



Artisanal Processing and Marketing of Local Agricultural Products in Senegal: Case of Women Processors Who Are Members of a GIE

Mamadou Moustapha Mbaye¹, Aissatou Mane²

¹ENSA of Iba Der Thiam University, Thiès, Senegal

²MBA2 Agribusiness, Dakar, Senegal

Email: mamoustaff@yahoo.fr, aissatou-mane@ism.edu.sn

How to cite this paper: Mbaye, M.M. and Mane, A. (2024) Artisanal Processing and Marketing of Local Agricultural Products in Senegal: Case of Women Processors Who Are Members of a GIE. *Open Access Library Journal*, 11: e11423.

<https://doi.org/10.4236/oalib.1111423>

Received: March 12, 2024

Accepted: June 28, 2024

Published: June 28, 2024

Copyright © 2024 by author(s) and Open Access Library Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

For some time now, we have seen sustained development in agri-food product processing activities with the emergence of small and micro enterprises. These processing activities, whether artisanal or industrial, are mainly carried out by women through GIEs. However, locally processed products have great difficulty making themselves known on the market due to several factors. This study thus focuses on processing and marketing techniques for locally processed products: case of GIE Takku Ligueey de Thiaroye. The methodology used consisted of conducting surveys among GIE members and consumers. The study showed a multitude of products manufactured and marketed by the GIE. Made up mainly of women, the GIE has developed artisanal processing and marketing techniques for various local products. Despite their efforts to offer healthy and safe foods to consumers, the women of the GIE encounter many difficulties, particularly in terms of supply, production and marketing.

Subject Areas

Food Science & Technology

Keywords

GIE, Artisanal Processing, Marketing, Local Products, Women Processors

1. Introduction

According to statistics from (Bank, 2022) [1], the importance of agriculture remains crucial, it is one of the most important sectors of the Senegalese economy

and the main engine of growth in the primary sector, thus representing 15.7 % of GDP in 2022 compared to 14.9% in 2019. The agricultural sector thus offers jobs and income to many Senegalese people and presents significant potential for economic development and poverty reduction. In addition, it provides most of the basic foodstuffs to the Senegalese population, making it a vital sector for the country's food security (Sow, 2004) [2].

In recent years, with the emergence of small and micro businesses most often located in urban areas, we have seen sustained development in agri-food product processing activities. These processing activities, whether artisanal, semi-industrial or industrial, are mainly carried out by women through GIEs according to the (Agency, 2023) [3].

However, these processing companies, from artisanal to industrial level, are often fragile and unstable and encounter multiple problems such as supply difficulties (high costs of raw materials, sometimes perishable products), difficulties of access to markets, foreign competition, factors linked to expensive and difficult-to-access packaging materials, marketing problems among others.

In the informal sector, at the level of the various production sites particularly at the level of the Thiaroye market, the activity mainly employs many women: it is a sector with high potential for female labor and thus contributes to the creation of jobs and the fight against poverty: it is a source of income for all of these women who work there directly and indirectly, generally in the form of GIE (Soleil, 2014) [4].

For the GIE "Takku Liguey", processing activity is generally based on raw products such as cereals (millet), raw vegetables, and traditional drinks. These women have made agricultural processing one of their main income-generating activities. Indeed, their work consists of converting local raw materials into processed products using traditional and artisanal methods. This approach aims to bring added value to raw materials and promote the preservation of local know-how.

It is in this context that this study will serve as an instrument for reflection on processing and marketing activities for locally processed agricultural products. We then raise a research problem namely: "How are local agricultural products transformed locally by women: case of the GIE 'Takku Liguey' by 'Thiaroye'". Thus, our research objective is to study the artisanal processing techniques of local products: case of the GIE "Takku Liguey".

To do this, we will first present the research and analysis methods and tools, then, before interpreting the results obtained.

2. Methodology

To carry out this work, we adopted a working methodology structured around 3 essential points: documentary research, a field study and the analysis and interpretation of the data. The documentary study took place at the level of websites, previous dissertation projects, companies working in the field of processing local products but also with organizations such as the ANSD and the World Bank to

have the maximum reliable information in real time. The field study focused on collecting additional information through a qualitative study initially through simple observation, a collective interview and an interview guide with professionals. Secondly, we carried out a quantitative study through a questionnaire survey administered to our target in question.

