory roles to men (who often belong to the local inhabitant group) suggest that women not only perform lower paid tasks but also occupy subordinate positions in the workforce. The systematic exclusion of Rohingya families in the wider society based on their undocumented immigration status have intensified poverty and lower literacy levels that undermine their wellbeing. Factoring in the precarious position of Rohingya women (e.g., denial of work, sexual exploitation), it is evident that Rohingya women are the most marginalized and disadvantaged group compared to women with Bengali origins (i.e. local inhabitants and seasonal migratory workers from elsewhere in Bangladesh).

Panel 2: Dried Fish in Tanzania

(developed based on Medard et al., 2019)

Since the 1990s, cross-border trade of dried Nile perch, locally known as kayabo, is an important livelihood for people on the shores of Lake Victoria, East Africa. Kayabo traders in Mwanza located on the Tanzanian shores of the lake are predominantly women, who operate as retail traders. These traders include local Tanzanian women and groups of women from the Democratic Republic of the Congo. The Congolese women are highly mobile opportunity-seeking traders, whose trading livelihoods are not restricted by marital status (i.e. the married women have the freedom to trade without any interference from their male partners, similar to the freedom exercised by single or divorced women in trading groups). In contrast, Tanzanian women traders have less mobility as their children and families are dependent on their daily earnings for food and other expenses. Their ability to participate in the trade is also restricted by daily household tasks such as food preparation, care taking, and social obligations.



Fish landing site in Ukerewe Island in Lake Victoria, Tanzania (Photo: Joseph Luomba)

Both groups of women rely on kayabo made from small or low-quality fish, mostly which are rejected by the buyers from export processing factories, which they

access through brokers at the landing sites. 'Fish for sex' is also considered a common practice in this context, where women engage in sexual relations with influential men in anticipation of access to fish/kayabo and the ability to manipulate trade. These women's trading livelihoods are also impacted by various other risks and insecurities such as theft and ill-treatment. In addition to trading, some Tanzanian women also process Nile perch (salting and sun drying).

Women's access to kayabo trade is controlled by a small cross-border trade network of powerful and wealthy businessmen such as brokers and distributors. This network has emerged in face of the increased competition for the lake's (decreasing) fish harvests due to changing regional and global trading arrangements (e.g., new markets, trade destinations, new actors). The trade network, mediated by long-standing friendships, mutual trust, kinship, and nationality heavily influence kayabo prices and trade relations, including women's access.

While both Tanzanian and Congolese women traders struggle to access kayabo, these struggles vary between the two groups of women. This is mainly because Congolese women traders have managed to establish close ties with powerful men within the trade network. Through these ties, Congolese women have secured strategic positions that enable them to manipulate trading relations and afford substantial amounts of capital which they invest to buy large quantities of kayabo. In doing so, Congolese women traders operate as groups and use various strategies mediated through personal contacts and sexual relations (e.g., placing large orders with a collector associated with a cooperative, bribing at the landing sites, hiring local aids associated with cooperatives to buy fish without valid trade permits). The foreign status of Congolese women while engaging in trade in Tanzania and the protection from powerful men in the trade network enables them to secure substantial profits from kayabo destined for various regional and domestic markets. As a result, the trading opportunities available for local Tanzanian women remain heavily squeezed. In order to survive, they resort to selling small quantities of kayabo (often produced using illegally harvested fish) in local markets for a smaller profit and supplement this income by selling dried dagaa (a smaller indigenous fish). Tanzanian women rely on their families, kinship ties, and personal contacts to buy fish, however, lack of capital to support the business remains their key challenge.

Regardless of the competition and the different experiences between the two groups of women, the trading livelihoods of all women involve substantial risks and uncertainties (e.g., theft, health risks). Most women in both groups are also faced with issues within their households (e.g., increased alcohol consumption among men, husbands abandoning them and the children). Despite the hardships, these women continue to act as traders to improve their living conditions, educate children, and gain economic independence.

In the case of dried fish processing and trade in Mwanza, Tanzania (Panel 2; Medard et al. 2019), women's experiences seem to differ largely based on their affiliations with a trade network dominated by a group of powerful businessmen. Thus, the trade network not only asserts a subordinate position for all women (i.e., sexism) but also restricts their access to good quality fish. The ability of women to associate with this trade network is shaped by their social ties with the men in the network. Congolese women have managed to establish and maintain a larger network of social ties that enable them to maneuver into strategic positions from which they can secure access to kayabo, markets, and capital. These social ties appear to be mediated by their nationality (Congolese vs. Tanzanian) as well as their mobility (ability to stay away from homes for a longer period) and marital status (freedom to engage in trading without the interference from their male partners). As a result, the trading opportunities and the benefits derived by women belonging to the two groups vary significantly. The most marginalized are the local Tanzanian women whose access to kayabo and profitable markets are being squeezed by powerful men as well as the Congolese women affiliated with the trade network. Tanzanian women also depend on a more localized social network involving kinship and family for support with their trade, however, the household expectations and obligations associated with their roles as wives, mothers, and caregivers also impact their availability to participate in

trading. Despite the differences in trading incomes they earn, both groups of women are socially and economically disadvantaged as kayabo trading involves various risks and uncertainties (e.g., sexual exploitation, theft, ill-treatment, and issues within their households). The mutual support, protection, and solidarity within the groups they socialize with (relational wellbeing) is central to the way they survive and support themselves and their families (material and subjective wellbeing). In doing so, some women perform overlapping roles as traders in different local, domestic, and regional markets and also as fish processors while participating in multiple nodes of the value chain.

