

A study of women's place and role in Bobo Dioulasso's dairy value chain



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1 Background and rationale

Burkina Faso does not rank among the largest milk-producing and consuming countries in West Africa. However, it does have significant as yet unexplored dairy resources. Indeed, it boasts one of the largest cattle herds in the region (Corniaux et *al.*, 2014; Gret, 2016; Sory, 2020; Fayama, 2022). Today's dairy industry is highly functional across all its segments, i.e. production, collection, processing, distribution and marketing - the so-called value chain. Women and men's roles vary throughout this dairy value chain. In a three-level classification, Vall (2021) offers further details on this unequal distribution of tasks within the industry. Among pastoralists, while milk production remains a minor economic activity for the household as a whole, it benefits women in 60% of cases. For agro-pastoralists, milk plays a more important economic role within the household than it does for pastoralists. However, the proportion of women benefiting directly from milk income falls to 40%. For these farmers, dairy production is often an important economic activity, with income mainly managed by men (82% of cases). This classification clearly shows that women are sadly being excluded from milk-generated income as dairy farming takes on greater importance in the household.

Furthermore, Schneider et *al.*, (2007) have shown a growing trend towards 'de-feminisation' of the dairy value chain through small-scale processing units. For these authors, women have been focusing on home production and processing. As dairy production and marketing activities intensify, women's workloads tend to increase, leading to their being sidelined and men taking over the marketing chain. Beyond production, the dairy value chain is largely male dominated, with men acting as milk sellers, animal health officers, artificial insemination service providers and extension staff. With this in mind, policies have been introduced to promote women's inclusion in value chains. These policies sought to increase women's involvement in the management of dairy cooperatives and improve their access to credit and training (Vall, 2021).

However, they have been slow to produce results, and the picture is far from rosy. Women still have fewer opportunities (particularly in terms of access to knowledge and market) and more constraints (particularly in terms of access to natural resources, knowledge, social levers and economic levers) than men (agropastoralists or mini-farm owners), thereby limiting their space for initiatives (Vall, 2023). This author therefore feels that women dairy farmers face more constraints, enjoy fewer opportunities and, consequently, have limited space for agroecological initiatives compared with male socio-economic groups (agro-pastoralists and mini-farms).

At the same time, the age-old tradition of milk sales revenue falling to women because they were largely responsible for milking and processing milk, even though men owned the animals, has also been disrupted. Today more than ever, women may be deprived of their source of income as new entrepreneurs take over local dairy markets (Fokou et al., 2011; Schneider, 2007). There is therefore evidence that women are excluded from managing milk-related income when this activity becomes economically important to the household. For example, in Fulani society, income from milk traditionally goes exclusively to women. However, this seems to change when farmers decide to sell their milk to a dairy. This pattern is not specific to Burkina Faso and West Africa. In East Africa, Herego (2017) and Umuzigambeho (2017) showed that in dairy value chains, women tended to outnumber men, but enjoyed few of the financial benefits from the business.



From the above, it is clear that women are involved in almost every aspect of the dairy value chain, yet enjoy fewer rewards from it. This paradox raises the question of women's actual place in the dairy sector. It also raises the question as to why women are ultimately excluded when it comes to sharing the income from milk sales. Can this trend be reversed?

It is against this backdrop that this study follows on from that carried out as part of the activities set out under WP5: Understanding and influencing changes in partnership and behaviour. The previous study focused on consumer criteria or preferences for dairy products. It provided a starting point for understanding consumer practices and behaviour with regard to milk and milk-based products. In addition to providing an insight into dairy product consumption practices and preferences, the study showed that women are heavily involved in all dairy activities. However, their presence fades once issues of responsibility and milk-related profit-sharing come to the fore. This is the essence of this study of women's place and role in the dairy value chain. It will involve examining the current structure and operation of the dairy value chain in order to determine the interactions and roles of influence between women and men in the various segments of the chain in Bobo-Dioulasso's dairy production area.



2 Study objectives

- Analysing the role and place (order and positioning) of women and young people (girls and boys aged 13 to 20 and under 12) in dairy production (link between production, processing, collection and marketing);
- Analysing women's social attributes in the dairy value chain;
- Analysing women's contribution to the development of the dairy industry;
- Analysing power and decision-making dynamics;
- Analysing the social logic behind the distribution of dairy-related income within households.

3 Expected outcomes

- Understanding the role and place of women and young people in the dairy value chain (production, processing, collection and marketing);
- Understanding women's social attributes in the dairy value chain;
- Understanding women's contribution to the development of the dairy value chain;
- Understanding power and decision-making dynamics;
- Understanding the social logic behind the distribution of dairy-related income within households.

4 Methodological approach

Our approach will involve two stages: i) a literature review of targeted topics within the dairy value chain in relation to the gender issue, and ii) a targeted household survey aimed at providing empirical evidence through a household questionnaire, semi-structured interviews and focus groups. We combined this with a governance review of the Dairy Innovation Platform (DIP), which is the framework governing the organisation of Bobo Dioulasso's dairy industry stakeholders.









Figure 1. Individual and group interviews

4.1 Guiding concepts

The study used a mixed approach. It was operationalised according to the key concepts of gender and sociological categories.

Gender roles: tasks and ways of acting, thinking and feeling, based on gender differences, attributed to each sex and which may vary between different cultures and evolve over time and within a given society. For example: looking after the children, housekeeping, clearing fields.

Gender positioning: roles legitimise women's position and give them a legal or cultural status.



The gender division of labour reflects the compartmentalisation of tasks assigned to each sex according to gender roles, which help to understand and analyse this gender division of labour.

Access to a social status or asset (whether material or moral) is influenced by gender roles and the gender division of labour.

Power dynamics reflect the ability attributed to individuals or groups to exercise authority over another part of society, based on gender roles. Four power categories are thus established:

- 1. Excess power (refusing to share power, exercising power beyond normal standards, social dictatorship);
- 2. Power to (reasoned exercise of power at individual level, for one's own benefit without oppressing others);
- 3. Power with (collective power, where a group agrees to address an issue together so that everyone can contribute);
- 4. Power in (internal strength of individuals, who know their strengths and weaknesses and respect others).

The last three categories of power are prioritised in gender relations given the radical nature of the first.

Gender needs stem from the different gender roles, the different types of work assigned to men and women and the different degrees of access to services, goods and resources. They take two forms: practical needs and strategic needs. Practical gender needs require minimal resources to perform a gender role more easily and effectively (concrete, immediate need). Strategic gender needs require means to improve the situation, the status of one gender in relation to the other (schooling for girls, women's access to land, involvement in decision-making circles).

4.2 Role theory as a model for analysis

The gender approach to role theory was used to analyse field data. First of all, it should be noted that 'gender' as a concept is not a substitute for 'women'. The gender issue is as relevant to men as it is to women. The aim is to understand gender power relations (Scott, 1988), hence the importance of considering gender interactions. Gender analysis is a tool for tackling gender-based inequality. However, at the same time, it aims to promote women's empowerment over men given the latter's perceived domination over the former (MFP/PNG, 2009). A gender approach is said to be 'integrated', i.e. it affects all areas of life and all activities covered by a study (De Dianous, 2020). In this respect, the gender approach we apply to the dairy value chain cannot overlook the importance of women's literacy or public speaking training. Our gender approach goes beyond paid and productive activities in the dairy industry to include domestic work.



4.3 Study area and target population

The study was carried out in Bobo Dioulasso's dairy production area in the Hauts Bassins region with dairy industry stakeholders and resource persons. It covered the city of Bobo-Dioulasso, capital of the Houet province, and the surrounding area within a 50 km radius. The region covers a total area of 25,479 km2, i.e. 9.4% of the country, and comprises three administrative provinces: Houet, Kénédougou and Tuy. There are 33 communes in these provinces, three of which enjoy 'urban commune' status, which is equivalent to provincial capital: Bobo-Dioulasso for Houet, Orodara for Kénédougou and Houndé for Tuy. The climate in the Hauts-Bassins region is Sudano-Sahelian. Rainfall patterns are characterised by alternating dry and rainy seasons during the course of the year. Maximum rainfall occurs in August. Over the last 25 years, the average annual rainfall has not exceeded 800 mm in the central area and 1,200 mm in the Hauts-Bassins region. Average daily temperatures are also subject to seasonal variations. At the height of the rainy season, temperatures are low, averaging 26°C. During the dry season, they are high, reaching an average peak of 32 to 33°C (Kouakou et *al.*, 2023). The population of the Hauts-Bassins region is young. According to the National Institute of Statistics (INSD, 2022), 5- to 14-year-olds make up 27% of the population and 15- to 64-year-olds account for 55% of the total population, which is estimated at 2,239,840 (of which 1,094,100 are men and 1,145,740 are women).

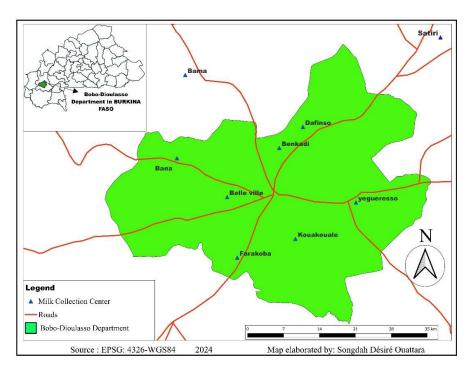


Figure 2: Map of the study area



4.4 Information gathering techniques and tools

Information was gathered using a combination of three complementary methods: literature review, semi-structured individual and group interviews, and direct observation. A questionnaire also had to be drawn up and sent to various stakeholders in the dairy value chain in order to collect some quantitative data.

Ultimately, we used a mixed approach to data collection, combining qualitative and quantitative survey methods. This approach is particularly important for the purposes of this study, as it makes up for the shortcomings of either method used in isolation (Fayama and Adiola, 2020). The systematic random sampling technique was used across the lists of members of the various dairy cooperatives in the villages, i.e.: Yéguéresso, Dafinso, Kwakualé, Bama, Farakoba, Satiri, Belle-Ville, and the processors' cooperative.

4.4.1 Literature review

This review involved looking at the existing literature on the global issue of milk in Burkina Faso in particular, and worldwide in general. Priority was given to gender studies and issues relating to all aspects of the dairy industry. This review helped to refine the analysis of the gender issue in relation to the dairy value chain.

4.4.2 Semi-structured (individual) interviews

The field survey consisted of semi-structured interviews with men, women and young people (girls and boys) involved in the dairy industry across the province. A total of 75 individual interviews were conducted with women (36), men (23) and young people (12 girls and 4 boys) aged between 13 and 20. Since this study focuses primarily on their place within the industry, the majority of these interviews (60%) were held with women and girls. Two individual interviews were conducted with resource persons: one with an officer of the Regional Office of the Ministry of Livestock and Animal Resources, and the other with an officer of the Livestock Breeders' Federation of Burkina Faso (FEB). This brings the number of individual interviews to 77.



Table 1: Summary of individual interviews

Location	Men	Women	Girls	Boys	Total
Bama	4	4	2	0	10
Kwakualé	2	4	2	2	10
Yéguéresso	3	6	0	1	10
Farakoba	1	5	1	1	8
Bana	2	4	2	0	8
Satiri	3	3	2	0	8
Dafinso	1	3	2	0	6
Belle Ville	4	6	1	0	11
Scoop Ben Kadi	3	1	0	0	4
Total	23	36	12	4	75

Source: Field data, June-July 2024

4.4.3 Focus groups

Focus groups were conducted in addition to the semi-structured interviews in order to capture a number of specific points. With this technique, groups of between 6 and 12 people can be brought together for discussions. Despite being difficult to carry out and process, this method provides an opportunity to observe the behaviour and attitudes of the participants, to compare their opinions and to identify key contradictions. A total of 10 focus groups were carried out, five with men and five with women.

Table 2: Summary of focus groups

Location	Bama	Yéguéresso	Kwakualé	Farakoba	Bana	Satiri	Dafinso	Neima	Total
Men	1	1	0	1	0	1	0	1	5
Women	1	0	1	0	1	0	1	1	5
Total	2	1	1	1	1	1	1	2	10

Source: Field data, June-July 2024

4.4.4 Questionnaire

Quantitative data is also important for such a survey. A mini questionnaire was therefore drawn up to provide statistical data. This information includes estimates of household milk consumption, quantities of milk offered to neighbours, milk volumes sold, income from milk sales and its use to meet various expenses.

The questionnaire was handed out to 147 people, with an average of between 20 and 30 people in each village. Each site had a ratio of 60% women and 40% men. Among the 60% of women, we included the percentage of girls aged 13 to 20. Among the 40% of men, the percentage of boys aged 13 to 20 was also represented. The sample of respondents took into account the diversity of stakeholders who make up the



social body of the study, following the principle of information saturation advocated by Olivier de Sardan (2003).