Sampling:

Since our target concerns women processors particularly the Economic Interest Group “Takku leaguey”, then we surveyed this entire population of women in order to obtain data representative of the group. However, it seemed important to us to access additional information that would allow us to make cuts. This is how we also surveyed a representative group of consumers of GIE products and some specialists in the field.

Sample size:

The 6 women of the GIE “Takku Ligueey” represent the scope of our study and we therefore believe that these women hold the majority of the relevant information we need.

Concerning consumers of GIE products, not knowing the parent population, we used the following Cochran formula to calculate the sample to be surveyed.

So we have:

$$n = t^2 \times p \times (1 - p) / m^2$$

n = minimum sample size to obtain significant results;

t = coefficient for a given confidence threshold: let's take 95%;

p = frequency of appearance of the phenomenon studied: 50%;

q = frequency of non-appearance of the phenomenon = $1 - p = 50\%$;

ε^2 = confidence interval given by the margin of error = $\pm 5\%$.

The sample size n must be greater than or equal to $n = t^2 * p * q / \varepsilon^2$.

Hence $n = 0.95^2 * (0.5 * 0.5) / (0.05)^2 = 90.258$.

Thus, we were able to survey 90 consumers representing the size of our sample (see [Table 1](#)).

3. Analysis and Discussion of Results

3.1. Characterization of the Women Transformers of the GIE “Takku Ligueey”

3.1.1. Distribution of GIE According to Age

The age distribution of women made it possible to classify them into 3 groups:

Table 1. Summary of all people surveyed.

Actors surveyed	GIE	Consumers
Men	0	20
Women	6	70
Total	6	90

Source: our 2023 surveys.

women aged between 21 and 30 years old, those aged between 31 and 40 years old and women aged between 41 and 50 years old. The results (see **Table 2**) show that no woman in the GIE is aged between 21 and 30 years old and that only one woman among the 6 is aged between 31 and 40 years old, or 16.7%. Women aged between 41 and 50 represent the majority, *i.e.* 5 women for a rate of 83.3%.

Considering the data obtained, the age group between 41 and 50 years old constitutes the largest share of the GIE (83.3%). The GIE is thus made up mainly of people who are in their forties, that is to say who are between 40 and 49 years old. These are women who have accumulated different experiences over the years and who have more availability to devote themselves entirely to the different activities of the GIE. In addition, these women encourage female entrepreneurship and the promotion of women's economic autonomy.

3.1.2. Distribution of GIE According to Level of Study

The level of education is also a significant criterion because, however minimal it may be, it represents an advantage for these women because thanks to their studies, they were able to acquire certain fundamental skills such as reading and writing. Thus, the distribution shows that the entire GIE has completed studies, two (2) of which reached the secondary level: the baccalaureate (40%) and three (3) were able to have the certificate of completion of elementary studies (60%). Among these 6 women, four (4) of them also attended the Koranic school and one (1) studied Arabic (see **Table 3**).

Level of education plays an important role because it directly influences the skills and opportunities that may be available to women processors. 60% of GIE women with at least a primary level of education are able to read and write and

Table 2. Distribution of women by age.

Ages	Percentage
21 - 30	0%
31 - 40	16.7%
41 - 50	83.3%
Others	0%

Source: our 2023 surveys.

Table 3. Distribution of women according their level of study.

Level of study	Percentage
Primary	60%
Secondary	40%
University	0%
Others	0%

Source: our surveys, 2023.

express their needs in French. The president and the financial manager represent 40% and have a higher level of education: secondary reason why they occupy these strategic positions in the company.

3.2. Analysis of Products Locally Processed by the GIE

• Organization and operation

“Takku Liguey” is an economic interest group composed mainly of women and specialized in the processing of local products. Co-founded by 6 Senegalese women, their different experiences allow them today to produce and sell different local products at the Thiaroye Gare market.

