

Inyange Industries' Journey to Implement the Dairy Sustainability Framework Model in Rwanda - Case Study



About the project

Dairy for Social Impact, a project funded by the International Fund for Agricultural Development (IFAD) and Global Dairy Platform (GDP), assists dairy organisations in emerging dairy markets to implement the Dairy Sustainability Framework (DSF). This process includes the review and prioritisation of sustainability challenges and establishment of a local management group (LMG) to act as an advisory board for sustainability topics. This ensures that improvement strategies are effective and deliver tangible results. The objective is to capture the dairy organisations' experiences throughout different geographies and markets to provide guidance to others.

The partners in this pilot are Inyange Industries, a leading food processor in Rwanda, and the [DSF](#) a non-profit organisation

developed by the global dairy industry to monitor and report the aggregate sustainability progress of the global dairy sector and to provide a platform for pre-competitive collaboration and knowledge sharing across the global dairy value chain.

Inyange Industries is a privately owned company in Rwanda that has been operating since 1997, producing and selling dairy products, natural mineral water, and fruit juices. The company has 413 full-time and 158 temporary employees, and five milk processing sites close to the capital, Kigali. Every day, the company sources 240,000 litres of raw milk from 42 dairy farmer cooperatives. The average farm supplying the cooperatives spans 15 hectares, milking 45 cows, with an average milk production of 5 litres per cow per day.

Executive Summary

From 2021 to 2022, Inyange Industries implemented the DSF model as part of the GDP/IFAD-funded initiative. The company saw value in using a structured approach and strengthening their connection with stakeholders to improve the sustainability of the Inyange business. The company assigned a project leader, who was in frequent contact with a large team of internal managers and technical staff at Inyange Industries. A LMG was established, composed of farmers, government, academia, and Inyange Industries managers. The LMG provided guidance from each of the members' unique perspectives and acted as a sounding board during the process of identifying and prioritising sustainability topics.

A materiality analysis was undertaken to assess which sustainability topics should receive high priority, and the Inyange team undertook a desktop review of factors that influenced the sustainability of the business. The project lead conducted multiple one-on-one and group conversations with the management team and technical staff of Inyange in addition to members of the LMG.

An online survey was undertaken to maximise the breadth and depth of input to the process, with a wide range of stakeholders allowing access to an even greater level of external input.

To assist in prioritizing the 11 DSF sustainability criteria (covering the three pillars of sustainability – economic, social and environmental), the Inyange project team considered a number of factors as part of the materiality process including the company's performance, impact on the business, ability to leverage opportunities to control/influence to improve impacts, interconnections among the DSF criteria, business strategy, and values and importance for stakeholders.

During a validation meeting with both internal and external stakeholders, the process and outcomes of the prioritisation were presented to ensure that Inyange Industries was on the right track and to provide further opportunities for input from different perspectives. The DSF criteria that received the highest priorities were safeguarding **Product Safety and Quality** and contributing to **Rural Economies** – the latter describes Inyange's ambition to

contribute to the resilience and economic viability of farmers and rural communities.

A key learning from the pilot for Inyange Industries was gaining greater understanding and appreciation of the DSF model, to identify and prioritise the sustainability criteria most relevant to the business. As a food processor that sources milk from local farmer cooperatives, engaging value chain partners with the process is crucial for the sustainability of Inyange Industries. Involving stakeholders in every step and inviting them to join the

LMG strengthened their relationship with the company, aligned efforts to work together as a focused value chain on common challenges, and improved partner communication. Overall, the pilot has been extremely successful and has contributed to the second phase of the Rwandan Dairy Development Program (supported by IFAD). Inyange Industries has now started developing sustainability programmes and taking actions on the prioritised topics with support from all relevant stakeholders.

About the Dairy Sustainability Framework model:

The Dairy Sustainability Framework (DSF) is a monitoring and reporting initiative that tracks the aggregated sustainability progress of the global dairy sector. Launched in 2013, it provides a universal platform to align, quantify and demonstrate the difference that the sector is making across a range of sustainability criteria by applying and reporting against common indicators. The DSF is a unique approach in that it is neither a standard nor a certification scheme, but rather a process for continuous improvement and aligned reporting. It is a pre-competitive and collaborative initiative that encourages the sharing of both challenges and solutions between its members, who operate across the global dairy value chain. To achieve this, the DSF establishes a number of different knowledge sharing and solution finding platforms that brings the DSF membership together to accelerate the solution finding and implementation process.

