



INITIATIVE ON
Agroecology

Agroecology Initiative

Business Incubator program

Business model : Jamm Bugum Bakery

Product valuation premises : production of millet-based bread



Final technical report

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January 2025

TITLE of AGREEMENT	<i>JAB - Transformational Agroecology across Food, Land, and Water systems. (G193)</i>
AGREEMENT NUMBER	<i>C24PAL343</i>
IMPLEMENTING PARTNER	<i>JAB - Jamm Agro Business</i>
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DATE SUBMITTED	20/01/25
REPORTING DATES (DD/MM/YY - DD/MM/YY)	08/10/2024 – 15/01/2025
TYPE OF REPORT	Evaluation report
ABSTRACT (maximum 200 words)	<p>The report covers the activities of GIE Jamm Agro Business, a bakery located in Niakhar, Senegal. Supported by the One CGIAR agroecological initiative, it valorizes local cereals such as millet, corn and moringa leaf powder, producing breads and pastries incorporating these ingredients. With funding of USD 20,000, the bakery has increased its production capacity from 1,500 to 2,375 baguettes per day, with a target of 3,000 baguettes. It also produces cookies, cakes and children's food, diversifying its offering.</p> <p>The impact includes a 158% rise in annual sales (to USD 161,540), job creation (from 12 to 13 employees, with a strong inclusion of young people and women) and increased income for distributors. Products enriched with local cereals still represent a small share of production (2%), but their development is a priority.</p> <p>The bakery aims to strengthen sustainability and food self-sufficiency, while contributing to local development and the agro-ecological transition. It is now stepping up technical assistance to promote a sustainable and innovative model for adding value to local value chains.</p>
KEYWORDS	<p>Country/region: Sénégal/ Fatick</p> <p>Crop(s): Millet</p> <p>Subject: Production of millet-based bread</p>

Introduction

Senegal's socioeconomic framework, developed in 2014, was designed before the emergence of the Sustainable Development Goals (SDGs). As a result, sustainable development and agroecology were not explicitly integrated into its strategic objectives. This planning document, called the Emerging Senegal Plan (PSE), has however evolved to adopt a more ecological vision thanks to advocacy efforts and the dynamics of the agroecological transition that has emerged in Senegal. The PSE has thus been enriched and renamed PSE_vert , marking the integration of agroecology into national policies.

The involvement of agroecology in public policies is now strong at the national level. However, at the local level, the dynamic remains insufficient and local policies continue to leave limited, or even negligible, space for agroecology.

In this context, local initiatives such as the Dytael of Fatick have set themselves the objective of territorializing agroecology. Chosen as an Agroecology Living Landscape (ALL), this initiative benefits from the support of the One CGIAR agroecological initiative, which aims to promote a voluntary and responsible adoption of agroecology in local development policies. Thus, in many municipalities making up the ALL, such as Niakhar , agroecology is now integrated into municipal development policies (PDC).

To operationalize these PDCs, the municipalities rely on local initiatives and highlight actions in favor of agroecology. The municipality of Niakhar , which hosts the Jamm association Bugum (currently in charge of the secretariat and leadership of Dytael), relies on the activities of this association to advance the agroecological transition.

Jamm Bugum works towards the territorialization of local value chains, particularly that of millet, by developing an integrated value chain. The association promotes the valorization of local products through the production of composite bread that substitutes wheat with 30% of locally produced millet. In addition, Jamm Bugum supports the agroecological transition of local millet production and offers commercial opportunities, thus placing its action in a broader vision of valorizing local value chains. As leader of the ALL, Jamm Bugum wants to make its integrated value chain model a showcase for the promotion of agroecology in the Fatick department.

The GIE JAMM AGRO BUSINESS wanted to increase production of breads made from local cereals without losing its market share in the sale of more traditional breads. To do this, it needed to increase the bakery's capacity. In addition to bread, it also needed to conquer a niche market by diversifying its product ranges and embarking on the production of cakes and cookies based on local products. It also wanted to launch into the production of baby foods based on roasted and ground cereals such as millet and sorghum. These niches are highly developed in the commune of Niakhar, and are supplied by local products. The company therefore needed to make investments at various levels:

- firstly, at the primary processing level; at this level, the company aims to be self-sufficient to improve work efficiency, with the acquisition of its own equipment, in this case a huller and a mill for processing local cereals.
- secondly, at the secondary processing level, the company aims to improve work quality and safety with the acquisition of a new oven and a mixer (for cookies).
- And finally, on the distribution front, the company aims to increase sales capacity by setting up three kiosks in the city.