The organization chart of the GIE “takku leagueey” is as follows (see **Figure 1**):

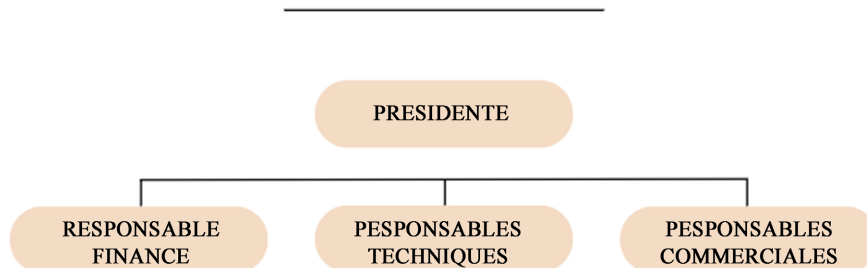
In any well-organized structure, each member has one or more responsibilities to ensure its proper functioning. It is in this context that “Takku Liguey” is composed of:

- Of a president elected by the members of the GIE: aged 45, she has a secondary level of study (baccalaureate) and is thus responsible for coordinating and correlating all the activities of the GIE: she has the power to act name of the entire GIE.
- From a finance manager: aged 42, she attended the Koranic school and has a secondary level of education (Baccalaureate). It thus takes care of monetary flows: inflows and outflows of money.
- Two technical managers: respectively 43 and 42 years old, they are responsible for the supply and production of finished products. They both attended French school and have primary school education.
- Two sales managers: aged 42 and 39, having attended the Koranic school and completed French school and primary education.
- Two sales managers who take care of communication and promotion of products during exhibitions or at the market.

• Organization of GIE production

Within the GIE “Takku Liguey”, production is managed by the technical managers who are Diattou Kébé and Khady Lèye but in reality, it is provided by the entire back office team. Indeed, the two managers are highlighted because

Organigramme du GIE “Takku Ligueey”



Source: Our surveys, 2023.

Figure 1. GIE organization chart.

they each benefited from training in agricultural production techniques; however, the processing tasks are shared between the members of the GIE.

Firstly, production managers select the different suppliers from which they obtain their supplies based on the quality and costs of the products. Once the suppliers have been chosen, they purchase the various raw materials necessary for their processing activity. The next step consists of receiving and then checking the raw material. As hygiene is paramount in food processing, it is essential to follow strict hygiene measures to ensure food safety and consumer health. Thus, after receipt of the raw materials, the hygiene measures employed by the women come into play which consist of wearing personal protective equipment (PPE), cleaning the production premises and all kitchen equipment and utensils. After all this prerequisite, comes the production stage itself where the different tasks are distributed among the women according to the skills of each. Thus, some women take care of the preparation of raw materials and their processing, while others take care of packaging, conservation and storage.

- **The different products marketed by the GIE**

The “takku” GIE “Liguey” markets very diversified products entirely from local agriculture. The different products marketed are products derived from millet: “arraw”, “thiakri”, “sankhal”, local drinks: “bouye” juice, “bissap” juice, ginger juice and canned vegetables. Millet processing occupies a very important place in the various activities of the GIE, being their first activity carried out since the beginning. The GIE then focused on traditional drinks which represent an integral part of Senegalese culture and which are consumed in daily life and during celebrations. Canned vegetables are the latest variety of products offered by the GIE. They are therefore available in all seasons and consumers have the possibility of choosing the different components of their canned vegetables. This variety of products which includes three groups mainly supplied by local origins reflects the wealth of agricultural resources in the region and demonstrates the commitment of women processors to promote local agriculture and meet market needs. The most notable aspect of the offering of “Takku Liguey” is the emphasis placed on local production which meets significant consumer demand.

- **Consumption of GIE products**

The results of our surveys show that most consumers of GIE products live either in the Thiaroye area or in neighborhoods close to the market (Thiaroye station, Thiaroye police, Thiaroye tali diallo, Guinaw rail, Yeumbeul etc.) and the majority of GIE customers obtain their products from the market itself. We therefore asked each consumer the different products they are used to buying and they responded differently. The responses we collected show that each consumer’s purchase varies depending on their preferences.