In comparison, women's experiences in dried fish value chains in Mannar Island, Sri Lanka (Panel 3; Quist 2015) are shaped by the dynamics of how structures of oppression intersect largely in response to the impacts of a decades-long civil war. For example, the access to fish by the women from traditional fishing communities is impacted by their marital status (widowed or abandoned), which exerts a bigger influence in post-war context in intersection with the gendered norms that restrict women from fishing. In addition, their social positions are being shaped by (lost) access to land and racism (i.e., ethnic tensions among Tamil, Muslim, and Sinhala ethnic groups). Understanding these experiences, however, requires special attention to the fluidity involving the reorganization of these structures following the war (e.g., ongoing changes in demographic profiles and social positions associated with traditional land ownership).

Panel 3: Dried Fish in Sri Lanka (developed based on Quist, 2015; UNHSP, 2015)

Fish drying and selling is the primary livelihood of many women in Mannar Island, a small island off the Northern coast of Sri Lanka, which is historically known for its dried fish production. Most of these women are widowed or abandoned during a civil war that lasted nearly thirty years and ended in 2009. Many fishing households in Mannar island are currently led by these women as they have lost male breadwinners to the war. These women earn a living by removing fish from nets, cleaning, and mending nets in exchange for raw fish. It is customary in these communities that fishing is done by men. The women dry the bulk of the fish they get and keep some for consumption at home. Selling dried fish in the local market is the main source of income that supports these women, their children, and extended



Home-based fish drying in Northwestern Sri Lanka (Photo: Indika S.K. Tennakoon)

families. The fishing season, however, lasts about six months and the women engage in other activities during off-season (e.g., rearing goats or chicken, selling home-made food). Most traditional fishing communities in Mannar island are Sri Lankan Tamil by ethnic origin (mostly Catholic). The war (between the Liberation Tigers of Tamil Eelam and the Sri Lankan military) created devastating impacts including loss of lives, widowed and abandoned women, internally displaced people, disrupted livelihoods, and disconnected communities across the Northern province. The entire Muslim community of Mannar island fled during this time and the island received a huge influx of internally displaced people, mostly of Tamil origin. As a result, Mannar island's demographic profile and social structures underwent major changes with a greater majority of Sri Lankan Tamils and a fewer Muslims who have returned since the ending of war. The island is also home to other smaller groups, such as Indian Tamils

(mostly Hindu) and Sinhalese migratory fishers. In navigating these social dynamics and the tensions resulted by the war, the widows engaged in dried fish production face significant challenges. Most of them reportedly encounter conflicts in accessing the coast for fish drying activities, for example, due to low social status associated with widows and land ownership issues. In many cases, these women have lost their traditional coastal lands while they temporarily abandoned their houses during the war. Even though they have received alternative lands in during post-war resettlement, they continue to seek legal assistance to claim titles to their traditional coastal lands and join their communities where they feel safe and supported.

As demonstrated by the case analyses above, the application of our new framework reveals deeper insights on women's and men's differential positions and wellbeing outcomes, gender-based constraints, and underlying forms of discrimination within each value chain. In doing so, the framework brings greater attention to contextually nuanced data that describe people's real experiences. This means that the data needs to be disaggregated by gender as well as the other identity markers associated with the structures of oppression operating within a given value chain context (e.g., ethnic groups, caste groups, and cultural affiliations).

The nuanced insights that emerge from the new framework can help identify entry points for policy and program

interventions toward achieving gender equitable outcomes in dried fish value chains. The differential value chain experiences revealed by the framework (e.g., who has access to resources to begin with) can guide the development of targeted regulatory measures that enable the achievement of gender equality commitments within current policy and legal frameworks such as the SSF Guidelines. In relation to livelihood development programs, a range of supports might be required to address the issues unique to different groups involved in dried fish value chains because the same support will not impact all members equally. For example, addressing the wellbeing issues in Nazirartek value chain may require interventions such as informal savings groups to assist the

women with lower literacy levels save their earnings and invest those savings to improve their fish drying activities. Such savings groups not only improve financial management skills but also help women gain confidence in decision-making that will enrich other aspects of their lives. A crucial consideration in such efforts is the inclusion of most marginalized Rohingya women in ways that their social status or the ability to produce documentation does not undermine their capacity to participate and benefit from these interventions. Likewise, the framework advanced in this paper has the potential to inform the development of well-rounded interventions to address gender inequities embodied in dried fish value chains.

Conclusion

Understanding gender relations is about examining systems of power and oppression. Within dried fish value chains, gender intersects with other structures of oppression, and uniquely positions women and men in relation to the well-being outcomes they can generate. To understand this complexity, we emphasize the idea of **relationality and advance a novel framework in this paper**. By linking value chains, social wellbeing, gender, and social structures, we broaden the conceptual and analytical scope of value chain analysis and challenge the conventional approaches to studying gender in value chains. In doing so, we contribute to dried fish scholarship in several ways. First, the focus on relationality elevates gender as a crucial element of social connections and brings explicit attention to the most marginalized social groups whose survival depends on dried fish value chains. Second, the framework brings visibility to women's productive labor and recognizes them as legitimate actors in dried fish value chains. Third, the framework reveals diverse forms of value and different ways that dried fish value chains support gendered social wellbeing. Finally, the framework helps systematically unpack the complexities of women's lived experiences with focus on how certain groups are uniquely disadvantaged. Overall, the new conceptual and analytical linkages encouraged by a framework results in a deeper analysis of how gender inequity manifests within dried fish value chains. The nuanced and applied insights that emerge from our framework may inform the efforts within current policy frameworks and program interventions toward achieving gender equitable outcomes in meaningful and lasting ways.

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