To encourage the implementation of sustainability programs tailored to local circumstances while achieving international alignment, the DSF focuses on 11 sustainability criteria identified from an extensive global analysis. Each criteria has a Strategic Intent, which can be described as the ambition of the global dairy sector to achieve as an outcome. Though the Strategic Intents are globally consistent, the way in which they are addressed in different geographies will be very different, recognising a diverse global dairy sector.












Using the 11 criteria as a basis, DSF members decide which criteria they prioritise by applying what is known as a materiality assessment. Identifying priorities ensures members focus on where they need to invest immediate effort, before embarking on other less priority criteria. It also ensures that programs are effective and deliver tangible and quantifiable results. You can read more about the process in the [DSF Materiality Briefing Paper](#).

Once the prioritisation is complete, members create improvement and implementation plans for their selected criteria. These plans aspire to deliver Strategic Intents associated with each criteria (see Table on the right). The criteria have internationally relevant, high-level metrics to measure progress over time, which allows the DSF to align the global dairy sector's sustainability efforts. In addition, the DSF requires members to adopt their own specific, local key performance indicators and timelines for each of the initiatives they implement.

The DSF requires a Plan-Do-Check-Adjust approach. This involves regular reviews to monitor impact and to make amendments (involving the LMG) if the progress is not aligning with the

original design and progress expectations. Members report their performance to the DSF on an annual basis, using the high-level indicators associated with their prioritised criteria. This information is kept confidential with sector progress only published at the aggregate level.

The DSF Sustainability Criteria and Strategic Intents

| Criteria | Strategic Intent |
|---|---|
| Economic | |
|  Market Development | Participants along the dairy value chain are able to build economically viable businesses through the development of transparent and effective markets. |
|  Rural Economies | The Dairy Sector contributes to the resilience and economic viability of farmers and rural communities. |
| Environmental | |
|  Greenhouse Gas Emissions | GHG emissions across the full value chain are quantified and reduced through all economically viable mechanisms. |
|  Soil Nutrients | Nutrient application is managed to minimise impacts on water and air, while maintaining and enhancing soil quality. |
|  Soil Quality and Retention | Soil quality and retention is proactively managed and enhanced to ensure optimum productivity. |
|  Water Availability and Quality | Water availability, as well as water quality, is managed responsibly throughout the dairy value chain. |
|  Biodiversity | Direct and indirect biodiversity risks and opportunities are understood, and strategies to maintain or enhance it are established. |
|  Waste | Waste generation is minimised and, where unavoidable, waste is reused and recycled. |
| Social | |
|  Animal Care | Dairy animals are treated with care, and are free from hunger and thirst, discomfort, pain, injury and disease, fear and distress and are able to engage with relatively normal patterns of animal behaviour. |
|  Working Conditions | Across the dairy value chain, workers operate in a safe environment, and their rights are respected and promoted. |
|  Product Safety and Quality | The integrity and transparency of the dairy supply chain is safeguarded, so as to insure the optimal nutrition, quality and safety of products. |

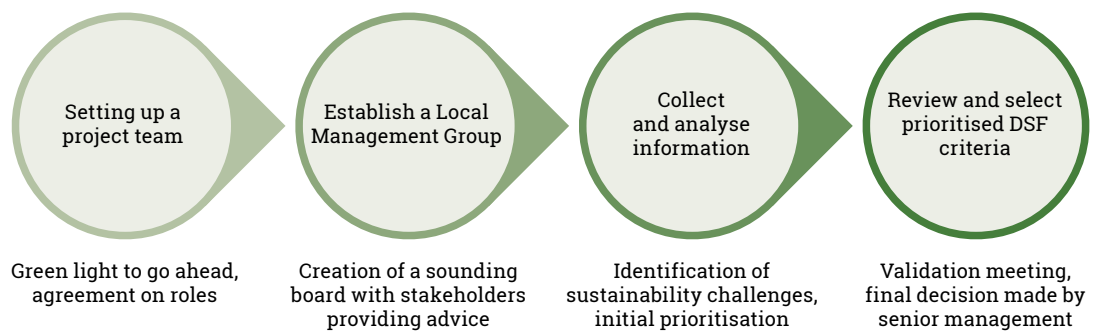
The start

Inyange Industries had already been running a series of company level sustainability initiatives before becoming part of this project. Recently, the introduction of one-cow-per-family country programme had started to boost national milk production, with value chain actors starting to connect to manage the increased production. The project came at the right time for Inyange Industries, as the company was looking for ways to strengthen relationships within the value chain.