As part of its support for local initiatives, the One CGIAR Agroecology initiative, through its third component –WP3- dedicated to the development of value chains within the framework of

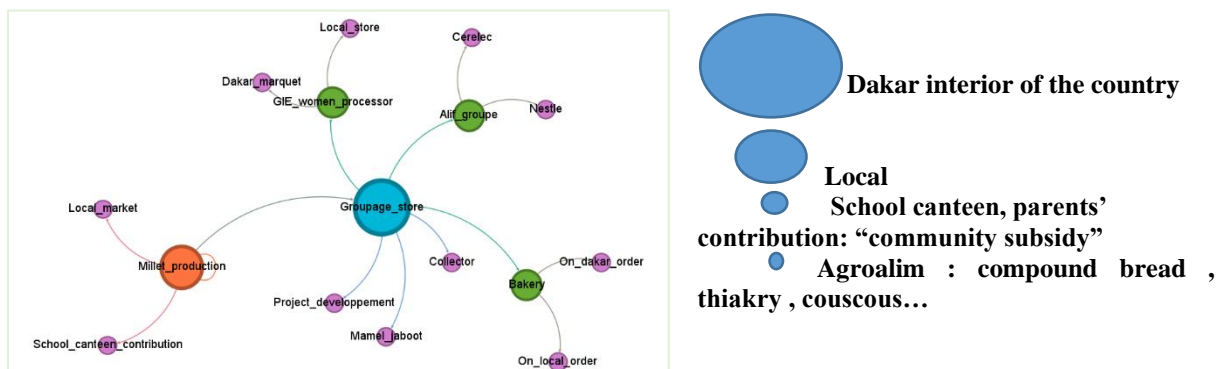
the business incubation program, supported the action plan of this dynamic to the tune of USD 20,000. This support aims to increase the production and marketing capacity of the bakery, in order to strengthen its socio-economic impact, particularly in terms of income generated and jobs created. The objectives were:

- Double the bakery's production from 1,500 to 3,000 loaves a day, incorporating 30% local cereals (millet, corn, moringa) for self-supply of bread to the town of Niakhar;
- Market and product diversification, with the development of cookies, cakes and food for children and infants;
- Job creation by increasing the number of direct employees, over 50% of whom are women;
- Holistic impact of the relocalization of local bread value chain, with the bakery's innovative touch including the incorporation of local cereals.
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Brief presentation of the association

The Jamm Association Bugum is seen by the State, through the Ministry of Youth, and by technical and financial partners, notably the International Fund for Agricultural Development (IFAD) as a reference for inclusive socio-economic development¹². The Jamm association Bugum, initially dedicated to the socio-cultural development of young people, has expanded its activities to meet the challenges of the local population, with a particular focus on agriculture. In 2015, the adoption of the SDGs and the designation of Senegal as a pilot country for agroecology by FAO marked a turning point for the association, which then adopted a sustainable and environmentally friendly approach. It focused its strategy on quality production, reduction of chemical inputs, and partnerships with niche markets.

However, the export of raw materials such as millet has been seen as a brake on local employment and food self-sufficiency³. Faced with health and geopolitical crises, Jamm Bugum decided to relocate millet value chains, creating a GIE to intervene in production, storage, and processing, with the opening of a bakery integrating 30% millet in bread. It trained its members with the help of the Institut de Transformation Agroalimentaire du Sénégal and is piloting the Local Dynamics for Agroecological Transition (DyTAEL) of Fatick, aiming to make the region an agroecological model by 2035.



¹ [IFAD ASCIFAD Director Invites ASCs to Get Into Agriculture](#)

² [ASC JAMM BUGUM must be given as an example | SenePlus](#)

³ <https://cgspace.cgiar.org/server/api/core/bitstreams/d515a0cf-7607-4cf0-b863-3fd73ceecf6e/content>