Table 3: Summary of respondents by location

Location	Men	Women	Girls	Boys	Total
Bama	4	10	4	2	20
Kwakualé	6	8	4	2	20
Yéguéresso	5	8	5	2	20
Farakoba	3	6	3	3	15
Bana	3	7	2	3	15
Satiri	4	6	3	2	15
Dafinso	3	6	3	3	15
Belle Ville	6	10	4	2	22
Scoop Ben Kadi	3	1	0	1	5
Total	37	62	28	20	147

Source: Field data, June-July 2024

4.5 Data processing and analysis

Survey data processing and analysis was carried out in two ways. Quantitative data was processed using the Sphinx software and subjected to a descriptive statistical analysis (Durand, 2002). Qualitative data was recorded during collection, transcribed and subjected to thematic content analysis (convergence and divergence points) using Wanlin's method (2007, p. 249), which consists in bringing together "a set of increasingly refined and constantly improving methodological instruments applied to extremely diverse 'discourses' and based on deduction as well as inference", in order to organise the data by theme around a core area of research and to build up a corpus for analysing the various statements made by respondents.



5 Study results

5.1 Overview of respondents' socio-demographic characteristics

5.1.1 Breakdown of respondents by gender

Figure 3 shows the gender breakdown of respondents to the quantitative survey. It does not include respondents who were surveyed using qualitative tools (semi-structured interviews, focus groups). Since we wanted to understand the place and role of women in the dairy value chain, we had planned to administer the questionnaire to at least 60% of women (including girls aged 13 to 20) and 40% of men (including boys aged 13 to 20). Numbers obtained at the end of the survey are shown in Figure 1.

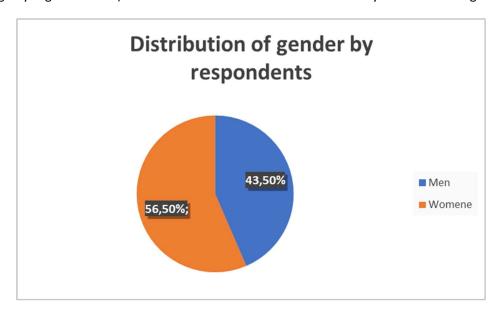


Figure 3: Breakdown of respondents by gender (Source: Survey data, June-July 2024)

Ultimately, 56.5% of respondents were women and 43.5% were men. This could be explained by the fact that most women still seek their husband's advice before answering our questions. Women often claim to have no knowledge of milk management at home. It should also be pointed out that the dairy industry, which used to be run by women, is gradually becoming more male-dominated, although some recent studies, such as that by Fayama et al. (2024, p.5), provide explanations for the high proportion of women in the dairy business:

The fact that women are heavily represented in the dairy industry could be explained by the fact that they are virtually present throughout the entire value chain. In addition, there is a widespread popular belief that women are natural consumers of milk and milk byproducts.



5.1.2 Breakdown of respondents by main activity

The dairy industry is made up of several segments: production, processing, distribution and marketing (Figure 4).

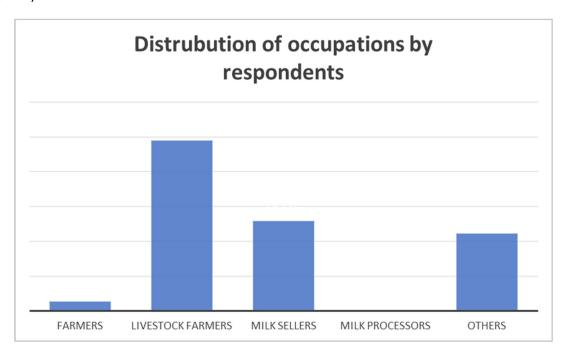


Figure 4: Breakdown of respondents by main activity (Source: Survey data, June-July 2024)

Data shows that 49% of these respondents are primarily engaged in livestock farming as their main occupation. They are followed by milk sellers (25.9%). Agricultural farming was reported by 2.7% of respondents as their main activity. Incidentally, most of the respondents who said they were livestock farmers are also engaged in agricultural farming. It therefore seems that these two activities often go hand in hand and that it would be beneficial to combine them more effectively to improve the economic situation of men and women farmers. As can be seen, no respondent mentioned processing as their occupation. Yet, a few dairies are run by women in Bobo-Dioulasso, and there are always women employed in these dairies; these women stakeholders were taken into account in the quantitative part of the study.

However, it should be pointed out that during focus groups and individual interviews, we met respondents whose main activity is processing. This is the case of the Neima cooperative, whose focus group photos are appended to this report. It should also be mentioned that some of the women who sell milk are in some way involved in processing without explicitly saying so. In the section dedicated to the main occupation, an item entitled 'other - please specify' was inserted so as not to leave out any activity related to the dairy value chain. Analysis of the main occupations shows the following: Housewife (20 respondents), Pupil (8) Agribusiness (1), Driver (1), Quranic Master (1), Security guard (1), Tricycle driver (1). It is worth pointing out that these different respondents are involved in one way or another in livestock and dairy farming in general.



5.1.3 Breakdown of respondents by age group

All age groups are represented among dairy industry stakeholders, with a higher concentration in the 21-50 age bracket (68%). To get some idea of the age range of stakeholders in the value chain, we included the related question in the questionnaire (Figure 5).

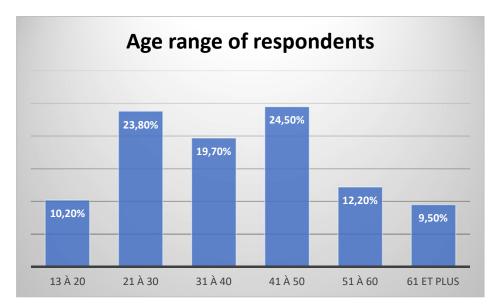


Figure 5: Breakdown of respondents by age group (Source: Survey data, June-July 2024)

The largest age group is 41-50 at 24.5%, followed by 21-30 at 23.8%. This is followed by the 31-40 age bracket with 19.7%. The over 61s make up the smallest age group, with 9.5%. This is understandable given that some of the tasks carried out throughout the dairy chain are exhausting, in particular when it comes to keeping and herding cattle.



5.1.4 Breakdown of respondents by marital status

Livestock farming and, by extension, the various dairy-related activities, are difficult to carry out alone. This is why livestock farming was traditionally family-run for the production and marketing of milk. With this in mind, we set out to determine the marital status of dairy industry stakeholders in the course of this study (Figure 6).

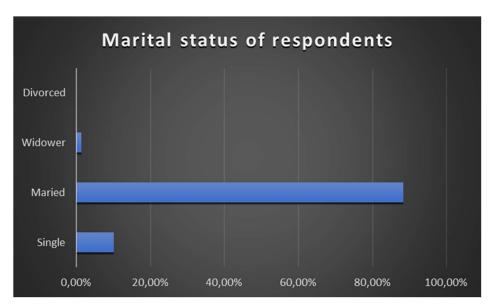


Figure 6: Breakdown of respondents by marital status (Source: Survey data, June-July 2024)

This shows that most stakeholders are married (88.4%). Around 10.2% of respondents are single. This could be explained by the presence of respondents with student status on the one hand, and by the age range of 13 to 20 on the other. Indeed, as a result of school attendance, there is a growing number of teenagers, even in rural areas, who up to the age of 20 are not yet married. Only 1.4% are widowed. The survey did not identify any respondents in a divorce situation.

Looking at these marital situations as a whole, the high percentage of married people is of particular interest to us. This is because some of the information we are looking for on the place and role of women, such as the management of milk-generated income, is only of value and relevance in the context of marriage. As such, married people are in a position to tell us about the quantity of milk set aside for their own consumption, the quantity of milk sold and their strategy for managing milk-related income.

5.1.5 Breakdown of respondents by ethnic group

In the past, livestock farming and dairy activities were seen as part of the Fulani ethnic group's heritage. However, other ethnic groups are increasingly joining in. Given this momentum, it made sense for us to survey the ethnic make-up of those involved in livestock farming and milk sales (Table 4).



Table 4: Breakdown of respondents by ethnic group

Ethnic group	Frequency
Bobo	2.0%
Fulani	92.5%
Mossi	5.4%
Samo	0.0%
Other, please specify	0.0%
Total	100.0%

Source: Survey data, June-July 2024

As expected, the Fulani ethnic group is by far the most represented in the dairy value chain, with 92.5%. Next comes the Mossi ethnic group, with 5.4%, followed by the Bobo ethnic group, with 2%. The study was unable to identify any other ethnic groups involved apart from the three mentioned above.

5.1.6 Statistical distribution of respondents by religion

As with ethnicity, livestock farming also appears to be associated with religion, and in particular Islam. This is understandable given that the Fulani, who form the majority ethnic group in the dairy value chain, are by and large Muslims. A question was asked about the religion practised by the respondents who took part in this study (Table 5).

Table 5: Breakdown of respondents by religion

Religion	Frequency
Animist	0.0%
Muslim	98.6%
Christian	1.4%
Other, please specify	0.0%
Total	100.0%

Source: Survey data, June-July 2024

Unsurprisingly, as was the case in the previous section, the religion most practised by respondents is Islam, with a frequency of 98.6%, followed by Christianity with 1.4%. No other religion was recorded. Cross-referencing ethnicity and religion in livestock farming shows that it is the Fulani who follow Islam. Some Mossi and Bobo livestock farmers are also practising Muslims.

5.1.7 Breakdown of respondents by level of education

Among the socio-demographic information collected about respondents is their level of education. In the 21st century, this variable is crucial insofar as everything that is being implemented for the benefit of those involved in the industry depends on them having a certain level of education. This is so that they can



understand some of the information given during training sessions. Answers provided by respondents regarding their level of education are shown in Figure 7.

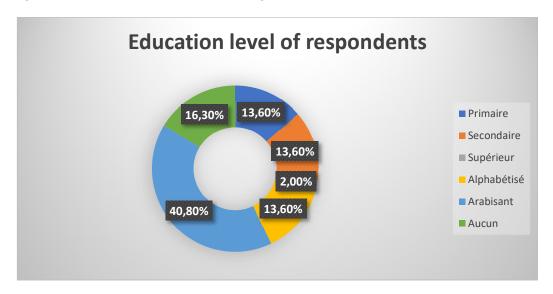


Figure 7: Breakdown of respondents by level of education (Source: Survey data, June-July 2024)

The data shows that 40.8% of respondents are Arabic speakers, followed by those with no formal education (16.3%). Respondents with a primary or secondary level of education and those who received language literacy training share the same percentage, i.e. 13.6%. Only 2% of respondents have a higher level of education.

The overall picture is one of a low level of education among those involved in the dairy industry. This has implications for the behavioural change process that needs to be put in place as a result of this study. Therefore, to encourage this change in behaviour, we believe it is imperative to focus on improving the level of education of those involved in the value chain.

5.2 Dairy value chain organisation at local level

As we already know, the dairy value chain is made up of three key segments: production, processing and marketing. A fourth segment, distribution, is trying to emerge. However, at first glance, this segment forms a sort of interconnection between the other three. This is what makes it so difficult to accept and/or set up distribution as a fully-fledged segment. During a focus group discussion conducted with a cooperative involved in milk processing, the question of how the dairy value chain is organised was answered as follows:

We set up an office including everyone: processors, farmers, distributors, sales staff and even the regulatory department. All stakeholders involved in the dairy value chain were invited to join the platform so that we could work together towards developing the industry. It is in this context that we often liaise with the INERA and the CIRDES to find ways and



means of developing the value chain. Since 2019, they have been available to those who own land and can, of course, produce fodder to feed their livestock. We work this way in order to produce quality milk in quantity. Local milk is very popular these days, but we don't produce enough of it (Focus group, men, Neima cooperative processors).

Beyond the structure described, what interests us in this study is the difference in tasks performed by men, women and young people in the dairy business. The following points deal with the allocation or differentiation of tasks from a gender perspective.

5.2.1 Tasks performed by men in the industry

Based on the various interviews conducted, it is fair to say that most of the activities linked to livestock farming, and by extension milk, are carried out by men. Men take care of feeding the animals, in particular by mowing grass for them. They also take them to pasture and to the river for watering. Men also milk the animals. These various tasks performed by men are accepted by both men and women. For example, during a focus group held with women in Bama, the participants unanimously agreed that:

When it comes to grazing cattle or taking animals to water, this is done by men. Men also milk the animals for us women (Focus group, women, Bama).

Following on from this, we heard similar comments from men in the focus group held in the same village. As one of the focus group participants put it:

We were born into livestock farming, we grew up in livestock farming and we are still involved in livestock farming. In the past, there were no milk collection centres, so we men would graze the animals and milk them, handing over the milk to our wives who would go out and sell it. We men cut grass to feed our calves and cows at home so that we can have some milk. We men administer veterinary care to the animals. We're the ones who locate suitable grazing areas for younger animals (Focus group, men, Bama).

The point made by this respondent about finding locations confirms comments made by Ima/Ouoba and Fayama (2024, p. 125):

'Masters of pastoral knowledge' carry out a reconnaissance mission along the presumed transhumance route in order to assess the availability and accessibility of pastoral resources (pasture and water) and the likely risks (types of animal disease, possible presence of bandits, etc.).

Virtually all the tasks seem to be carried out by men. One of them puts it this way:

Without enough farmland, we have to make a living from milk, that's why we do it. During the dry season, we have to buy oil cakes if we want to produce milk. If we leave it to women, they won't be able to feed the animals. In order to feed the animals, you also have to sell some of them to earn money for feed. You have to sell to be able to pay for cattle feed and to feed yourself, women can't take care of that (Focus group, men, Neima processors).