A dedicated project lead was appointed as the link for the project team and all stakeholders. For this project, the lead was in frequent communication with the general managers, plant directors and technical teams at the five production sites, as well as the farmer relations manager, production manager and quality assurance manager, who were all an integral part of the team.



Steps to implement the DSF approach



Creation of a Local Management Group

A (multi-stakeholder) local management group (LMG) is composed of the senior management of the DSF member organisation plus external stakeholders with an interest in the business's sustainability efforts and performance. The member selects which organisations will be represented - farmers, customers, suppliers, investors, local authorities and NGOs, academia etc. The role of the LMG is to serve as a local sounding board and provide input that is applicable and appropriate to that region, while the member organisation makes all final decisions. The LMG therefore provides input during collection and analysis of information and prioritisation of sustainability topics. Later in the process, the LMG can guide the organisations in developing targets and action plans to address the priority criteria identified by the member organisation. The LMG is also a useful resource when evaluating the performance of the improvement initiatives against the agreed KPIs and timelines – supporting the business in adapting where appropriate.

The LMG concept was new to Inyange Industries. To create an LMG, they initially listed key stakeholders of the company, before identifying individuals from each of these stakeholder groups. The project lead selected individuals that already had a working relationship with Inyange Industries, as these stakeholders knew the company and were aware of both previous initiatives to improve sustainability and current challenges. The project lead then started to reach out to stakeholders, introducing them to the project and the LMG's guiding role. After initial discussions, email invitations were circulated, inviting stakeholders to be part of this influential group.

The invitations were met with considerable enthusiasm. Stakeholders were keen to participate in Inyange Industries' sustainability efforts and appreciated being part of the LMG process. This company's LMG consisted of representatives of the Ministry of Agriculture, the Rwanda Agriculture Board, the Rwanda Inspectorate, Competition and Consumer Protection Authority, the Ministry of Trade and Industry, academia, customers and all 42 farmer cooperatives. In addition, this group of external stakeholders was complemented by internal stakeholders, including the General Managers of the five production sites; the Dairy Supply Manager and the Farmer Trainer. In total the group therefore spanned more than 54 members. For Inyange Industries it was also very important to have the government and district mayors involved in the process to receive their support

The LMG was invaluable in the criteria prioritization process, supporting Inyange industries from the validation meeting (involving all stakeholders who provided input to the materiality process, giving them a final opportunity to provide input, clarify or raise new points where necessary), which was conducted after the materiality assessment was completed and prior to Inyange Industries agreeing which of the 11 DSF criteria they would prioritise.

Materiality assessment

Materiality assessment is the process of identifying, refining, and assessing numerous potential environmental, social, and economic challenges (including governance) that could affect the business, and/or the business' stakeholders. These challenges are then condensed into a short-list of priority areas that inform and guide company strategy, actions, targets, and progress reporting. The DSF acknowledges that all 11 DSF criteria are important, but also recommends that members only prioritise a small number of sustainability criteria on which to focus efforts for action. 'Do less, though do them well!' Materiality and prioritisation enable a dairy organisation to sequence efforts and allocate resources accordingly. This ensures that the sustainability programme is effective and yields tangible and quantifiable results. Over time, and as resources permit, other sustainability criteria can be targeted. Project participants were guided by the following sentiments:

- › Progress over perfection
- › Strive for continuous improvement
- › Start with a small number of priority criteria areas and build momentum from there

For this pilot project, Inyange Industries was supported by an external organisation to facilitate and conduct the materiality assessment. Furthermore, as a result of the project, Inyange Industries now has the skills to undertake their next materiality assessment.

The first step in the prioritisation process was to collect a wide range of information on all 11 Sustainability Criteria. For that, the project lead had multiple conversations with the full team at Inyange Industries, asking for information and insights. The most important considerations were current business performance, potential threats and opportunities. The team assessed whether the performance of any of the DSF criteria were currently having a negative impact on the business, and if improving the performance of individual criteria would have a positive impact on the business and other aligned factors, e.g. rural communities or the environment. The team considered the current situation

and how it aligned with business strategy, the vision and values of Inyange Industries, and the wider operating environment. Interconnections between individual sustainability criteria were also a critical part of the process. Action on a specific criteria can positively or negatively affect other criteria. This is an important consideration when designing improvement programs – how can the DSF member maximise the outcomes to include co-benefits? In addition, the project team also reflected on the potential for leverage, considering the level of control or influence that Inyange Industries had to improve performance of the prioritized criteria; or whether specific actions required a more collaborative approach with other stakeholders.