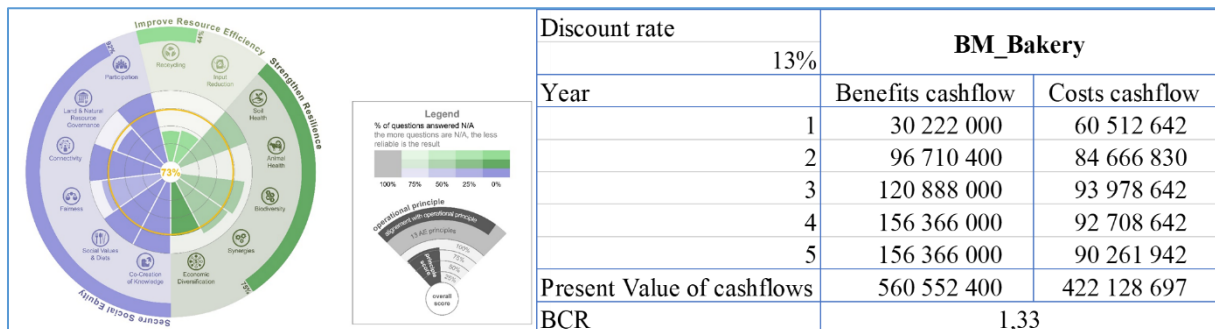
The current bakery situation

The reference situation of the GIE JAMM AGRO BUSINESS bakery is characterized by its central role in the commune of Niakhar, which includes 32 villages and a population of more than 77,784 people. Since its creation in 2019, the bakery has quickly established itself thanks to the quality of its products, establishing a significant market share. Currently, it produces around 3,000 loaves of bread per day, mainly baguettes made from wheat flour, while gradually integrating variants enriched with local cereals such as millet, moringa leaf powder and corn flour. Production is carried out at night and early in the morning, and distribution is ensured by three vehicles, reaching all 32 villages. The sellers make a profit margin of 10%, which contributes to the dissemination of the products in the commune.

The bakery has achieved a notable level of success, but it faces significant challenges in meeting the growing demand from the community and expanding its offering. Its current production capacity is limited and does not meet all needs, particularly for niche products such as cakes, biscuits and baby food. The business has managed to create jobs for local youth, but it is looking to expand its team and improve production and safety conditions.

In terms of agroecological transition, the bakery has an overall score of 73%, supported by strong social security (92%) and resilience assessed at 75%. However, there is still work to be done to improve equity and influence on natural resource governance⁴.

The baseline situation therefore indicates that the bakery is at a stage of success but needs to invest in additional equipment to increase its production capacity, diversify its products and adopt more sustainable practices, particularly in terms of energy and resource management.



The strategic vision of the bakery

The vision of GIE JAMM AGRO BUSINESS bakery is to become a key player in the transformation and valorization of local products, while meeting the food needs of the community. It aims to offer high-quality bakery products, enriched with local ingredients such as millet, corn and moringa leaf powder, to promote nutrition, sustainability and self-sufficiency.

The bakery aims to play a key role in local economic development, creating jobs and supporting local agricultural production. By diversifying its product range with innovative breads, cakes, biscuits and children's food, it aims to offer healthy and accessible alternatives while consolidating its market share.

The vision is to contribute to an efficient relocation of the bakery value chain, combining tradition and innovation to improve the well-being of the population and promote inclusive and sustainable growth.

⁴ <http://agritrop.cirad.fr/611466/>

Bakery action plan to expand action capabilities

The GIE JAMM AGRO BUSINESS bakery's action plan aims to double its production capacity from 1,500 to 3,000 loaves per day by integrating 30% of local cereals (millet, corn, moringa). This involves purchasing new equipment such as an oven and mixer and installing three additional kiosks to improve distribution. Product diversification includes the production of cakes, biscuits and baby food based on local cereals. The plan also includes the creation of six new jobs, continuous training of staff and the adoption of quality and safety standards. Finally, the bakery will support the local economy by collaborating with farmers and minimizing waste, thus consolidating its role in the relocation of the food value chain and community resilience.



Actions taken to implement the action plan

- ✓ **Positioning: Participation in the competition for the best baker of local cereal bread**

At the end of October 2024, the National Federation of Bakeries of Senegal organized in Dakar the competition for the best baker of cereal bread. Jamm 's bakery Bugum took part in this national competition, achieving a significant communication and marketing coup. In addition to this aspect, the bakery demonstrated its expertise in the production of compound bread by reaching the semi-finals of the competition.



✓ **Expanding the capacity for action**

With the first tranche (13,885.24 USD) of disbursement of the funding of the agroecology initiative within the framework of the business incubator to boost local business models and initiatives, the following equipment was purchased and received. This is the production equipment (oven, cart, tray and pretrin) to increase the production capacity in accordance with the productivity objects set in the action plan.