Through **Table 4** relating to the consumption of GIE products, we can classify the different GIE products into four categories (star product, dilemma, cash cow, dead weight) using the BCG matrix which is a tool strategic analysis tool designed by Boston Consulting Group.

We note that among the 90 consumers surveyed, “arraw” and canning jars

Table 4. Consumption of GIE products.

Products	Percentage
Thiakry	42.2%
Araw	56.7%
Sankal	48.9%
Pots de conserves	56.7%
Bissap	51.1%
Bouye	43.3%
Gingembre	47.8%

Source: our surveys, 2023.

represent the company's star products because they have the largest market shares and are growing rapidly. Each of its 2 products is thus consumed by 51 people in total and has a market share equal to 56.7% alone. Then, we can consider products between 47 and 51% to be cash cow products given that they have a significant market share but experience slower market growth with a rate of 51.1% for juice of "bissap" consumed by 46 people out of 90, a rate of 48.9% for "sankal" consumed by 44 people in total and a rate of 47.8% for ginger juice consumed by 43 people out of the 90 consumers surveyed. Finally, we can consider "thiakri" and "bouye" juice as being the dilemma products given that these products have a low market share compared to other products while they are in markets with growth quite fast. Bouye juice is thus consumed by 39 people out of 90, which represents a percentage of 43.3%, and thiaki by 38 people, or 42.2%. If they succeed in increasing their market share, they can become star products.

The majority of consumers also judge that the quality of GIE products is good.

- **Sources of supply for the GIE**

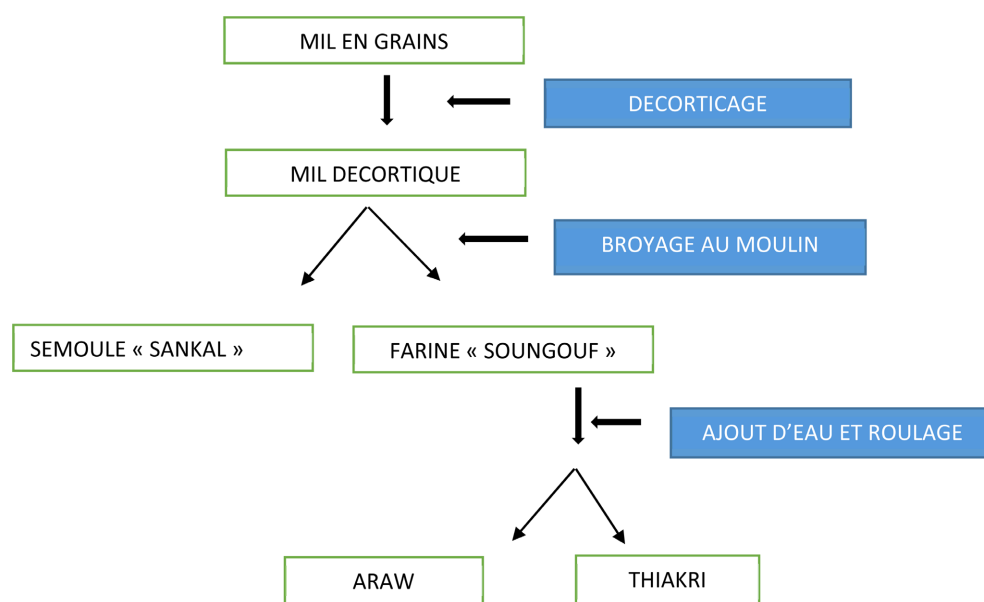
The different sources of supply for the GIE are local producers: bana-bana coming from Mboro and local markets. The supply of the latter from their suppliers constitutes an essential component of their operation. Indeed, it is important that women carefully choose their suppliers to have quality raw materials in order to provide quality products to consumers. Local markets thus constitute an essential source of supply for the women of Thiaroye who benefit from a variety of products serving as raw materials in their production and processing. However, the women of Thiaroye are not limited to just one source of supply because they are also in contact with the producers of Mboro which is a town located near Thiaroye, which facilitates logistics and transport of products. and reduces delivery costs while guaranteeing the freshness of the products. Indeed, the bana bana coming from Mboro travel very often according to the schedule and go to the Thiaroye market to sell their products. The latter thus provide women processors with fresh, varied and good quality products at an affordable price.