The project lead also engaged multiple times with farmers and governmental representatives to collect more information, gain outsiders' perspectives, and establish an understanding of which criteria provided the highest-ranking sustainability challenges.

In tandem with this intelligence gathering, the team also prepared and then circulated a survey to capture and integrate the perspectives of a wider group of stakeholders. This 10-minute online (only) survey (translated into local language) asked stakeholders to rank the sustainability criteria that are most important: (1) to them, (2) for Inyange Industries to focus on in the coming years, and (3) to rate Inyange Industries' current performance on the criteria. It proved very difficult to receive farmer surveys as not all farmers had the telephone infrastructure to access the link or the experience with technology to complete an online survey. In this instance, it proved valuable to have face-to-face conversations with farmers and farmer cooperative leaders to help them complete the surveys.

"We cannot be successful when all of our stakeholders are not successful, because it's a chain. No one can move alone."

Jean Claude Bahati
(Food safety manager and project lead at Inyange Industries)

After analysing the survey responses and collaborating with a wide range of internal and external stakeholders, the project team met to discuss the priorities that they saw emerge from this exercise. The plan was to hold a validation meeting to present the outcomes to all stakeholders who had engaged in the process, providing the opportunity to clarify or voice additional input. This included the Inyange team sharing their initial thoughts on possible priority criteria. Normally this meeting would have been conducted face-to-face, but with the constraints posed by COVID-19, the meeting it was set up on a virtual platform.

The LMG was highly involved in this process, providing an extra set of ears within the meeting, with which to support Inyange's priority criteria setting afterwards.

For Inyange Industries, this validation process also ensured they received essential support and buy-in from their value chain partners in collaboratively addressing the prioritised sustainability issues.



Criteria with high priority

Inyange Industries identified two of the 11 DSF criteria as high priority based on the outcomes of the materiality process. The company perceived these criteria as major limitations to the growth and economic development of the business and the value chain partners – specifically farmers.

Rural Economies

The company selected this criteria with a goal of securing and increasing milk supply and, in doing so, helping both their business and local farmers to thrive.

This was a win:win solution, as farmers could identify ways to increase productivity and associated income, while Inyange maximised the productivity of their recently increased milk processing capacity.

Product Safety and Quality

For Inyange Industries, safeguarding product nutrition, quality and safety is critical for the company's reputation, recognising these qualities as the foundation of a trusting customer base.



The objective of focusing on this criteria is to improve milk quality to meet government standards and to reduce the current level of rejections at collection centres due to excessive microbial contamination. This will improve both production systems' efficiency and the financial viability of the whole value chain.

In addition, the company intends to improve consumers' food safety awareness, in order to create a market for higher value products.

Focusing on these two DSF priorities requires Inyange to collaborate effectively with other value chain partners to achieve its objectives.

Outcomes

The project team collected and reviewed information across all 11 DSF Sustainability Criteria. Inyange Industries also established an LMG of stakeholders to support the company on its journey toward implementing the DSF sustainability process. Sourcing milk from dairy cooperatives, Inyange Industries' sustainability efforts rely on collaborative relationships with its value chain partners. Strengthening relationships with partners along the Inyange value chain was a key learning from implementing the DSF model. Having aligned activities and a more effective flow of information between different value chain levels, has increased the motivation of partners to enhance collaborative activities from which everybody can benefit.

As a result of the information collection and analysis required for the materiality assessment process, the project team identified four common challenges limiting milk production across the supply base that negatively impacted the prioritised rural economies criteria:

- Farm water and electricity supply
- Availability of high quality animal feed
- Animal husbandry practices
- Hygienic milk handling practices

These challenges cannot be resolved by Inyange Industries alone – they will require all actors in the value chain to work on these together through a multi-pronged approach. Collective efforts to establish corrective practices have already started. Inyange has also invested in a group of farm extension officers who will work directly with farmers on addressing these areas of focus.

Inyange is also seeking to establish model farms in each of their sourcing regions through the farmer cooperatives. These will provide proof of concept for new practices and training resources for the farmers in each region.

An interview with Jean Claude Bahati

Mr. Bahati has been working as Food Safety Manager at Inyange Industries for the last 13 years and was the project lead for the pilot.