For S.A. (livestock farmer from Dafinso):



We're the ones looking after the cattle, everything to do with feeding cattle is done by men. Well, it's true that someone takes the animals to pasture, but sometimes that person is ill, like at the moment, I'm the one taking the cattle to pasture. There's no age limit for going out to pasture with the animals, and if you don't have anyone to do it for you... It becomes an obligation.

An analysis of the various activities mentioned above shows that they all relate to the production segment. It's as if men's duties were limited to this single segment. This concern was highlighted during the focus group discussion held with men involved in processing. It turns out that men rarely perform processing tasks. According to one of the focus group participants:

What I'd like to add about the role of men and women in processing is that men go out to deliver products to shops and food stores. They may travel to other locations, while women stay at home for pasteurisation and packaging, taking care of everything that happens at home during processing (Focus group, men, Neima processors).

According to his explanations, most women involved in processing are housewives. This makes it difficult for them to travel in the same way as men.

5.2.2 Tasks performed by women in the dairy value chain

In the production segment, it emerges that women also perform more or less the same tasks, albeit with a few exceptions. For example, if the animals are at home, women draw water for them. They feed them. They also look after the calves at home during the dry season, when calves do not go out to pasture with the cows. They are kept at home and looked after by women and children. For S.A. (livestock farmer from Kwakualé), women's tasks can be summed up as follows:

When a cow falls over, women help us to lift it up again. They help us by grabbing the horns while I lift the cow by its tail.

This respondent goes on to point out that when men are not around:

Women mix oil cakes and bran, and feed the cattle.

So it seems that at production level, women and men perform the same tasks, with the exception of livestock grazing. According to some, this can be explained by the fact that:

It's a physical activity and they are housewives, so if we let them do some of the heavy work, things might happen to them. That's why we don't allow them to do heavy work (processors' focus group, Neima).

As far as processing is concerned, women are tasked with washing the equipment used to hold milk. They also strain the milk before selling it. On this point, P.L. (DRAAH agent) says that:

Women really play an important role there. If we look closely, women are involved in processing because many of them process milk. So, at distribution and marketing level,



when you're out in the field, in shops and so on, you'll see a number of women making dèguê and yoghurt and taking them to retail outlets.

In the processing segment as well as more generally, women can be in charge of filling jars and pasteurising. This is precisely what one of the participants said during the focus group discussion held with women processors from the Neima cooperative:

My job is to go out and collect milk, then process it into other dairy products such as yoghurt, dèguê and gapal, or into cheese when there's an order (Focus group, women processors, Neima).

S.F. (woman livestock farmer from Dafinso) adds the following to the list of tasks carried out by women in her area:

"After men have milked the animals, we collect the milk to filter it and the milk collector collects it from the farm to take it to town". In a similar vein, D.A. (woman milk seller from Satiri) states that: "Women filter the milk and place it in clean containers". According to S.M. (woman livestock farmer from Bana): "When milk is processed to take home, women do the filtering, then they measure the quantity obtained, keep some for personal consumption and hand over the rest to the milk collector who takes it to Bobo".

Both men and women are therefore present at every stage of the dairy value chain. They perform almost identical tasks. However, women tend to be more prevalent in the processing segment than men. By the same token, since fewer men are involved in processing, they tend to be found in production and marketing.

Our interpretation of these findings is that some respondents have embraced dairy farming as a business, in particular the cooperative's men and women processors. They operate in a different environment from those in the villages, where farming activities are less professional, i.e. still carried out in a traditional way or with little technical input.

5.2.3 Tasks performed by young people (girls/boys) aged 13 to 20 in the dairy value chain

Various tasks are carried out by young people aged 13 to 20 within the dairy value chain. Some tasks are performed by both girls and boys. In addition, there are certain tasks which, from the point of view of our respondents, must be carried out by one sex or the other. For example, grazing duties seem to be primarily assigned to boys. This is because such a task can be difficult for girls as it requires them to be away from home for long periods of time. However, some respondents pointed out that girls may also handle grazing duties. Only when they get married will they be relieved of this task.



When it comes to looking after the animals, and feeding them in particular, the data collected suggests that both sexes share this duty. They keep an eye on the animals. Accordingly, in sheet 82¹, a girl student states the following:

We water the animals, we feed them.

However, it seems that more girls than boys are tasked with this responsibility. This is what emerges from the words of this respondent, who states that:

Girls keep an eye on the animals at home when they're eating so that they don't eat anything else, like feed bags (Sheet 87).

Another parent adds the following:

Girls water the animals at home after grazing. Boys take the animals to pasture (Sheet 91).

Another task that is directly linked to feeding, and which usually falls to girls, is washing the equipment used to store milk and watering the animals. Girls are also responsible for fetching milk from the yard. Still on the subject of feed, we found that as well as mowing the grass for cattle, young people measure the feed that their parents will give to the animals in the morning.

In addition to the tasks listed in the quantitative section of the research, complementary data on young people's tasks collected during the semi-structured interviews and focus groups help us to understand the reasons behind these roles in relation to the tasks. During the focus group held with women in Bama, one of the participants said:

Boys graze the cattle, milk the cows and feed the cattle at home. Girls feed and water the cattle that are kept at home. They sell the milk in town. But girls do not take cattle to pasture (Focus group, women, Bama).

In the focus group conducted with men in the same village, it was pointed out that most of the children were schoolchildren. As a result, they only perform some of these duties during school holidays or at weekends, such as herding cattle to pasture. S.B. (livestock farmer from Kwakualé) summed it up this way:

All children go to school. But on Saturdays and Sundays, they do not. So, on Saturdays and Sundays, they help their mother feed the cattle and water them. They also help me by taking the cattle to pasture in the morning.

But they can easily carry out other tasks, such as feeding or looking after the animals at home. According to D.A. (housewife from Kwakualé):

Young people look after the cattle. They graze the animals, take them to water, and give them food at home. In the rainy season, there are fields all around here, and they take the cattle up the hill where they look after them during the growing and harvesting period.

¹ This is the sequential number assigned to each questionnaire when it is entered into the Sphinx software.



Young people also milk the cows and hand over the milk to women. Girls are in charge of selling the milk (Diakité Aicha in Kwakualé).



Figure 8: Dairy cows in their barn

In the same vein, B.A. (woman milk seller from Bama) stated the following:

Boys take the cattle or sheep to pasture. Among the girls, some are too young to go out and sell milk, so we can send them to the Milk Collection Centre (MCC) to deliver the milk; others can sell on the street, so they walk around to sell the milk.

At the same time, a schoolgirl interviewed in Satiri described girls' duties as follows:

We girls filter the milk and then wash the cans to put the milk inside. On days when our father is busy, we take the milk to the MCC for him.

In Bana, a schoolgirl made similar comments. For B.O. (schoolgirl from Bana):

During breaks or holidays, girls help look after the animals and filter the milk.

She went on to say that boys followed the animals into the bush.

On the processing side, young people in this age bracket are involved in a wide range of activities. Two main comments emerged from the focus groups carried out with stakeholders involved in processing. According to the men from the Neima cooperative:

In our dairy, the children we employ are aged 19 and over. They can pasteurise milk as well as deliver it. There are some girls, but they handle sales, while boys make deliveries and carry out processing activities at home (Focus group, men, processors).





Figure 9: Young people heading out to pasture

Women's views are fairly similar if we consider the following statement:

One of the boys puts the milk into pouches. He then takes it out to market. The girl helps me pasteurise the milk and package it in cans. As for the boy, he handles deliveries to the grocery stores and also picks up the milk for us (Focus group, women processors, Neima).

All this shows that there is no gender-based division of labour for young people in the various segments of the dairy value chain, contrary to what happens in field work. However, an official from the Livestock Breeders' Federation of Burkina Faso (FEB) points out that there is no reason for this, and that boys and girls used to perform the same duties in some livestock-farming families. As B.Y. (FEB member) puts it:

In some families, even the girls take cattle to pasture. It's a learning process, and it's through learning that a person learns to appreciate it, and those who love this work can never part with their cattle.

5.2.4 Tasks performed by young people (girls/boys) under the age of 12 in the dairy value chain

Not surprisingly, young people under the age of 13 cannot generally perform the same tasks as those aged 13 to 20. In most cases, they follow their elders and can take over if the latter get tired. As one respondent puts it:

Children under 12 graze cattle when the adults are tired (Sheet 100).

However, according to other respondents, young people under 12 do not have the physical strength to do the same work as adults. As such, their grazing duties are limited to small ruminants and do not include cattle. According to one respondent:

Children under 12 graze sheep and goats (Sheets 101 and 116).



Qualitative surveys provided the following additional information. From the outset, all stakeholders were keen to point out that children of this age were not forced to take part in dairy activities. But in the morning, they can keep an eye on the cattle at home while waiting for those who take the animals to pasture to do so. Similarly, if the cows are tethered, they can feed and water them. For S.A. (livestock farmer from Dafinso):

They (children under 12) do very little. Every evening, when the herdsman brings the animals in from pasture, they are tasked with separating the young from their mothers so that we have milk in the morning. If we don't separate the young from their mothers, they'll suckle all night and we won't have any milk to sell by morning.

However, according to one participant in the focus group held with processors from the Neima cooperative (who has a personal view of what the law says and allows in terms of underage work):

The law does not allow us to employ children under the age of 13. It does, however, allow us to employ children aged 17 and over. Their tasks are clearly defined. We mustn't give them jobs they can't do. So we get them to do small jobs like washing equipment and pots, and cleaning the premises, until we can train them in health and safety at work and in the various techniques before involving them in processing. The same applies to girls, but we get them to work on the kiosk sales side because delivery is difficult, although they can still deliver orders. It's difficult for some women to lift heavy ice boxes. We organise things accordingly, hence them handling kiosk sales (Focus group, processors, Neima).

Contrary to the view of the previous respondent, D.A. (livestock farmer from Bama) feels that:

Children can take animals to pasture from the age of 10. They assist their elders with tasks such as grazing the animals.

Along the same lines as D.A., B.Y. (FEB member) points out that the concept of child labour is misused. For him, in the livestock and dairy sectors, it would be more appropriate to talk about 'learning'. As he puts it:

When you say under 12, you're implying child labour. But for us it's not work. It's a learning experience. There has been talk of reviewing the 2002 law on pastoralism, and this has been very much emphasised because people have a different view, which is not very accurate at any rate. When people talk to us today about child labour, we don't recognise it as child labour, we see it as learning. From the age of 10, children are taught how to be around animals, how to get to know them and how to graze them. This is not child labour, this is a learning process starting from 10 onwards. This means that the child learns a great deal in the course of this process. Most of the time, you'll see that for sheep, goats, poultry and even calves, it's the children who look after them.

There appears to be a bone of contention regarding the tasks carried out by children under the age of 12 in the dairy value chain. On the one hand, some stakeholders comply with the provisions of the current legislation in Burkina Faso to ensure that they do not employ children to carry out tasks as part of their activities. On the other hand, there are those who object to the terminology used or to the fact that the concept of child labour is used in relation to the tasks performed in the dairy value chain.



In essence, we would argue that this is not child labour because these children are neither employed nor paid to perform these various tasks. The general view is that all work deserves payment. Yet this is not the case here. Consequently, in the dairy value chain, these children can be said to be engaged in a process of learning the trade.

5.2.5 Difficult tasks for women in the dairy value chain

In principle, everyone agrees with B.Y. that there is no such thing as an easy job. However, as part of this study, one of the priorities is to identify activities that are difficult and arduous to carry out from the point of view of the various stakeholders in the dairy value chain. Each respondent therefore gave their opinion as to which task they considered to be difficult. For D.A. (woman milk seller from Bana):

It's milking the cows that's difficult, because many women suffer from various ailments nowadays. Very often, our feet hurt. Yet to milk, you have to squat, and some cows don't stay still during the process. That's what I find really tiring.

This shows that a task can look easy to some people, yet hard to others. During the focus group held with women in Bama, one of the participants said:

When we set off to sell milk, we walk all day long, we get home late and we're tired by the time we get back. Yet we still have household chores to do, such as fetching water from the well, cooking, and washing dishes and clothes.

Unlike the above participant, another participant in the same focus group said that what was hard for women was grazing the animals. According to her, grazing requires so much physical effort that women are not allowed to do it. This point was brought up during another focus group with men. As one of them put it:

Women cannot follow cattle into the bush or take cattle to pasture because they are afraid, and also because they cannot defend themselves against certain dangers during grazing (Focus group, men, Bama).

Apart from walking around to sell milk and taking livestock to pasture, some respondents said that preserving milk should be seen as a difficult task to carry out properly without appropriate equipment. For B.F. (housewife from Bama):

Preserving milk is difficult for women, because you need good equipment to keep your milk from spoiling. Without the right equipment to put the milk in, it will spoil very quickly. That's the problem women face these days. We don't have a refrigerator here. So if you don't have the right equipment, the milk spoils. Unless you have the right equipment to keep your milk in, and if you have to sell it on the street, it's only a matter of time before it spoils.