Description	Number of units	Unit Price_USD	Amount_USD
Oven 40xG0	1	7,741.19	7,741.19
40X60 trolleys	4	403.19	1,612.75
Tray x 40x60	40	40.32	1,612.75
Spiral mixer 2 S Kg	I	4,531.31	4,531.31
Total			13,885.24

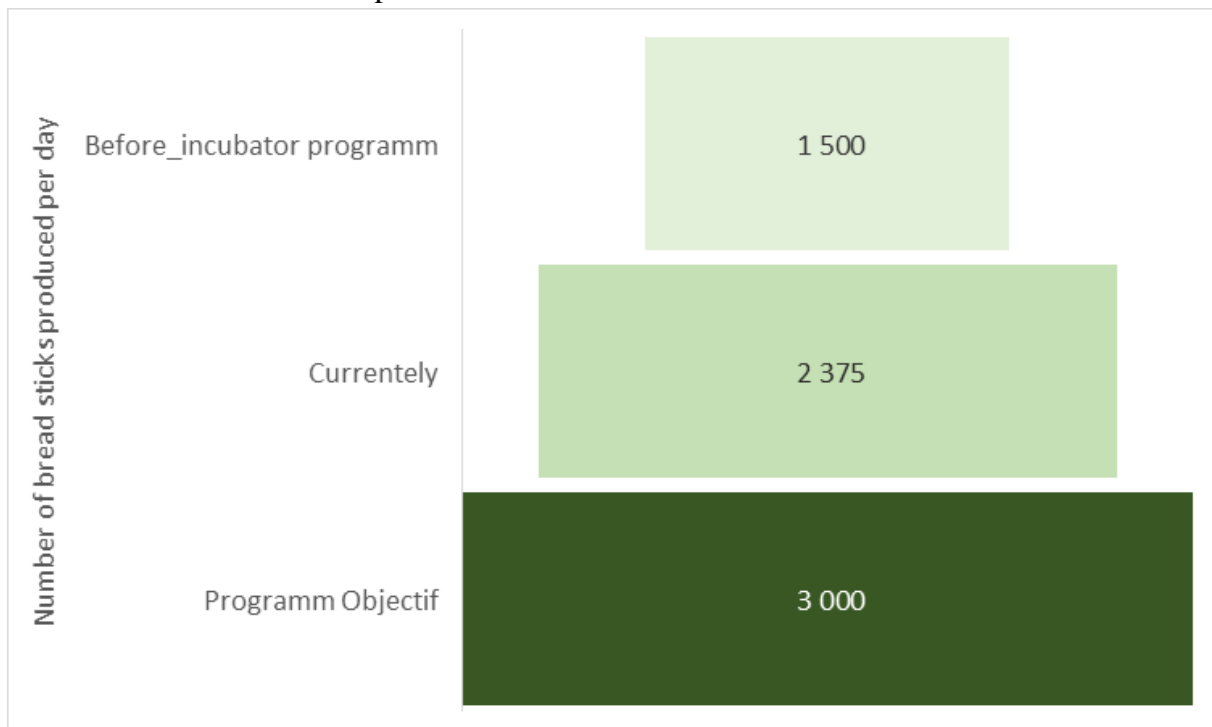


The purchase of technical equipment is accompanied by the improvement of the commercial and marketing framework of the company, with a particular focus on quality and hygiene ⁵. These facilities for the marketing framework, are pre-financed by the bakery to the tune of 6,114.76 USD.

Impact of the expansion of the capacity for action

✓ Increase in daily production

Since the installation, the bakery's daily production has increased from 1,500 to 2,375 baguettes per day, an increase rate of 158%. This trend is part of a perspective aiming for a daily production of 3,000 baguettes, which would represent an increase of 200% compared to the situation before the incubation program. At this stage, the objective has already been achieved at 76% thanks to the current production level.