Why did Inyange Industries decide to take part in the pilot project? What was the main take-away for your organisation?

Initially we decided to join the project because we saw that we could learn much from the project partners and that this would really help our business to thrive. Key learnings from the pilot for

our company were understanding and appreciating the approach the DSF uses, the process of the materiality assessment, and getting stakeholders on board. We analysed the components that have an influence on the sustainability of the dairy value chain and identified which criteria we need to address first. All of this was done together with a wide range of other stakeholders to ensure that they would also be making similar improvements, allowing us to move together as a value chain.

Inyange Industries is in a unique situation, in that we do not directly source milk from farms. Farmers are grouped into cooperatives

and each cooperative has a milk collection centre to ensure that milk quality is maintained. This means that Inyange is in direct collaboration with farmers in their role as the cooperative owners. For Inyange, sustainability means working together with all the actors in the chain. For example, one of the main issues affecting our raw milk supply is the availability of animal feed, water and electricity to the farms. This is not something that we can resolve by ourselves as a food processor, it can only be resolved by working together as a chain.

How did you get started?

The Ministry of Agriculture approached us and asked if we want to participate in the pilot project. We then talked to DSF to better understand the project, the expectations, and the roles of the partner organisations. After deciding to join the pilot, senior management assigned me as project lead. We then brought internal stakeholders on board by explaining the project and its benefits for our organisation. For this project, I worked together with a large team to engage staff at all production sites. I frequently spoke with the general managers, plant directors and technical teams at the five production sites, the farmer relations manager, the production manager, and the quality assurance manager. It was very important to gain their input and buy-in from the beginning, as they are at the forefront, charged with implementing the actions that we plan together to address sustainability issues. After bringing the internal stakeholders on board, we did the same for the external stakeholders, including farmers, cooperatives, transporters, and clients.

What went well?

I was surprised about how positively stakeholders perceived the project and how excited they were to take part, learn and implement actions to improve sustainability. They were all very eager to engage.

What didn't go so well and how did you deal with it?

Two things come to my mind. The first relates to a survey that we developed, seeking stakeholders' perspectives on the sustainability topics that Inyange Industries should consider prioritising. Prior to releasing the survey, I invested time in informing the stakeholders about the project that Inyange Industries had engaged in, so they fully understood the context of the questions and the overall objective of the project. The issue was that the survey was created online, and we had asked the stakeholders to access it using an internet link. For many stakeholders, responding to the survey online was cumbersome. In particular, farmers did not have the experience or sometimes even the means to access technology. We resolved this by visiting the stakeholders, opening the survey on our laptops, reading out the questions to them and filling in their responses. Next time we will provide both paper and electronic options.



The second issue was that we experienced an intense drought while we were undertaking this project. Within the pilot project, we wanted to review and reflect on Inyange Industries' sustainability as guided by the DSF Sustainability Criteria, and identify priority areas that required more immediate attention. Given the drought, we had to instead focus our attention and resources to address this immediate challenge. For a couple of weeks neither we, our stakeholders or the value chain partners we had been collaborating with had the capacity to consider the bigger picture and develop long-term strategies to improve the resilience of our value chain. When the rain finally arrived, we were able to pick up where we left off with the project.

How did implementing the DSF model affect Inyange Industries' sustainability programme?

One big change is that we involved the stakeholders and prioritized together the topics we wanted to work on. We already believed that we could work more effectively if we improved integration with other value chain partners and we really learned how to do that through the project. We hope that this collaboration leads to smooth communication and information flow between all stakeholders now and in the future, and helps us achieve our objective of securing high quantity and quality of milk supply. We have also already made plans for addressing the prioritized criteria going forward. We want to implement model farms in different areas of the country linked to different farmer cooperatives. As a result, we are collaborating with local governments and engaging farmer cooperatives. Similarly, we are also involved in broader conversations on improving animal feed quality and quantity, water supply on farms and rural electrification.

Do you have advice for other dairy companies that are interested in implementing the DSF model?

My advice would be to apply the DSF approach to create vertical and horizontal integration of actors in the value chain. This will benefit the business and boost economic development in the region.

Where to Find More Help and Guidance on How To Start The Process

To find out more about the Dairy Sustainability Framework model implemented by Inyange Industries and the steps included in the process, you can visit the website of the DSF at dairysustainabilityframework.org. The secretariat is open to answer questions on the model, the platform and membership benefits and can help guide you through the process.