Along similar lines, P.L. (DRAAH agent) points out that what's hard is selling dairy products on the street, especially when you don't have any means of transport. For him:

Once you've done the processing, there's the marketing. Sometimes it's a bit difficult to get the products to the retail outlets because there's no suitable transport equipment. You have



to use motorbikes, even if the products are heavy, and given the state of our roads, it's not easy to transport them by motorbike. Sometimes you have to travel 5 kilometres, 10 kilometres, it's quite difficult.

On the whole, both women and girls seem to be faced with the same difficult tasks. D.A. (housewife from Kwakualé) adds, however, that even having milk to sell these days is becoming a burden for girls. According to her:

Girls don't receive enough milk, and what little milk they do get doesn't sell. Some of the girls follow the animals out to pasture, which is a tough job for them.

5.2.6 Pleasant or enjoyable tasks performed by women and men in the various segments of the dairy value chain

After identifying the tasks that women and girls found difficult to perform, it seemed necessary to also identify those that they found pleasant or enjoyable to carry out. At production level, all tasks are perceived as difficult, as was shown in the previous point. In the area of processing, according to P.L., as a result of a number of projects that have been implemented for the benefit of the dairy value chain, women and girls find the tasks associated with this segment enjoyable. As P.L. puts it:

Where they feel comfortable is in processing, where they have premises. Those who have benefited from some of the projects have been given premises and have installed equipment, so they're comfortable working there.

As far as marketing is concerned, most agree that the creation of the MCCs has made women's tasks in this area easier. This is reflected in the comments made by the women themselves during the focus group held in Bama:

Right now, it's selling milk to the MCCs that women like because it saves them having to walk long distances. With the MCCs, we no longer talk about the difficulties involved in selling milk. When we get the milk, we deliver it to the MCCs and then go home and have a seat. We only take sour milk, cream and buttermilk to sell in town because milking is done in the evening and we can't keep milk fresh to deliver to the MCCs (Focus group, women, Bama).

Whereas women describe street selling as difficult for them, men are convinced that this is a pleasant task for women. They put it this way:

Selling milk on the road is difficult and tiring for women, but they enjoy it. They like to stroll around selling their milk. They would rather be out selling milk than taking the animals to pasture. Grazing animals is more demanding than walking around selling milk (Focus group, men, Bama).

In a similar vein, D.A. (livestock farmer) states that:

What women like to do is collect the milk from the cattle yard, strain it and sell it to the men who, in turn, will sell it on.



For this respondent, that's all women like to do in dairy farming because, at that level, less physical effort is required.

Comments made by S.B. (livestock farmer from Kwakualé) are very much in line with what men perceive as pleasant tasks for women to carry out. As he puts it:

Women like to have milk available to sell. Selling milk is what they enjoy, although it's tiring for them. But when you're doing something that generates income, you don't feel tired any more.

For D.A. (housewife from Kwakualé), it is important to remember that, alongside what men say about pleasant tasks for women:

Girls prefer selling milk. They prefer selling milk because it is less of a chore than other activities.

Ultimately, it seems that the creation of the MCCs tasked with collecting fresh milk from dairy farms and women sellers has somewhat eased the burden of street vending for women and girls, although some believe that street vending is enjoyable from a woman's point of view.

5.2.7 Perception of the tasks carried out by the various social groups in the dairy value chain

An analysis of the tasks carried out by the various social groups within the dairy industry has been provided above. What emerges is a certain gendered differentiation in the tasks performed by each stakeholder in the various segments of the value chain. It therefore seemed appropriate to find out how respondents perceived this issue. With this in mind, some of the respondents felt that, given the way things are going and how the country is evolving, a change in the division of labour was needed. However, it is important that all stakeholders first get together to talk about it. And this with a view to finding out how children's work should be organised so that they can move forward. The same applies to women. It is crucial to compare ideas beforehand in order to determine the best way of working together. D.L. (livestock farmer from Farakoba) feels that the current division of labour is satisfactory. He doesn't see any problem with it, because as far as he's concerned:

Women are not strong enough to do the same types of work as men, which is why things are the way they are. But you say men and women are equal (laughter).

From this respondent's point of view, the much-vaunted equality cannot be achieved when, in terms of physical strength, nature has already endowed men and women with different qualities.

Otherwise, more specifically, respondents' perceptions are tantamount to stones being cast at each other. For B.F (woman livestock farmer from Bama):

Men say they take care of all the expenses, such as buying cattle feed, providing veterinary care, paying the herdsman's salary and meeting family expenses. Now they show an interest in milk sales and income from milk. Nowadays, women buy milk from their husbands to sell on. Several women do that here these days.



According to B.Y. (FEB member), changes in the gender division of labour have a history. This history is inextricably linked to the very process of managing the family's needs. For him, therefore:

Before, women were the ones carrying milk on their heads to go out and sell it. Often, they were able to sell everything, and sometimes they would come home with the rest. They also used to take charge of all household expenses, as they had all the milk. But now they sell the milk at home for us. And we husbands also go and sell it in town to make a little profit. As a result, women no longer bear all the expenses. We also take on some of the expenses. In some families, it's the wife who always goes out to sell the milk. There are also families where the milk is shared between husband and wife and each goes off to sell their share. Each family has its own way of doing things.

The perception of changes in the various tasks is not limited to the dichotomy between adult men and women. It also includes the sphere of girls and boys. On this point, a respondent living in Kwakualé said:

Nowadays you don't see girls taking cattle to pasture. Only boys graze the animals. Likewise, women no longer milk the animals. Before, it used to be them. But now it's the boys who do it to relieve women who are already busy with domestic chores.

5.2.8 Difficulties encountered in carrying out the various tasks

We have deliberately selected four tasks which we consider to be the most important and of greatest concern.

The first major difficulty mentioned by respondents has to do with grazing space. This is a major challenge as most farmers graze their animals in search of feed in order to produce milk. During a focus group, the following comments were made:

Frankly, the main problem is the lack of space for the animals to graze. When our children go out with the animals, we worry because they get beaten up and because the animals often get hit on the tarmac trying to get to the other side. The reason we have reduced the number of animals here is because of the lack of cattle tracks. There are no roads to take the animals to the river for watering. There are so-called tracks, but they're not really tracks. These tracks are blocked by fields, or when the animals use them, they run alongside fields all the way to the river. Cattle tracks should not be like paths used by people. When the cattle track is small and covered by fields, the animals are bound to wander into the fields on their way to drink. But if they do, it's a problem. There are no tracks to take the animals to pasture, there are no areas where the animals can be brought to graze, and that's the real problem with livestock farming.

The lack or insufficient number of tracks mentioned here can lead to a shortage of milk. This correlation is reflected in the words of one respondent:

Today, if we're short of milk, it's because there is no space for the animals to graze. There aren't even any cattle tracks any more. Why do I say there are no longer any cattle tracks? Because those that were laid out have been taken over by farmers to such an extent that you can't even drive a cart through them. Can we still say that there are cattle tracks? You go down these tracks with your cattle and come back without them having enough to sustain



themselves, how can you possibly milk them? Today's milk shortage is due to the lack of pasture and tracks to get to grazing areas and rivers.

In the same vein, D.T. (livestock farmer) adds:

You can see that women don't have milk to sell in the rainy season, even though cows produce a lot of milk in the rainy season because they have plenty of grass to graze. But the problem is that there are no cattle tracks to take herds to pasture. Even if you have two draught oxen out here, in the rainy season you have to pull them out using ropes because there are no tracks. There are fields all around. The fields have taken over every track. These days, getting water and feed for your cattle is complicated and exhausting. You need courage and determination. Especially with cattle diseases, which are all too common these days.

The literature shows that one of the major threats to livestock farming is the shortage of transhumance routes (sources). This shortage of transhumance routes leads to a decline in grazing land, as Sy (2022, p. 10) points out: "...grazing in the dry period is due to irregular rainfall, a reduction in pastoral areas in favour of agricultural expansion around Lac de Guiers". All of which poses a threat to livestock farming and, by extension, the dairy industry. Magrin et al., (2011) mentioned those threats to livestock farming. According to them: "Sahelian pastoral systems are under threat. In particular, they are affected by climate uncertainty, demographic pressures and public policies, which create insecurity over access to pastoral resources and jeopardise mobility" Magrin et al., (2011, p. 3). These authors explain that agricultural farmers' relationship with space puts them in a position of strength over livestock farmers, given that agriculture's footprint is visible and long-lasting. This is undoubtedly what creates conflicts between livestock farmers and agricultural farmers over land.

The second major problem facing the dairy industry is milk preservation. All respondents agreed that milk is highly perishable and requires a great deal of care and attention to prevent it from spoiling. According to one of our resource persons: "In the dairy value chain, the other difficulty is preservation. Milk is a very rich food and if it's not stored properly, it can cause a lot of damage. So there's all that. Also, hygiene is so important, hygiene is so involved in preservation throughout the milk chain that if the equipment isn't properly maintained, it can cause a lot of problems" (P.L., DRAAH agent). In a fairly similar vein, one of the focus groups revealed the following:

During the dry season, the milk we collect and deliver to the dairy often spoils. When we deliver the milk to the dairy in the dry season, they tell us it's spoiled. The heat is the main reason why milk often spoils in the dry season. In that case, can you still claim the income from the milk? It's complicated. These are simply losses in the dry season. If you call me to say that what I've delivered isn't any good and that it's spoiled, can I still ask you for the money? Losses of this kind are common in the dry season (Focus group, women, Bama).

It is clear from these comments that the problem of milk preservation is highly seasonal.

Another challenge related to milk preservation is mentioned by S.D. (livestock farmer from Bama):



As far as milk is concerned, it's true that we have somewhere to deliver milk in Bama, and that's the MCCs, but these MCCs only collect fresh milk. We have to walk around for hours to sell sour milk and other milk by-products such as buttermilk and cream.

In our view, the problem raised by this respondent is one of preservation since the MCCs are unable to handle all dairy products.

Among respondents involved in milk processing, it seems clear that preservation is also an issue. This is what processors from the Neima cooperative told us:

There are many challenges in this business because it's a local product that spoils quickly. That's why training is needed to deal with this problem, and why we need to acquire equipment that can help preserve products a little longer. There's also the problem of transport, we need quality transport equipment (Focus group, man, processor, Neima).

The third major challenge reported by stakeholders is the lack of knowledge about local milk processing techniques other than those used at home. During a focus group, one participant echoed the previous speaker's comments, stressing that:

(Local milk) production levels are low because people don't know much about milk. They don't know that milk is a source of income from livestock. Many people don't know. The Fulani know a little about it, but they too don't have the courage to do it properly. Those who are involved and successful are the other ethnic groups. They pick the dairy cows because at the moment you really have to prepare yourself to feed them, for hygiene, for health, and they're the ones who produce at least 100 to 150 litres a day. But if we really want to take up traditional livestock farming, we can improve it, but those involved don't have the courage to improve it, so we need to diversify them (Focus group, men, processors, Neima).

The fourth and final major challenge we identified after analysing field data was the low purchase price of local milk. On this point, respondents argue that there is a problem with the price of milk. According to them, the price at which they usually deliver to MCCs is very low. For example, according to one respondent, MCCs buy milk at between 300 and 350. So when you only have one or two litres of milk, you can't buy anything to take home. Yet family needs are enormous. During the focus group conducted with men in Bama, the low purchase price of milk was pointed out:

Admittedly, although we agreed on a price for milk with the MCCs, that price is too low. People are complaining. Women go out to sell milk, but it often spoils due to poor sales. Especially during the mango season, when the cows eat too many mangoes, the milk can't be kept for long, especially when it's being sold on the streets under the sun (Focus group, men, Bama).



5.3 Women's social attributes in the dairy value chain

5.3.1 Acceptance of women's involvement in livestock farming at local level

Respondents were unanimous in saying that women's involvement in livestock farming was accepted in their community. For B.K, for example:

At home, all the women have cattle. But they do not perform certain livestock farming activities that require a great deal of physical effort.

D.A. continues in the same vein:

It is acceptable for women to raise livestock. Women raise sheep, goats and poultry. If you see goats and sheep in the yard, most of the time they're for the women.

An analysis of D.A.'s comments suggests that women's livestock farming is restricted to goats. Fortunately, this restriction is not widely shared, since according to S.D. (livestock farmer from Belle Ville):

It is acceptable for women to raise livestock and even cattle. The wife and her cattle belong to the husband.

When asked about women being involved in livestock farming, processors said:

When you have animals tethered at home and the man goes away, if the wife doesn't look after the animals by feeding and watering them, the husband will find dead animals by the time he comes home. So we show women how to feed and water the cows. When we have to deliver orders of say 20 to 30 litres, it takes time. So while you're away, your wife can look after the animals (Focus group, processors, Neima).

For B.Y. (FEB member), the practice of livestock farming by women, especially Fulani women, is not up for debate. According to him, as soon as a child (boy or girl) is born into a Fulani family, they are given a cow on their christening day. Those who are lucky may be given 2 or 3 cows. By the time children reach 15 or 16, they may already have a core herd of cattle to their name. As for girls, a cow must be given to them by their husband on their wedding day as a dowry. This shows the importance given to women in livestock farming and in the social structure of the Fulani.

Women's involvement in livestock farming is therefore accepted. In fact, according to women processors from Neima:

Livestock farming often seems to be more successful when undertaken by a woman than by a man (Focus group with women processors, Neima cooperative).