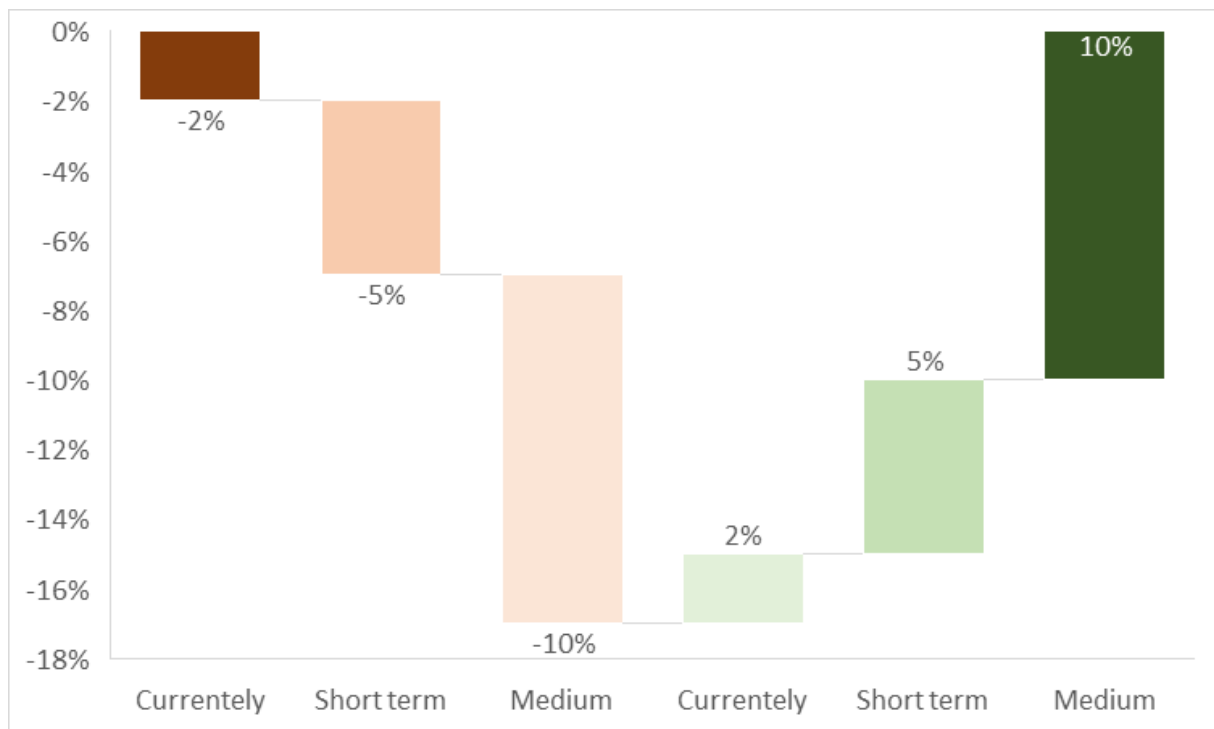


⁵ <https://www.facebook.com/share/1AzXJnCBHn/?mibextid=wwXIfr>

✓ **Promotion of local cereals and diversification of products**

White bread made from imported wheat, with a standard weight of 125 g, dominates production. However, breads made from local cereals, such as millet, fonio, corn, cowpea, sesame and moringa, enrich the supply. These breads, weighing between 225 g and 230 g, incorporate 20% local cereals and 25% moringa. Today, they represent only 2% of total production, but the short and long term objective is around 5 and 10%, with incorporation rates of 30% or more.

In addition to incorporating cereals into bread production, the bakery also offers corn and millet cakes, meeting a specific demand and promoting local products. In addition to bread-making, a dynamic pastry business enriches the range with 200 types of pastries. This diversification not only allows us to satisfy a varied clientele, but also to explore new business opportunities, particularly for products with higher added value.