• GIE transformation methods

The processing of “Takku” products “Liguey” is a set of processes aimed at converting different raw materials into finished products (see **Figure 2**). With the means at hand and the little equipment available to women, the different stages of millet processing are:

- Shelling: is a primary transformation which produces an intermediate product. This is a step which consists of removing the millet grain from its husks. A sieve is used after hulling to separate the hulled millet grains from the remaining hull and the grains are then stored in clean bags to avoid the reintroduction of unwanted particles.
- Cleaning: is a fundamental step which will affect the finished product. In fact, this step consists of eliminating all impurities likely to alter the quality of the product at the end of the transformation by sieving or sorting. After hulling, the millet grains are sorted and sifted to remove husk residue and other impurities. The millet grains are then poured into large basins through the sieve and the largest residues remain on the surface. This operation separates the clean grains from the debris and eliminates any impurities that could cause an unpleasant taste or texture.
- Milling: or grinding at the mill is an essential step in the processing of millet carried out by a miller at the Thiaroye Gare market. Grinding produces “sankhal” semolina or “sougouf” flour which is stored in large calabashes. It is from this flour obtained that women produce thiakri or arraw by adding water and thus forming small or large granules.

After millet, women became interested in traditional drinks which are consumed daily by many Senegalese people. These drinks are often appreciated for their refreshing taste and affordable prices.



Source: our surveys, 2023.

Figure 2. Transformation du mil.

The production of traditional drinks first requires:

- The preparation of the raw material which consists firstly of choosing a quality raw material and secondly of sorting and cleaning it in order to eliminate any foreign bodies. To produce ginger juice, the pieces are placed in the mortar and are crushed using firm pressure to obtain a thick paste which will be filtered using a sieve to extract as much juice as possible. To make bouye juice, the baobab fruit is soaked in water and then crushed with a whisk until the flesh falls away. For bissap juice, the women of the GIE mix the vimto variety and the koor variety and soak the raw material in water in order to infuse it.
- Soaking (infusion) which consists of softening the raw material in large basins in order to extract the flavor, aroma and nutrients.
- Filtration: consists of eliminating raw material residues. It is essential to ensure that the final drink is free of any unwanted solids. This filtration step is first carried out using a coarse sieve before being passed through a cotton filter bag which allows for a finer extraction. This step provides a filtrate without impurities and ensures that the juice is ready to be consumed. However it varies depending on the drink and the resources available.
- Taste adjustment: to improve the flavor and taste of their drinks, women processors add herbs and sugar to give a more pleasant taste to the drinks. The quantity of aromatics and sugar is determined according to the quantity of the drink and the desired final product.
- Bottling and conservation: once the processing of the drinks is finished, the products are packaged in basins and are then poured into their previously cleaned containers and are stored in a refrigerator to keep them cool.

In a logic of diversification of their offer on the market, canned vegetables are the latest products marketed by “Takku Liguey”. They are used to store sliced vegetables that are ready to eat. The preparation of preserves goes through different stages which are:

- The selection of raw materials: this first step is very important because the quality of the raw materials directly influences the quality of the final product. Thus, women buy vegetables from traders coming from Mboro to have fresh products. They are carefully selected according to their maturity for optimal nutritional value, their freshness and their quality to ensure the absence of damage such as rot and mold. After selection, the vegetables are stored in large basins and then transported to the production room.
- Preparation of raw materials: vegetables are washed in basins and prepared thoroughly to remove dirt and impurities. They are then peeled and cut into pieces or slices using knives.
- Filling the previously sterilized jars: this step consists of canning the already prepared raw materials through a strainer and adding a covering liquid: vinegar to prevent the growth of bacteria and mold.

- **Packaging of GIE products**

According to our investigations, the GIE “Takku Liguey” uses different types of containers to package its products. These containers vary depending on the

products sold and are generally available through recycling or at the market. Not benefiting from sufficient resources, the women of Thiaroye work with the means at hand by reusing recycled pots to maintain their commercial activity. The availability of pots already used facilitates their acquisition and avoids dependence on suppliers who may be far away. Recycling allows them to reduce production costs (purchases of containers, high transport costs, etc.). To package their products, the women use plastic bags for all products derived from millet, water or drink bottles already used in plastic for traditional drinks and old mustard pots for canned vegetables.