5.3.2 Acceptance of women's involvement in milking at local level

As with livestock farming, it appears that women's involvement in milking is accepted by all. Better still, some consider this task to be the traditional role of women. We were told that:



As far as women milking animals is concerned, if you look back in time, i.e. to the days of our parents, women were usually the ones doing the milking. Women are the ones who do it most of the time. When the milking is done, they keep some for home consumption and give the rest to the men to sell. Often, they're the ones going out to sell (Focus group, processors, Neima).

At the same time, D.L. (livestock farmer from Farkoba) made the following comments:

It's not a problem, in fact it's their job. But nowadays they hardly ever milk the cows any more. In the old days, they used to do the milking and go out to sell milk.

So women handling milking duties is not a problem. But according to B.F., the difficulty lies in the fact that nowadays, cattle travel far from the farm. In such situations, women are unable to milk the animals. It's the men who are away with the animals who handle the milking.

While the notion that women can milk cows is accepted, it should be pointed out that not all women are willing to do so. As one respondent told us during a focus group:

Women can do the milking, but not all of them are willing to do so because they are not used to it. However, in some areas, we find that men themselves don't go into the yard to milk the animals; it's their wives who do it. In our area, women refuse to do the milking. If you see a woman milking in our area, it's obviously a case of force majeure. Otherwise, women don't handle the milking around here. As a result, we don't include them in our livestock farming activities (Focus group, men, Bama).

As with married women, girls are also allowed to perform milking duties. According to D.A. (livestock farmer from Kwakualé):

Girls carry out milking duties. They are tasked with milking to relieve the wives. But there are also young women who are not used to milking because they've never done it before. This is not something they usually do. They did not grow up in families where women were in charge of milking.

To sum up, we agree with P.L. that in the past, milking animals was the preserve of Fulani women. Literature shows that:

"In sylvo-pastoral regions, in addition to household and domestic tasks, women are responsible for managing small livestock, processing milk and selling it to feed the family", Cissokho, 2022 (p. 4).

5.3.3 Acceptance of women's involvement in milk marketing at local level

As with livestock farming and milking, women are not excluded from milk marketing activities. On the contrary, all the evidence suggests that selling milk is their favourite activity. In a focus group conducted exclusively with men, we learned the following: "Women sell the milk. This is their favourite activity because they make money from it. This enables them to provide for themselves and their children. I don't think anyone



would refuse to do something that's going to make them money if they had the opportunity to do it" (Focus group, men, Bama).

In the same vein, B.F. (housewife) reveals that:

Milk is sold by women. But once the cattle are about ten kilometres away from them, it's the men who do the milking, who bring us the quantity needed for home consumption, and who take the quantity to be sold to the MCCs.

S.B. (livestock farmer from Kwakualé) adds the following:

Women sell the milk, but only in the dry season, because in the rainy season the animals are moved to other areas. In the dry season, the animals are kept within the household compound. Although milk is scarce in the dry season, it is during this period that women get milk to sell. However, in the rainy season, some women go to the areas where the animals are kept to collect milk and sell it in Bobo.

Milk shortages in the dry season are not unique to farmers in the Hauts-Bassins region of Burkina Faso. In their study of livestock farmers in the Ferlo region of Senegal, Cesaro et *al.*, (2023) highlight a similar situation. However, they argue that:

The effect of the dry season on milk production is mitigated by the use of crop residues as well as agricultural and agro-industrial by-products (Cesaro et al., 2023, p 50).

As far as young people are concerned, D.B. (woman milk seller from Kwakualé) points out that boys, unlike girls, do not sell milk. They feel this is not an activity for them. They feel embarrassed about selling milk. They prefer to do the milking and leave sales to women and girls. This respondent points out that it is definitely not right for boys to go out to pasture with the animals and come back to sell the milk.

5.3.4 Bans imposed on women in the dairy value chain at local level

From the information gathered, it appears that there are no formal bans imposed on women in any segment of the dairy value chain. Some religious beliefs relating to menstruation are nevertheless extended to dairy farming. This is understandable given that the industry is highly Islamised. Indeed, during a focus group held with women, one participant commented that:

In our area, there are no bans regarding women. But I've heard that in some places, women are not allowed in the cattle yard when they're menstruating. We don't have such a ban. We don't have any rules banning women or others in relation to milk (Focus group, women, Bama).

In a similar vein, B.S. (housewife) points out that:

There used to be bans. But these days, they no longer apply. It used to be forbidden for a woman to set foot in a cattle yard while menstruating. But nowadays, children no longer heed this ban. As a result, damages occur in the yards. We recently had a case where several cattle died, even though there was nothing wrong with them. This is what happens



when women enter cattle yards while menstruating. But children don't think about that. If you see cows, oxen and calves dying even though there was nothing wrong with them, it's because of that. Can't you see that animals die every time in the yards? They have no chance.

Finally, according to S.B.:

Among us Fulani, when a woman is menstruating, she does not enter the cattle yard. She doesn't even head towards the yard. When this happens, we take the milk home to her. But we Fulani can't say why she's not allowed in the yard.

These three statements show that this perception of a woman's menstruation is very pervasive, which is why we set out to understand what lies behind it. But we were unable to find a satisfactory answer.

This notion of a ban linked to menstruation needs to be put into perspective. It is neither specific to milk nor to religion, but rather applies to all activities involving women. In other words, from an anthropological point of view, this issue can be explained by the relationship that communities have with blood.

As for the rules governing dairy activities for girls, B.M. (a schoolgirl from Satiri) explains that:

Girls don't follow cattle, and in the morning after getting up, they must stay away from cows.

Still on the subject of bans on women's dairy activities, B.Y. (FEB member) says that there are no bans as such. However, he points out that when a girl gets married, she is forbidden to graze cattle as this is no longer her role. Once married, her role is to milk the animals and divide the milk between what needs to be kept for home consumption and what must be sold.

5.3.5 Women's ownership of dairy cows at local level

Two viewpoints emerge regarding the possibility for women to own dairy cows. For some, this is not an issue. According to D.K. (housewife from Bama):

I have dairy cows. When a woman gets married, her husband gives her a cow. When a child is born, they are given a cow on their christening day. I was given a cow on my christening day and one by my husband on my wedding day. It is possible for a woman to buy a cow if she saves money.

Further to D.K.'s comments on the possibility for a woman to buy a cow herself, B.D. explains that:

Where I come from, a woman cannot take an ox or a cow to be sold, even if it belongs to her. It's just not done. It is the man who has to go and sell the ox or the cow, bring back the money and discuss household needs. Even if a man selects an ox belonging to his wife and hands it over to her to sell, she will not accept to take it and sell it. She will refuse to take the animal to be sold, and will tell her husband that he has complete rights over it. So she will let him do whatever he wants with it. Ever since I was little, I've never seen a woman



go out and sell an ox. It's not forbidden, but it's not done. Where I come from, even if a woman wants to sell her livestock, she asks her husband to do it for her.

What emerges from these comments is that Fulani women still have authority over their property. However, they do not go to market to sell cattle because the marketing network is highly regulated socially (customs and traditions very rarely allow women to sell cattle directly at the market). On the same note, it is worth noting that some agro-pastoralists themselves hand over their cattle to the Fulani to sell at the market. This implies the existence of a dedicated group specialised in trade within the Fulani organisation.

5.3.6 Views on women's ownership of farms and cattle at local level

Two main viewpoints emerge regarding the possibility for women to own their own farm. For B.D. (livestock farmer from Yéguérésso), it is possible for a woman to own a farm, as there is no single way for a woman to own cattle. According to him, some women, because their parents had several head of cattle, can inherit them. In this way, they can establish their own farm.

Contrary to what B.D. claims, most respondents subscribe to the second view, which is that it is not possible for women to own their own farm. The reason for this is that once married, the wife, along with her farm, becomes her husband's property. According to B.F. (housewife from Bama):

A woman can't run a farm on her own, because if she starts her own yard, her husband will tell her to look for a herdsman, whom she'll have to pay, and she'll have to look after her cows. Yet a woman doesn't have the money to pay for a herdsman, to buy feed for the animals, to pay for vaccines and medicines for the cattle. And that's why all the cattle are thrown in together.

If a woman owns a large herd, she is required to entrust it to the head of the family, as D.N. (livestock farmer from Yéguérésso) confirms:

A woman can't set up a farm even if she has a lot of cattle. Her cattle are always kept in her husband's yard.

Like women, young people (boys and girls) are not in principle entitled to set up a farm of their own. As D.A. (housewife from Kwakualé) explains:

A young man cannot set up his own farm. He brings his own cattle and his father's cattle together to look after them, because his father can't look after the cattle, feed them or take them to water. Even if he gets married and lives at his father's house, his father will rely on him to look after his herd. In most cases, young people do not own enough cattle to form a yard.

Incidentally, it should be pointed out that during the focus group held with women dairy processors, we came across a woman who owned her own farm. This is what she had to say:

I often have to go and check how things are going. It's really difficult. But, it has to be said, I had to hand things over to one of my children to look after. You just can't entrust things to other people. You have to go and check because otherwise they won't look after the



animals properly. I used to buy cattle feed which they then sold to other people instead of feeding my animals. What's more, they sell my cows' milk behind my back (Focus group, women, processors, Neima).

When we followed up on her testimony, it turned out that she was a widow who had been raising livestock for thirty years. It is therefore understandable that she was able to set up her own farm. In any case, it is not inconceivable for a married woman to own her own farm or herd.

5.4 Women's contribution to the dairy value chain

Women contribute a great deal to the dairy industry. For B.Y. (FEB member), it starts at birth, when they are given a cow on their christening day. They also receive another one on their wedding day. Women play an essential role in the milk business as, traditionally, they are entrusted with all the milk produced in the family. It should be noted that this comment only applies to the Fulani community. In other words, the importance placed on women in the dairy value chain differs from one ethnic group to another. Indeed, whereas the Fulani are accustomed to gifting cows to girls, this is not the case for other ethnic groups such as the Mossi, Bobo, Samo etc.

5.4.1 Women's contribution to the dairy value chain at local level

Women's contribution to the dairy industry can be seen at every level of the value chain. All stakeholders agree that women make a significant contribution to the industry. During a focus group conducted with men, one participant summed up the contribution made by women:

In my opinion, whatever the business, if there are women involved then that business will thrive. They are brave and often do wonderful work. I believe that the presence of women in the dairy industry is a good thing. In the dairy value chain, from the production stage onwards, women do a huge amount of work. The simple act of feeding the animals, for example. When you teach women how to do it, they do it properly and when it's time to milk the cows, they can do it because they organise their time around it. Unlike us men, who are often so busy that we sometimes forget to follow the planned schedule and end up doing something else. They are also active at the processing stage, looking after equipment and clothes hygiene. Also, if you train women in processing techniques, they can manage perfectly well. They can also handle the marketing side of things; they can manage a sales stand when you set one up for them. When you train them, women fare better (Focus group, processors, Neima).

It is clear from the above that women make a significant contribution to the dairy value chain. However, a large majority of the respondents who took part in this study highlighted their contribution in the areas of hygiene and sanitation. Women themselves said as much, as the following statement shows:

If a woman keeps the containers clean, the milk will be clean. If the containers are dirty, the milk cannot be good and this can lead to spoilage. When the milk is clean, it sells well. Women sanitise the milking equipment, as well as the milk after milking. Even the equipment in which the milk is stored and taken to the MCCs. Women handle those cleaning tasks to ensure that the milk delivered is of the highest quality. Men cannot sanitise milk



and equipment. Women are the ones who sanitise milk for men (Focus group, women, Bama).

This view of women's essential contribution to milk hygiene is shared by another participant. For him:

Women contribute to the quality of the milk produced by cleaning the utensils used to collect milk during milking, and by sanitising the milk storage equipment before collection or delivery to the MCCs. This ensures that we deliver quality milk that will sell. If the milk sells well, it's because it's been sanitised by women, who wash the utensils used to collect and preserve it before sale (D.S. livestock farmer from Yéguérésso).

S.B. (livestock farmer from Kwakualé) also believes that it is the women who:

Sanitise milk after milking. Without women, men could not sanitise milk to ensure clean, quality milk.

On the basis of the above, it seems that P.L. (DRAAH agent) is right in saying that people associate hygiene with women. It is therefore important to pull out all the stops for them, because it is women rather than men who are better able to practise hygiene in the dairy value chain. P.L.'s viewpoint is borne out by another respondent's statement:

The men are not on site. Women are the ones at home. They're the ones who encourage children to look after the animals properly. If the animals are not well cared for, there won't be any milk (D.A., farmer from Bama).

5.4.2 Views on women's participation/involvement in the dairy value chain at local level

With regard to women's involvement in the dairy value chain, respondents told us that they could not give their views for the simple reason that women can no longer get involved in that chain. In the past, income from milk was shared between men and women. These days, with the MCCs, men dominate the dairy business. Nearly all the women are unable to take part in these activities, in particular at MCC level. According to S.A. (housewife):

These days, men don't really allow women to be actively involved in the dairy industry. They say that since they bear all the expenses, the milk should be theirs too. However, when women used to sell milk, they dealt with all the other expenses, such as buying children's shoes, children's health care, condiments. When women had the milk to themselves, they took care of everything. You couldn't ask your husband for money for your expenses if you had the milk. Everything was done with the income from milk. It was in the Ivory Coast that I first saw men selling milk. When I first came here, I saw a few men selling milk, but now it's become standard practice, with men selling more milk than women these days. Men have done everything to keep women away from milk.