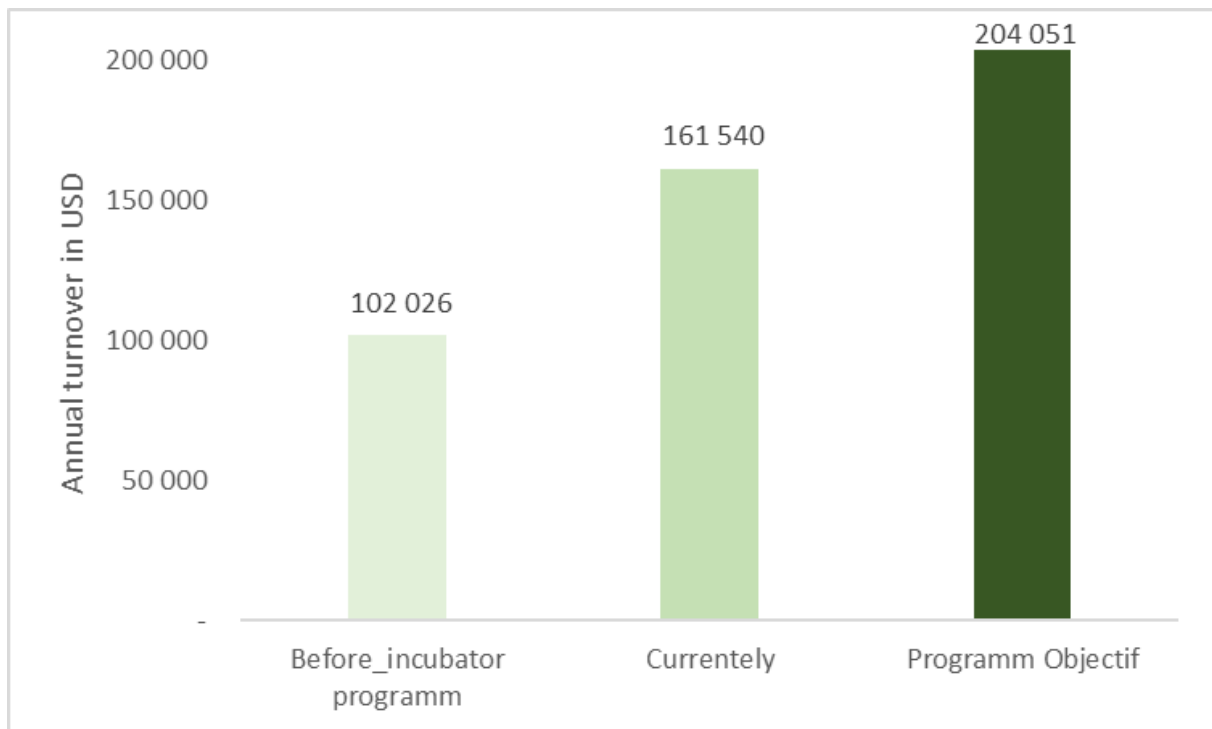


✓ **Increase in annual turnover**

The increase in the bakery's daily productivity has resulted in an estimated annual turnover of USD 161,540, an increase of 158% compared to the pre-program situation, where turnover was approximately USD 102,026.

The annual performance targeted by the program is a turnover of USD 204,051, corresponding to an increase of 200% compared to the pre-program situation. Currently, production is already at 76% of this objective, reflecting the significant progress made thanks to the improvement of productivity and the implementation of the actions planned by the program.

These performances are supported by a marketing and sales strategy that relies on a well-structured distribution network. The majority of sales are made via a shop adjoining the bakery, located in the commune of Niakhar, which remains the main market for white bread. However, breads made from local cereals benefit from wider distribution, covering the regional markets of Fatick and also reaching Dakar, the capital. This opening towards urban areas helps to strengthen the visibility and promotion of products from local sectors.



✓ **Direct employment created and social inclusion**

Following the installation of the equipment, the bakery is in the process of strengthening its technical staff in an inclusive manner, in line with its corporate policy. Before the programme, the bakery had 12 employees. Currently, this figure has increased to 13 employees, including 9 men and 4 women. Of these employees, 8 are youth and 5 are adults. This slight increase in the number of jobs is a testament to the positive impact of the programme on creating new employment opportunities, already underway, while maintaining a high proportion of youth and women in the workforce.

In addition to direct employment, the bakery pays baguette distributors 10% of the sale price. This generates a total annual income that increases from USD 16,154 to USD 26,203, an increase of 158%. This increase covers 76% of the performance target of USD 34,051 set under the program.

Conclusion

The GIE JAMM AGRO BUSINESS bakery illustrates the potential of relocating value chains to stimulate local development and promote agroecology. By promoting local cereals such as millet, it contributes to job creation, improving incomes and strengthening food resilience.

The objectives are being achieved:

- bakery's production from 1,500 to 2375 loaves a day, incorporating 30% local cereals (millet, corn, moringa) for self-supply of bread to the town of Niakhar;
- Market and product diversification, with the development of cookies, cakes and food for children and infants;
- Job creation by increasing the number of direct employees;

- Holistic impact of the relocalization of local bread value chain, with the bakery's innovative touch including the incorporation of local cereals.

Thanks to the support of the One CGIAR Agroecology initiative, it is establishing itself as a model of sustainability and innovation, with promising prospects for expanding its markets and supporting the transition towards the development of territorialized food systems supported by successful local businesses.