Before reusing the containers, the women processors carry out preliminary preparation to sterilize the old containers. They therefore go through different stages to guarantee the cleanliness and hygiene of the containers. First, the women remove any labels or adhesives from the empty container. Next, she disinfects by soaking the container in bleach followed by cleaning which involves washing the glass jars with hot water and soap to sterilize and remove any residue or remaining particles. A new wash with clean water is undertaken to ensure that the container does not contain any foam or soap particles.

After cleaning, the containers are completely air dried in a clean, dry place. The women of the GIE, dressed in their personal protective equipment (PPE): gloves, hats, always carry out a visual inspection after drying to ensure the cleanliness of the containers.

However, women processors do not use packaging because they believe the containers are adequate and that it will cost them more.

- **Conservation of GIE products**

This is a very important step so that the products remain consumable or fresh (drinks) for a certain period. To preserve products derived from millet, the GIE carries out complete drying (solar drying) because the drier the flour, the longer its shelf life. Indeed, the almost non-existent humidity level plays an important role in the shelf life and final taste of the flour produced.

For traditional drinks, the preservation method used by women is refrigeration which consists of keeping the drinks cool so that the taste is not altered and is pleasant to taste. As the shelf life is not defined, the women set themselves the goal of rotating stock every week to sell the drinks efficiently.

For canned vegetables, women use natural preservatives such as salt or vinegar because of its acidity: the more acidic an environment, the less microorganisms can develop there. They are thus placed in places sheltered from direct sunlight to naturally preserve the products and avoid any degradation.

- **Organization of the marketing of the GIE**

The organization of the marketing of “Takku Ligueey” is carried out by the two sales managers who are in direct contact with customers. They take care of reception operations, presentation and explanation of products, price negotiation and order processing. However, GIE does not have a defined business strategy due to their lack of training, difficulty accessing financial resources and their focus on local sales which hampers their ability to explore larger markets.

In fact, the GIE only has one distribution channel which is the Thiaroye Gare market which is quite limited. Women do not invest in promoting their products. Regarding pricing, it is established taking into account production costs and the market. All sales are made in cash: the GIE does not provide credit and does not provide after-sales service.

- **Marketing of GIE products**

The “Takku” GIE “Liguey” only has one distribution channel which is the Thiaroye Gare market. However, although rare, it happens that women make home sales by direct delivery when they receive an order and the customer lives close to where one of them lives. In this case, they take care of the delivery themselves because they do not have delivery people. The main targets of the GIE are the market, households and small catering services (gargotes). This targeting is based first of all on the fact that many operators come into play in the market, from wholesalers to retailers. In addition, today consumers are increasingly moving towards products that are ready to be consumed. According to the GIE, households and small catering services represent a good target because the majority of their customers are made up of these two segments and they will save a lot of time by using their products. In addition, some consumers are increasingly concerned about their health and favor local products that are fresh compared to certain products that have probably been stored for a long time or contain chemicals.

The products marketed by the GIE are distinguished by their accessibility, which makes them suitable for a wide range of consumers. The women strive to maintain efficient production costs, which allows them to offer competitive prices. To set prices, the GIE is based on production costs while taking the market into account. Since the start of their activities, the prices set by them have not changed significantly. Thus, all GIE prices vary between 100 and 1500 francs.

For products derived from millet, prices vary between 250 and 500 francs. Thus, sachets of “arraw” and “thiakri” are sold for 500 francs and the 500 g sachet of “sankal” is sold for 300 francs.

Bissap and ginger juices packaged in 30 cl bottles are sold at 100 francs each and 1 L bottles sold at 1000 francs. For Bouye juice, due to the higher production cost, the 30 cl bottle is sold for 150 francs and the 1 L bottle for 1500 francs.