Whilst they were unable to answer the question about women's involvement in the dairy value chain, respondents did paint a picture of women being sidelined from this activity. De Dianous (2020, p. 5) has documented this sidelining process in Niger in the following terms:



On the question of women's share of income and control over milk, the situation is particularly striking in the Hamdallaye sub-production area in Niger. Failure to anticipate this risk on the part of those involved in the value chain has meant that the arrival of public and private dairy businesses has led to women being driven out of the industry. By attaching value to milk, these businesses have accelerated the influx of men into the sector, pitting them against women. What's more, women are forced to buy milk from their husbands, who see no point in giving it to them free of charge when the dairy industry provides them with a regular income. Conversely, this practice tends to disappear in the Kollo and Namaro dairy sub-production areas as a result of the work carried out by the gender officer.

5.4.3 Obstacles to women's full contribution to the dairy industry

A number of obstacles stand in the way of women's full contribution to the dairy industry. The first major obstacle undoubtedly stems from socio-cultural and religious considerations. Under these considerations, women's place in the community is different from men's. According to D.B.:

Men are the ones who dominate the dairy business here. Religion also makes it difficult to get men and women to work together. Women stay at home.

Besides the religious hurdle, the other aspect of socio-cultural and religious considerations is women's place in the household. During the focus group held with women processors from the Neima cooperative, the obstacles faced by women in the industry were described as follows:

Women are primarily responsible for the home, so they must take care of the house first and foremost. So if their schedule isn't right, they'll fall behind with their work. On top of that, women have to deal with many unexpected events. This has a negative impact on their work (Focus group, processors, Neima).

Those respondents add that combining household and dairy activities is often complicated. For example, some cooking ingredients can spoil milk. Cooking and milk processing activities just do not mix. This means that women have to get up very early to do their domestic chores before they can start processing milk. They have to do this every day. Which is really hard for them. In the same vein, Cissokho's report on the analysis of gender inequalities around digital technology in the sylvo-pastoral area of Senegal reveals the following:

Despite their willingness to contribute to the economic growth of their families and communities, these women face constraints linked to socio-cultural and gender-specific realities. This is why, when it comes to power and decision-making, women are less involved than men in the family and at community level as they do not control the resources linked to the sale of livestock, which is the main economic resource for families (Cissokho, 2022, p. 4).

Still on the subject of socio-cultural and religious considerations, B.F. (woman milk seller) raises the following questions:



A woman is under the responsibility of her husband. If her husband wants the milk and the cows are his, can she impose her will? Even if the cows belong to her, since both she and the cows belong to him, how could she impose her will?

These comments are closely related to Milewski's (2019) view that gender inequalities are deeply rooted and permeate all social fields. They are transmitted through education, politics and culture, and are conveyed by stereotypes, representations and beliefs throughout society. As a result, according to Guillas (2023, p. 10):

Men dominate agricultural and livestock value chains, particularly in rural areas of West Africa. Women are faced with a series of constraints that restrict their role in agricultural value chains.

One of the barriers to women's full contribution to the dairy industry is the seasonal nature of milk. According to S.B. (livestock farmer from Kwakualé):

During peak production periods, cows are usually away from women. Yet it's during such periods that milk is plentiful, and that women can sell it fresh and process it into sour milk, butter and cream.

For this FEB member:

Women have a role to play in the dairy business. Everyone has a job to do. But there are some men today who want to control everything. As a result, women become really miserable because they can't manage what they have to manage. They're always having to ask for something. So they becomes miserable. However, these are isolated individuals. It wasn't meant to be like that otherwise. Today, when you look at it, everyone wants to take over everything and most men, if they're physically strong, well, they dominate, they end up doing everything. It doesn't make sense otherwise.

We can see that there is a whole range of constraints that prevent women from making a full contribution to the dairy value chain. These obstacles relate, inter alia, to socio-cultural and religious considerations, the seasonal nature of dairy work, lack of trust, misunderstandings and domination. Literature describes a number of other hurdles. These are linked to difficulties in accessing credit in order to increase livestock numbers, difficulties in accessing land for the production of forage seed to feed livestock, as well as women's low level of education and literacy which could help them gain access to information and use technology (De Dianous, 2020). According to Ferrari et *al.*, (2024), today's use of telephones offers many opportunities for accessing information which could alleviate some of the constraints faced by women. Unfortunately, it should be noted that here again, women and young people have limited access to these technologies.

5.4.4 Challenges and opportunities for women and men in the different segments of the dairy value chain

Milk offers a wealth of opportunities for women, men and young people alike. At the same time, the industry is faced with significant challenges. The stakeholders interviewed are fully aware of this. Some



believe that the dairy business will enjoy a brighter future and that challenges can therefore be overcome. In their view, there is no way you cannot make money if there is milk available.

However, one of the main challenges is that women are gradually being sidelined. Some respondents indeed argue that women cannot look after the cows on their own. So in their view, it's down to men to help look after them. This view is not shared by B.B. (housewife from Yéguérésso) who believes that if women have plenty of milk, they're perfectly capable of looking after the cows by purchasing vaccines and cattle feed. For her, the real problem is that men are laying down the law. As a result, she has given up hope of women ever having a place in the dairy value chain. As noted by Fokou et *al.*, (2011), women are sometimes deprived of their source of income as new entrepreneurs take over local dairy markets. This happens when this activity becomes economically important to the household. According to B.B., milk offers opportunities for success because:

We've seen people selling their milk to buy sheep and goats. They then bought cows and today they have cattle yards.

In the same vein, D.M. (woman milk seller from Kwakualé) thinks that:

Young people can use the income from milk to buy a cow or an ox. By starting out as herdsmen, young people can have a cow that will later help them set up a farm. You can make a lot of money from milk because it sells well and for a very good price.

In any case, it is important to point out that the sidelining of women in the industry is largely due to public policies and local customs and traditions (social factors) rather than to their limited capacity for work. The fact is, if politicians had promoted women in the MCCs, no man would be stepping in to take their place. Consequently, it is largely because women are not properly taken into account in public policies right from the moment problems and solutions are framed that this situation of exclusion arises. Therefore, we believe that it would be wise to take the realities of society as a starting point for defining equitable public policies between men and women.

5.5 Power and decision-making dynamics regarding dairy-related income within households

5.5.1 Decision-making process regarding the purchase of dairy cows

Nearly all the information provided to us shows that in the decision-making process for the purchase of dairy cows, men can decide on their own to buy a cow without informing their partner. The opposite, however, is not allowed. According to B.A. (housewife):

When a man needs to buy a cow, he makes the decision and buys the cow himself. But if his wife wants to buy a cow, she must ask her husband's permission, and it's the husband who takes the money to buy the cow.



In the same vein, D.S. (livestock farmer from Yéguéresso) adds:

If, for example, a woman wants a cow, she needs her husband's permission because when the cow arrives, it's the husband who will look after it. Women cannot take animals to pasture, nor to the river to drink. They can bring water home for the animals, but they can't take them to the river. Even veterinary care is left to men. So it's the man who decides whether the woman can pay for a cow or not. And it's the man who takes the money to buy the cow.

S.B. (livestock farmer from Kwakualé) agrees with the two previous respondents:

Nowadays, it's impossible for a woman to sell milk in order to buy a cow, unless changes are made to the dairy value chain. When a woman has money and wants to buy a cow, she informs her husband that she wants to buy a cow.

The respondent goes on to say that when the husband takes the money, he might buy a cow for her. Alternatively, he might feel that there are other priorities for the time being. In which case he will tell his wife that buying the cow will have to wait. Otherwise, if there are no other priorities, the cow will be kept in the same pen as the husband's cows after purchase.

Notwithstanding this convoluted procedure for women to acquire cattle, it is worth bearing in mind that women acquire cows through birth and marriage. In addition, according to S.S.:

When her father dies, the daughter may receive cattle as part of her inheritance, even if she is married. This is one way for her to acquire cattle.

These are the different ways in which men and women (mainly Fulani) acquire dairy cows.

5.5.2 Decision-making process regarding milk production and marketing

Contrary to the previous point, where women have no control over the decision to buy cattle, the prevailing and widespread idea is that women are in control when it comes to milk production and marketing. During a focus group held in Bama, one participant declared:

Milk produced on the farm belongs to the wife. Milk produced by the wife's cows is pooled with that produced by her husband's cows, and is given to the wife. She has full marketing rights over the milk. Men are not supposed to get involved in milk matters or sales. The reason men have started to take an interest in milk is because of the livestock feed we now buy. We bring some of our milk to the MCCs in order to earn some money to buy cattle feed. The money we get from the MCCs for milk isn't sufficient to buy oil cakes because milk prices at the MCCs are too low. That money can be used as a top-up to buy oil cakes. Otherwise, milk sold to the MCCs alone does not provide enough money to buy oil cakes to feed the animals (Focus group, men, Bama).

The situation described by this respondent refers to cases where there is only one woman in the household. So what is the process like for polygamous families? According to D.A. (livestock farmer from Kwakualé):



In polygamous households, dairy cows are shared between the wives, and the milk collected is given to each of them. But in monogamous households, all the milk collected is pooled together and sold. If there are expenses, discussions are held to match them with income. In polygamous households, everyone takes the milk from the cows they have been given to milk and sell it to support themselves. In my house, milk matters are handled by my wife. She sells the milk and provides for herself. If the money doesn't cover her needs, I give her some money too. I have no personal interest in milk income. It all goes to my wife.

In Bama, the situation regarding women's control over milk is similar. As D.K. (schoolgirl) explains:

All the milk collected is pooled together because the cows are all in the same yard. My brother's and my dad's cattle are in the same yard. So the milk is pooled together. It is then brought to our mother, who hands it out to the brothers' wives. Each woman can do what she wants with it. If they want, they can sell their share of the milk, or keep some for private consumption.

For girls, the situation as regards decision-making is rather bleak. According to B.M. (schoolgirl from Satiri):

My cow is growing, but it's my father who will decide whether to sell its milk or let me sell it.

We set out to understand the logic behind this view in households with a tradition of livestock farming. As it happens, the respondents themselves do not know what the basis of this practice is. They tend to use the expression 'né trouvé' (i.e. the practice was already established when the individual was born) to explain this situation, as does B.S. (livestock farmer):

It's a decision that is 'né trouvé'. The man who is responsible for the herd, i.e. who looks after the herd, decides and lays down the law on how livestock and milk are managed. Another 'né trouvé' rule is that the milk must be handed over to the wife. He enforces that rule too. But he does get part of the income from the sale of the milk.

All these testimonies point to inequalities in the relationship between men and women in the dairy value chain. What's more, it seems clear that the various forms of inequality in men/women relationships do not simply stack up, they sometimes reinforce each other while at the same time exacerbating women's vulnerability. This process has been documented by several authors (Kabeer, 2014; Férrari et *al.*, 2023).

But ultimately, there are no inequalities as such. In our view, there are stakeholder strategies, in Crozier's sense, which arise insofar as women always decide what they want to do and inform their husbands.

5.5.3 Milk set aside for household consumption

Among the information we were seeking to quantify was the volume of milk that respondents set aside for personal consumption in the family. We suggested volume ranges of 15 litres per month (Figure 10).



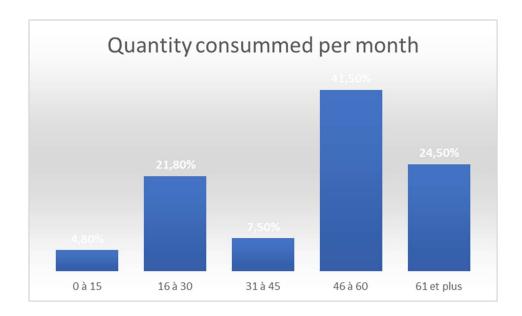


Figure 10: Household milk consumption in L/month (Source: Survey data, June-July 2024)

The answers provided by the respondents show that 41.5% of them set aside 46 to 60 L/month for their own consumption. Meanwhile, 24.5% set aside more than 61 L/month of milk for family consumption, i.e. an average of 2 to 3 litres a day. Overall, the proportion of respondents keeping less than 15 litres of milk for the family is very low, at 4.8%. This suggests that stakeholders in this industry consume milk frequently. We did, however, ask respondents whether they thought the volumes set aside were sufficient to meet their needs, particularly those of their children. The following section addresses this issue.

5.5.4 Domestic milk consumption and meeting household needs

Milk is considered a complete food. It is an integral part of both rural and urban diets. Given the importance of milk in children's food hygiene, respondents were asked whether or not the quantity of milk set aside was sufficient. The graph below gives a summary of their answers (Figure 11).



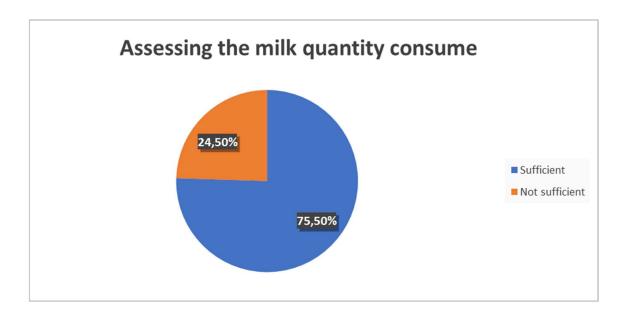


Figure 11: Views on household milk consumption (Source: Survey data, June-July 2024)

The graph shows that, for 75.5% of respondents, the amount of milk set aside for family consumption, particularly for children, is deemed sufficient. The reasons given for this are that families are often not very large or that milk is not to be drunk like water. You only need to drink a little and top it up with water. In some families, milk is only drunk on Fridays. For example, K.L.'s family doesn't sell milk on Fridays; everything collected on that day is consumed within the family. As a result, they consider the amount they drink to be rather large. Other respondents said they set aside milk according to the number of family members before selling the rest. There are also families in which some members do not drink or do not like to drink milk.

Conversely, 24.5% of respondents felt that the amount of milk set aside for consumption was insufficient. There are also a number of reasons for this. Our analysis of the questionnaires identified factors such as large family sizes, the need to sell milk to meet other needs, small herd sizes and the seasonal nature of dairy farming. Regarding the need to sell milk, one respondent said:

There are too many expenses. We can't leave any more than that.

Another respondent declared:

No, we're in a big city. We make up for it with other things.

This respondent draws attention to the fact that you cannot expect to drink milk in a big city in the same way as in a rural area.



5.5.5 Quantity of milk sold within the household

Admittedly, while milk is part of the diet for cattle farmers, it is more commonly sold than consumed nowadays by farmers and other industry players. This contrasts somewhat with the views of Sib, et *al.*, (2017) that milk produced in a traditional way is mostly self-consumed, and that only a negligible amount is sold. These days, monetising milk is no longer controversial. In fact, it is the expected gain from this activity that is driving other people who were not previously involved in livestock farming to get into the business. With this in mind, and having determined in the previous section the quantities of milk households were setting aside for their own consumption, we felt it was important to know how much milk they sold (Figure 12).

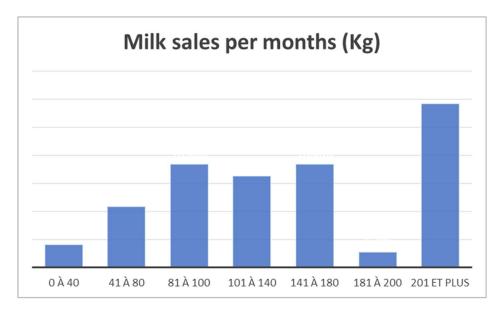


Figure 12: Household milk sales in L/month (Source: Survey data, June-July 2024)

This figure shows that 29.3% of respondents sell over 200 L/month, 18.4% 81 to 180 L/month, and 4.1% less than 40 L/month.

Overall, it seems that local milk is highly valued given the monthly volumes sold by respondents. However, it must be pointed out that milk supply still falls short of demand not only from consumers, but also from dairies and MCCs. According to Sory (2020, p. 18):

Although milk production has increased, it does not keep up with demand from this growing population. As a result, urban consumer habits have changed in favour of imported milk powder, which is more readily available.

In the same vein, according to the report from the Inter Réseau pour le développement (407°, June 2021):

Regional supply of dairy products remains well below regional demand, driven by strong population growth and urbanisation. This shortfall, combined with non-protectionist trade



policies and the expansion needs of multinational dairy companies in Europe, has led to massive imports of dairy products, in particular re-fattened milk powder, with low prices having a negative impact on the development of local dairy value chains. The development of local dairy value chains in West Africa still depends on tax and trade policies being adapted (Inter Réseaux, 2021, p. 1).

In the same vein, other sources show that in Burkina Faso:

Despite the existence of a number of production techniques that can be combined to improve herd productivity, local milk production today still falls short of demand (Sory, 2020, p. 3; Fayama et al., 2024, p.11).

A similar point is made in the study by Fayama et al. (2024, p.8), which shows that in the value chain:

Local milk is not available, which is why we don't process it.

Consequently, efforts will need to be made to encourage investors to move into the industry, or to support individuals through funding schemes, in order to help tackle the issue of youth unemployment.

5.5.6 Income from milk sales

For the many players investing in the dairy sector, one key priority is to make a return on their investment and make money. Given the growing demand for milk and the monthly volumes that each respondent manages to sell, we set out to analyse the impact of milk sales and the income generated among the stakeholders surveyed (Figure 13).

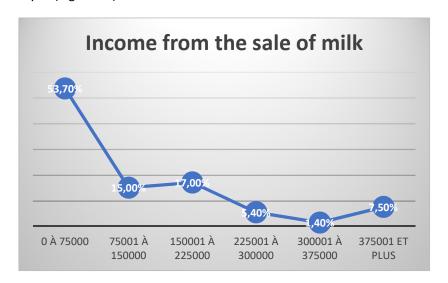


Figure 13: Dairy farmers' income from milk sales (FCFA/month) (Source: Survey data, June-July 2024)



Income from milk sales is surprisingly low. More than half the respondents (53.7%) earn an income of 75,000 FCFA/month or less, while 17% earn between 150,000 and 225,000 FCFA/month after selling milk. Respondents earning more than 375,000 FCFA/month account for 7.5% of the sample. Looking at these figures, it appears that most stakeholders do not prosper from the sale of milk.

However, we know that most people tend not to disclose what they actually earn to just anyone. This is not specific to milk, but rather a matter of habit and/or African customs which dictate that individuals should not flaunt their wealth. Otherwise, it could draw the attention of the wrong people. However, when you take into account the market price per litre of milk multiplied by the volumes that respondents say they sell each month, you realise that there is often a big gap with the income declared in the survey.

5.5.7 Quantity of milk offered/given to friends and family/neighbours

Apart from the quantities of milk set aside for family consumption and those sold, our investigation sought to assess the amount of milk that respondents were likely to give to their friends and family. The answers to this question are shown in the diagram below (Figure 14).

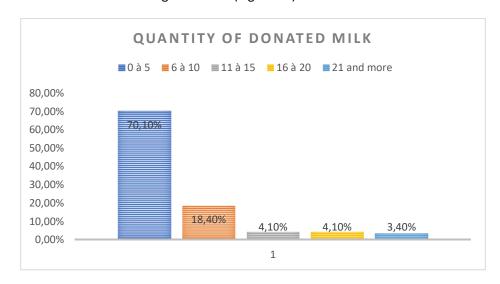


Figure 14: Milk given by households in L/month (Source: Survey data, June-July 2024)

This figure shows that 70.1% of respondents give less than 5 L/month to their neighbours, 18.4% 6 to 10 L/month, 4.1% 11 to 20 L/month, and 3.4% more than 20 L/month. Some explain this by the fact that all livestock farmers own cows and are therefore in a position to produce milk. In these circumstances, milk is only occasionally offered to people who do not have any, or for celebrations and ceremonies such as christenings and weddings.

5.5.8 Women's and men's household management of dairy income

In this section, we seek to establish the percentage of income that respondents allocate to expenses such as clothing, tuition fees or food for the family, including animals. This is a grouped question. Respondents



are asked to state roughly what percentage was earmarked for each type of expenditure and, if applicable, whether there were other types of expenditure. The results are shown in Table 6.

Table 6: Breakdown of expenditure paid from milk income

Type of expenditure/allocation frequency range (in %)	0 to 20	21 to 40	41 to 60	61 to 80	81 to 100	Total
Percentage for clothing	90.5%	6.8%	2%	0%	0.7%	100%
Percentage for tuition fees	95.2%	3.4%	1.4%	0%	0%	100%
Percentage for food	6.8%	9.5%	35.4%	28.6%	19.7%	100%

Source: Survey data, June-July 2024

This table shows that milk income is rarely used to buy clothes or pay for schooling. In order to cover the costs of clothing and schooling, one respondent says he has to sell one or two oxen. In the same vein, a number of respondents told us that the responsibility for children's tuition fees fell to men. There can be no question of this being factored into milk income. Income which, in their view, is insufficient. According to them, profits from milk do not cover tuition fees. They just pay for food and small family expenses (Sheet 59).

Based on the results shown in the table, milk-generated income seems to be mainly used to feed the family and the animals. In fact, most of the respondents allocate between 41% and 60% of their dairy income to food in general. A number of statements confirm the data provided in this table. In sheet 9, one respondent said:

It all goes to food. It's not enough to cover other expenses.

Sheet 54 reveals that:

I can't speak for other people, but in my house, the income from milk goes to my wife. She spends the money on cooking and milling. If she can't make ends meet, I can help her out with a little money.

Another respondent points out that:

During the dry season, men take part of the money to cover the cost of animal feed. But during the rainy season, women manage all the money, buying food and paying for the mill.

Other types of expenditure mentioned by respondents in the survey include family healthcare, animal care, staff wages, vehicle purchases, water and electricity bills, fuel costs and savings. Contrary to the statement made by the respondent on sheet 9 about the fact that income from milk is not enough to do other things, we came across many respondents who claimed to have saved some of the money earned from milk sales. For example, one respondent said:



Money from milk sales is often saved to buy oxen and cows (Sheet 132).

There is a similarity in the use of milk-generated income between the quantitative data shown above and the qualitative data presented below through a few examples. For instance, during a focus group, one participant declared:

Money earned from milk sales is used to buy feed for the cows.

However, according to another:

The money from the milk itself is not sufficient to buy cattle feed. We often have to sell a cow to feed the others so that they don't fall over due to hunger.

Women dairy processors believe that income from milk should be used primarily to meet women's needs. As one of them puts it:

Women need to look after themselves. No man is going to be attracted to an unkempt woman. So we use the money to look after ourselves and we also have to think about our own family. If you're a married woman, you've got your parents to think about. There are also our children, because we all know what men are like. They don't pay for children's clothes, except for festive occasions (Focus group, women, processors, Neima).

According to another respondent in Kwakualé:

Women use this (the income from milk) as spending money. They use it to buy soap, children's shoes and for other family expenses. My brother also uses the income from milk to buy medicines when an animal is sick, and salt for the animals. We also use that money to buy my brother shoes, tea and cigarettes. You know that those who take animals to pasture need shoes and most of them have tea and cigarettes (S.S., schoolboy from Kwakualé).

5.5.9 Views on income distribution arrangements

It is now acknowledged that, given the changes occurring in the dairy value chain, income from milk no longer belongs solely to women. The high cost of living has meant that men too have had to seek some income from milk to meet certain needs. So what do women respondents think about this situation? The vast majority of them are unhappy about it, but they are resigned to the fact that there isn't much they can do about it.

During the focus group held with women in Bama, one of the participants said:

I prefer this arrangement because if you don't have oil cakes for the animals in the dry season, you won't even have milk to drink, let alone milk to sell. You can't sell a cow every time you need to meet your family's needs. But if we manage to get cottonseed for the animals, we'll have milk to drink and milk to sell to meet the needs of the family. I think that's best (Focus group, women, Bama).



The fact is, women cannot refuse to share the income from milk since the cows themselves belong to the men.

In the same vein, D.O. (livestock farmer from Yéguéresso) adds:

Since the days of our parents, milk has always gone to women, so there's no discussion here. Now, if production conditions change, women are aware of it too, and we need to tell them that we'll be buying cattle feed or medicines for the animals. So the fact that some men frequently take the money to look after the animals shouldn't be a problem.

Along the same lines as D.O., S.B. (livestock farmer from Kwakualé) confirms that:

Before, the income from milk used to belong to women. No man would touch it. Women used that money to buy clothes, shoes, crockery and jewellery. They used the income from milk for the cooking. Men didn't give any money for that because that's what the money earned from selling milk was for.

5.5.10 Decision-making process between men and women regarding dairy income management (taxation, negotiation, collaboration...)

When it comes to decision-making on dairy income management, the fact that there are disparities between men and women comes as no surprise. Very rarely does a man consult his wife about anything to do with income management. On this point, Mrs B.F. declares:

Does a man ever consult anyone before making a decision? He only gives you what he wants

Many women believe that a woman should refer first and foremost to her husband. On that subject, this is what one woman processor said:

You can't just make a decision on your own. The fact is that we're all doing the same job, so it's only natural that he should be in charge - he's the one who figures out how to solve things (Focus group, women, processors, Neima).

Many men share this view of gender relationships, as evidenced by S.A., a livestock farmer from Belle-Ville:

It's up to the man to make decisions as he's the head of the family. He can inform his wife of his decisions.

5.5.11 Reasons for women's loss of control over dairy income when marketing is introduced into the dairy value chain

The reasons for women's loss of control over dairy income must be analysed on three levels. First, some respondents claim that it was the introduction of the MCCs that led to women losing control over their dairy income. According to one proponent of this view:



Before the MCCs, men didn't collect milk to sell it. It was when the MCCs were introduced that men began to bring milk to them.

Men are attracted to cottonseed, which is supplied by the MCCs with a view to improving animal feed (focus group statement). This type of milk-for-livestock feed transaction was also reported by Cesaro (2009) in the case of Senegalese livestock farmers. The author reveals that:

Every morning and evening, a car collects the milk directly from the camps in the northern part of the study area. Livestock farmers can even take out cattle feed loans with the dairy during the dry season (Cesaro, 2009, p. 11).