Canned vegetables preserved in old mustard pots are sold for 1000 CFA francs. However, the GIE does not provide credit, all sales are made in cash. GIE customers benefit from good quality products without having to spend a high price.

- **Consumer purchasing behavior**

- **Distribution of consumers according to purchasing frequency**

From a consumer perspective, the frequency of purchasing products varies across consumers. The distribution of purchasing frequency (see **Table 5**) indicates that among the 90 consumers the majority, 43.3%, purchase weekly. 25.6% of consumers stock up monthly. 22.2% of consumers stock up on a daily basis and only 8.9% stock up rarely.

Several factors can explain the fact that the majority of consumers stock up weekly. First of all, regular consumption of the various products offered by the GIE does not allow consumers to stock up on a monthly basis. To this regular consumption, we can add customers' preference for fresh local products. Some prefer to buy weekly to ensure product quality. Then shopping weekly is more economical for most customers in terms of transportation costs and budget management because it allows them to reduce the number of trips and expenses.

- **Consumer opinions on GIE prices**

When asked to consumers to get an idea of what they think of the prices set by the GIE, the majority judged that the products are affordable and accessible. This consumer satisfaction with regard to prices represents an advantage for the GIE because first of all it attracts a greater number of consumers ready to purchase a significant quantity of the products due to their accessibility: this broadens the base of potential customers. Then, the fact that prices are affordable helps build customer loyalty because any consumer is likely to return to a company that offers affordable products or services.

Beyond the price that is accessible to consumers, various factors encourage them to purchase GIE products such as quality, taste, availability of products and support for local production.

- **Consumer reviews on product quality**

After asking customers their opinions on the quality of the products, the results show that the majority or 65.6% found that the products are of good quality. 18.9% of consumers believe that the products are quite good; 11.1% find that the products are very good and a small percentage of 4.4% believe that the products are bad (see **Table 6**).

Table 5. Distribution of consumers by purchasing frequency.

Purchasing frequency	Percentage
Daily	22.2%
Weekly	43.3%
Monthly	25.6%
Rarely	8.9%
Others	0%

Source: our surveys, 2023.

Table 6. Consumer opinions on product quality.

Opinions on product quality	Percentage
Good quality	65.6%
Good	18.9%
Quite good	11.1%
Bad	4.4%

Source: our surveys, 2023.

Beyond the affordable price and the quality, various factors encourage consumers to purchase GIE products. We have factors such as the availability of products at all times which is also a strength of the GIE, the time savings enjoyed by consumers by using products ready for cooking or consumption, healthy eating and support to local production. These different factors, among others, push consumers to buy GIE products according to our surveys.

4. Conclusions

The valorization of locally processed products is a subject of great economic and social importance. Through this dissertation, we have explored multiple facets of the activity of the women processors of “Thiaroye Gare” by highlighting the challenges they face. Our in-depth analysis allowed us to draw various significant conclusions:

Firstly, the women of the GIE play an important role in the processing of local products. Their dedication and commitment make them key players in promoting local culture and economic growth in the commune of Thiaroye and the country. Secondly, despite all the obstacles that present themselves to them, they remain committed to promoting local consumption and their desire to be autonomous.

We were able to have an overview of the processed products, the consumption of these products, the distribution channel among others, the market for locally processed products and to note that the GIE markets a variety of processed products.

Furthermore, GIE products are not valued enough and women face many obstacles in carrying out their activities. Hence the need to carry out a study on the constraints and possibilities of valorizing products locally transformed by GIEs in Senegal.

Conflicts of Interest

The authors declare no conflicts of interest.

References

- [1] World Bank (2023) Economic Situation of Senegal in 2023: Meeting the Needs of Vulnerable Groups for National Development. Report Number AUS0003383.
- [2] World Bank (2022) World Development Report 2022: Finance for an Equitable Recovery Examines the Central Role of Finance in the Economic Recovery from the Pandemic. <https://www.worldbank.org/en/publication/wdr2022#downloads>
- [3] Soleil, L. (2014). Report on the Millennium Development Goals. Le Soleil.
- [4] Sow, I. (2006) State of Play of the Fruit and Vegetable Sector in Senegal. Project Info Conseil MPEA, Dakar, 65 p.