According to the author, these farmers will then repay their loans through milk produced during the rainy season.

In the words of the respondent quoted above, the idea is that the advent of MCCs is what brought men into the dairy value chain in the first place. According to De Dianous (2020), men's involvement in the dairy industry in Senegal has also been encouraged by the setting up of development projects such as the MCCs in Burkina Faso. She writes that:

The family income is now earned by men, even though women play a key role in production. This is evident in the project run by the Gret and Apess in Senegal through the 'chefs de bidon' scheme. These 'chefs de bidon' act as contacts for the Laiterie du berger and receive the income from sales (De Dianous, 2020, p. 5).

Furthermore, one of our respondents added that men also got involved in milk management because of the high cost of livestock feed. It just doesn't make sense to sell one head of cattle every time you need to buy feed for the others. At that rate, the farmer will be left with nothing. For S.D.:

We are forced to take some of the money from milk sales. For example, to vaccinate a feverish cow, you need to buy a bag of Bernal, which costs 500 FCFA. In addition, calves often have parasites, so you have to buy wormers at 100 FCFA a tablet. If you have five calves, for example, that's 500 FCFA. We take all this money from milk sales. Every morning, my brother has to have tea before taking the herd out. That's 200 FCFA every morning.

Mrs B.L. does not share the view of this respondent who believes that the high cost of living has something to do with men's involvement in dairy income. For her, it's quite the opposite. She says:

Men have taken over milk because the price of milk has risen and they don't want their wives going around selling milk.

Against this backdrop, D.A. (livestock farmer from Bama) maintains that:

Women say that men have taken the milk away from them. Yet this is not the case. Once the milk leaves the yard, it is handed over to the women. We men buy the milk off them and sell it on. Women cannot take the milk to the MCCs. They're too far away. Basically, we've lightened their load. Today, the dairy business is beyond women's capacity. Men have to



get involved, otherwise they won't be able to cope on their own. For example, can women really collect milk and bring it to Bobo?

5.5.12 Consequences of women's loss of control over dairy income on household expenditure (spending priorities)

In terms of consequences of women's loss of control over dairy income, two main ones stand out. On the one hand, this loss of control over dairy income leaves women in a precarious situation where they can no longer meet some of their needs, including household expenses. For Mrs D.S. (housewife from Bama):

Feeding cattle didn't cost anything before, there was pasture. The men used to milk the animals and hand over all the milk to us to sell. We used to stroll around selling milk. Household expenses were not managed by men. We would sell the milk to buy millet for the household. But now women can't do that any more, life is expensive these days. Men now grow crops for household consumption. So when they sell the milk and share the money with women, we have to accept it because everything has become expensive and we have to help each other.

On a similar note, a woman processor from the Neima cooperative said:

Those of us who grew up among the Fulani recognise that milk is the source of Fulani women's wealth. It's thanks to the milk trade that Fulani women buy their gold, their jewellery and their animals. As long as there's milk, they don't ask their husbands for anything. Milk has always had great value (Focus group, women, processors, Neima).

As this respondent points out, for authors such as Césaro et al. (2023), milk is a business that:

Contributes to economic diversification and household food security (Cesaro et al., 2023, p. 50).

In the same vein, Cesaro et *al.*, (2023) state that in Senegal, the development of a milk market has led some farmers to invest in more intensive feeding systems in order to make the most of the sector's returns.

Furthermore, in addition to financial insecurity, the loss of control over dairy income leads to arguments and conflicts within households. According to one woman surveyed in Yéguéresso, in the past, women used to sell milk and buy what they wanted. This is no longer the case. They are at home and have no option but to ask for money every time. This is where arguments and domestic disputes originate. As a result, there is no end to the petty squabbles between husband and wife. The woman asks for money today, but tomorrow she'll ask again, and that becomes a problem. So taking part of the income from milk from women has a negative impact on household peace and harmony. Even when women had all the income from milk, it wasn't sufficient, so it will be even worse for them if that income is halved.



5.5.13 Solutions to the various difficulties encountered by dairy industry stakeholders

Many difficulties and challenges have been highlighted by those we spoke to in the dairy industry. With a view to providing effective responses, we asked them about the solutions they felt were most appropriate. Their grievances revolve around awareness-raising/training, support, the provision of suitable equipment, and the availability of milk at all times of the year. According to Ms. B.K. (dairy processor):

I'd like to have the equipment required to prevent losses. We need to have the right testing equipment to check whether the milk we get contains water or is fermented. For the moment, we don't have such equipment. The equipment I have only tests whether milk contains water. Apparently, there's a device for testing milk fermentation, but I don't have it (Focus group, women, processors, Neima).

The above respondent's complaint centres on the provision of suitable equipment to ease her processing work, as the lack of equipment is causing huge losses.

Another proposal is to find ways of ensuring that milk is available at all times of the year. This concern was expressed by one respondent, who said:

There is milk in the rainy season, but not in the dry season.

So, from his point of view, a solution needs to be found for collecting and preserving milk, as with Dafani juice (Author's note: this would require setting up a UHT production line, which is not on the cards for the time being). This would be beneficial to all stakeholders. Similarly, the respondent was quick to point out the high cost of SN Citec's livestock feed. Steps must be taken here to reduce costs. Along the same lines, one respondent suggested the following:

We need to find a solution for feeding cows at home, so that we can keep them in the household compound all year round. In this way, women can get more involved in the dairy business (D.F., livestock farmer from Yéguéresso).

The proposal regarding livestock feed was raised during the focus group held in Bama. The participants asked for:

Support in acquiring livestock feed to feed the animals during the dry season. We would also like support with cow insemination in order to develop better breeds with high milk production. If milk is there, men and women will each have their share to meet their needs. It's the lack of milk that creates problems. If there's milk, even if men take some of it, there won't be a problem (Focus group, men, Bama).

These are effective technical suggestions for boosting milk production, albeit not very agroecological.

When it comes to solutions designed to lighten or ease women's workloads, the words of B.R. (livestock farmer from Yéguéresso) are of particular interest. According to him:

To support women, a system needs to be introduced that will enable them to deliver milk to a specific location, and then collect the proceeds from milk sales on a weekly or monthly basis. Also, in my opinion, even if the animals are on the move during the rainy season, the



milk has to be brought home so that women can sanitise it and sell it. However, this is impossible with us Fulani because for the Fulani, if a woman milks her own cow and sells the milk, if she is financially independent, she is no longer submitted to her husband.

This, let's face it, is a curious way of offering a tentative solution while at the same time saying that it's simply not possible. This somewhat contradictory way of thinking shows just how important it is not to exclude men when setting up a project that will benefit women, because their way of thinking affects their behaviour and it's important to understand them well.

B.R. suggests a solution to the challenges facing women in the industry. But ultimately, he ends with a pessimistic view regarding the irreversible nature of the situation. Yet, there is hope in the words of P.L. (DRAAH agent):

If we are to reverse this trend, we need to raise awareness, we need to raise awareness at home, so that men understand what is going on. There is reason for optimism.

To this end, policies and actions need to be implemented in order to alleviate women's exclusion from the value chain. These policies must also strive to curb the imbalance in power dynamics between men and women.

The place and role of women in the dairy value chain can be analysed on the basis of two key factors. The first factor relates to stakeholders and their rationality in an urban environment, while the second relates to stakeholders in a rural environment. The analysis does take account of the social realities associated with urban and rural players, because the existing structures do not operate in exactly the same way. It is also important to remember that women's place is not the same for stakeholders who have been involved in dairy farming for generations and for those who embraced it more recently as a business. Education levels and urban living are factors that help women assume an important role in the dairy industry. In these circumstances, women play a decisive role in production and in the sharing of decision-making power across the various segments in the chain. However, women's place reflects a more gender-based division of labour.



6 Conclusion

The local dairy value chain is structured around production, processing, marketing and distribution. Men dominate production, managing animal feeding and milking, while women also contribute but are more involved in processing and sales. Young people between the ages of 13 and 20 help out according to their gender: boys graze and make deliveries, girls feed and sell. Children under 12 are mainly involved in looking after the animals, with controversy surrounding the notion of 'child labour' versus learning the trade. Tasks are therefore divided along gender and generational lines.

Among the tasks that women and young people find difficult to carry out are street vending, animal grazing and milk preservation, due to the lack of appropriate resources and equipment. By contrast, some women enjoy processing milk, thanks to projects that have improved their working conditions, and selling milk to Milk Collection Centres (MCCs), which reduces travel needs. Gender role perceptions are changing, influencing the division of labour. The main difficulties encountered are the lack of grazing space, milk preservation problems, lack of knowledge about local milk, and the low purchase price of milk.

As far as women's social attributes in the dairy industry are concerned, the study shows that women's involvement in livestock farming is widely accepted, although some physical tasks are reserved for men. Milking is primarily a woman's job, but difficulties arise when the animals are moved away from the household. Women are also involved in selling milk, which they tend to favour because it provides them with an income.

There are no formal bans. Women's ownership of dairy cows is permitted, but their authority over these assets may be limited after marriage. In addition, the possibility for women to own their own farm is not being denied, however rare and restrictive it may be. On the contrary, it contributes to their independence and to the well-being of the household.

All stakeholders believe that women's contribution to the dairy value chain is essential. This contribution ranges from production to marketing. Traditionally in charge of milk, they are responsible for equipment hygiene, milking and milk processing. However, women are gradually being sidelined from new dairy value chains established with private mini-dairies and Milk Collection Centres (MCCs), largely due to men using social customs and traditions as well as religion as pretexts to prevent women from taking advantage of emerging opportunities. This has a negative impact on the management of milk-related income, which used to be handled by women for family expenses. This is what led Schneider et *al.*, (2007) to suggest that there is a growing trend towards 'de-feminisation' of the dairy value chain through small-scale processing units. However, this study showed that women are still involved in dairies, albeit in a limited way.

There are a number of obstacles to women making a full contribution to the industry. These include the seasonal nature of dairy farming, domestic chores and pressure from their husbands. Nevertheless, the dairy industry offers economic opportunities for women, men and young people alike. To overcome these challenges, solutions such as the production of forage seeds to improve livestock feed are being suggested. The need for better integration of women and fair management of economic resources is a key concern for women if the value chain is to develop in a sustainable way.



In terms of power dynamics within the value chain, decisions to buy cattle are predominantly made by men in the households examined as part of this study. Men can buy cows without asking their wives, while women must seek their husbands' permission. Women can acquire cows through inheritance or marriage, but they cannot make independent decisions about acquiring cattle. Unlike with cow ownership, women have control over milk production and marketing. Milk produced by the household's cows is handed over to women, who handle its sale and use the proceeds to meet the household's food requirements.

Respondents generally set aside a significant amount of milk for personal consumption, with the majority (41.5%) keeping between 46 and 60 litres per month. A small proportion (4.8%) set aside less than 15 litres per month. This is indicative of frequent milk consumption within households. For most of the respondents (75.5%), the amount of milk set aside for family consumption, and particularly for children, is deemed sufficient. This is due to the fact that families are small and milk consumption is moderate. However, 24.5% feel that the quantity set aside is insufficient because of the extended size of the family, financial needs requiring them to sell milk, the small number of cows and the seasonal nature of milk production. Selling milk is common, with 29.3% of respondents selling more than 200 litres per month. Sales volumes vary, but demand for local milk often exceeds supply. This suggests an opportunity to foster investment and support women livestock farmers through funding schemes in order to meet demand and promote women's self-sufficiency.

Monthly income from milk sales varies considerably among livestock farmers, with 53.7% of respondents earning less than 75,000 CFA Francs, while 17% earn between 150,000 and 225,000 CFA Francs. This income is often underestimated because of cultural reluctance to disclose actual earnings. As for milk giving, 70.1% of respondents give less than 5 litres a month to their neighbours, often only on special occasions. Milk-generated income is mainly allocated to feeding the family and animals, and is rarely used for clothing or tuition fees. Some respondents use this income for other expenses such as medical care, animal care and savings. Evidence suggests that women often manage the income from milk, using it for domestic needs, while men supplement it for major expenses. Women dairy processors stress the importance of using this income for personal and family upkeep.

With regard to the logic behind dairy income distribution, this study revealed a shift in the distribution of dairy income between men and women as a result of the high cost of living. This has led men to claim a share of the income to meet their needs. Although women are somewhat resigned to this situation, they prefer this arrangement which provides food for the animals and avoids the need to sell cattle to meet family needs. However, women's loss of control over the full amount of the dairy income has led to financial difficulties, conflicts and greater insecurity. Solutions put forward to overcome these issues include stakeholder awareness-raising and training, the provision of appropriate equipment and the constant availability of milk throughout the year. Specific suggestions include reducing feed costs, improving processing practices, and providing support for cow insemination. A scheme whereby women could deliver milk to a central location and collect the income on a regular basis is also suggested, although cultural issues make this solution difficult to implement. All this needs to be backed up by a clear policy to enable women to take their rightful place in the value chain. In any case, there is reason for optimism if the emphasis is placed on raising awareness within households and on support mechanisms for women and young people.



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