# Learning Paper: Incentives and rewards platform for continuous improvement of smallholder sugarcane farmers

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| **Time** | 1 November 2022 to 31st October 2024 |
| **Theme** | Innovating sustainability in smallholder sugarcane farming |
| **Project Lead** | Solidaridad |
| **Co-leads** | Raízen S.A |
| **Local Partners** | Cenicaña, ALUR, Cooperativa Manduvira, SC Agro and Bayer - FieldView |
| **Budget** | Grant Awarded: £30,000 – Project Budget: £85,740 |

## 1. The Project

Certifications like the Bonsucro Production Standard are often considered a good indication of a commitment to environmental and social sustainability in value chains. However, in some regions formal certification is out of reach for smallholder farmers who lack the resources, know-how, credit and tools to reach the sustainability performance expected to get certified. To address this challenge, **Solidaridad and its partners Raízen , Cenicaña, ALUR and Cooperative Manduvira supported by the Bonsucro Impact Fund**, implemented the project ***"Incentives and Rewards[1] Platform for Continuous Improvement of Smallholder Sugarcane Farmers, IMPULSA"*,** intending to increase the uptake of sustainable practices in small-scale production systems.

IMPULSA was a key input to bridge the gap between small sugarcane producers and formal certification through an approach based on continuous improvement and an understanding of small-scale production dynamics. In other words, **this project aimed to enhance the sustainability of small-scale sugarcane production.** This initiative was crucial as it aligns with Bonsucro's Production Standard for Smallholders, ensuring that farmers were rewarded for their contributions to more sustainable and resilient value chains, regardless of their capacity to achieve formal Bonsucro certification. The project recognised that farmers were more likely to adopt sustainable practices when a clear business case led to increased income or profitability.

Engaging smallholder farmers in sustainability requires understanding how they change behaviours and manage risks, especially when the benefits tend to be long-

[1] In this context, a reward is a benefit, prize, or incentive given in recognition of successfully completing a set of tasks. Rewards are often used to motivate individuals or groups, fostering continued effort and participation. They can take various forms, such as monetary compensation, recognition, goods, or privileges.

term. The IMPULSA project aimed to drive the adoption of better practices through short-term tangible incentives and rewards. Through a mobile app, farmers were able to carry out a diagnosis of their production and management practices, receive a tailored action plan and inform progress over time. Based on their progress, measured by the effective adoption of better practices, they were able to access incentives and rewards as recognition for their efforts.

**The pilot project engaged 39 small-scale producers from four countries: Brazil, Colombia, Paraguay, and Uruguay.** In Brazil, the focus was on the State of São Paulo. In Colombia, the project targeted Valle del Cauca, where smallholder farmers supply the majority of raw materials to local mills. In Paraguay, the pilot was concentrated in the Department of Guairá, where most sugarcane farms are small, with less than 20 hectares. Finally, in Uruguay, the project took place in Bella Unión, where all sugarcane crushed by the local mill is produced by independent farmers, half of whom have less than 25 hectares.

This project was designed as a hybrid of research and pilot testing, combining the development of a mechanism to support smallholder adoption of sustainable practices with practical implementation. In collaboration with partners—**Raízen in Brazil, Cenicaña in Colombia, ALUR in Uruguay, and the Manduvira Cooperative in Paraguay,** testing its approach across diverse farming contexts. In short, the primary goal was to support farmers in transitioning to more sustainable practices by providing technical assistance, digital tools, and a gamified incentives and rewards system.

## 2. Results

The project aimed to improve practices of small producers through a combination of incentives, technical support, and rewards. It began with a diagnostic phase to identify **existing practices and the specific challenges faced by producers** in each context, allowing for a clearer understanding of regional needs. The **incentives and rewards mechanism was designed using insights from the research on drivers and barriers for behavioural change,** and adapted to the farmer's profiles, production systems and local legislation in each country. **Tailored action plans were automatically generated by Solidaridad's digital platform**, prioritising key tasks to progress towards compliance with the Bonsucro standards. As producers committed to implementing these actions, they became **eligible to receive incentives**. The diagnostic phase also revealed that each country faced unique obstacles, making it necessary to customise the incentive and reward packages to fit each context—marking a shift from the original plan. This overview captures the foundations of the project; the following section presents in detail its main activities and results.

A **participatory design process** was used for prototyping the incentives and rewards system, engaging producers and stakeholders to identify priority behaviours—sustainable practices aligned with the Bonsucro Standards—and analyse the factors influencing their adoption. This approach helped define the most effective incentives to boost motivation, reduce barriers, and encourage engagement with sustainability in the short term, bridging the gap until farmers could start to experience the long-term benefits. Table 1 presents the incentives received by farmers in each country during the project.

**Table 1: Incentives per Country**

| Country | Incentives |
|---|---|
| **Brazil** | • All **ten** participating suppliers received at least one **technical visit and informative materials** on agronomic practices. Four suppliers accessed personalised consultancy, and one benefited from a 35% discount on soil services. |
| **Uruguay** | • All **twelve participating farmers** received **water potability tests, soil analysis, and best practice brochures**. Five also received **technical visits and safety signage** to support compliance with safety and environmental standards. |
| **Colombia** | • **All eight farmers received individual visits and group training** by experts to deliver tailored recommendations on agronomic topics (pest and weed control). They also had exclusive access to innovations and technical information generated by the research centre, and were invited to take part in a special event focused on sharing field experiences. |
| **Paraguay** | • **Ten farmers received free soil analysis** as a key incentive to encourage engagement in sustainable soil management. |

Once designed, the app was activated, allowing farmers to record and track their practices. The incentives and rewards mechanism was then launched, enabling farmers to **earn points for participating in the action plans**. A monitoring system was implemented to track progress, including real-time dashboards to monitor the use of Farming Solution and visualise key indicators related to farmers' profiles and self-assessed practices. Finally, actions completed were validated, followed by a final evaluation to assess the project's overall impact.

**The results from the pilot project across the four countries highlight varying levels of participation and improvement among small sugarcane farmers**. In Brazil, 10 producers took part, with 4 showing improvement. Colombia had 8 participants, and 6 improved. In Paraguay, 9 producers participated, with 8 reporting improvements. Uruguay had the highest participation, with 12 producers, half of whom showed improvement. Overall, the data indicates that **the project was successful in motivating a significant number of participants to improve their practices**, with 24 out of 39 producers (approximately 61%) showing progress. The

total number of completed tasks[2] (149) further suggests strong engagement and active participation from many producers in the project (see table 2).

**Table 2: Project Results**

| Country | Producer Participants | Producers who improved their performance during the pilot project period | Producers rewarded for their improvements in sustainability | Action Plan Tasks completed |
|---|---|---|---|---|
| **Brazil** | 10 | 4 | 3 | 52 |
| **Colombia** | 8 | 6 | 2 | 49 |
| **Paraguay** | 9 | 8 | 8 | 15 |
| **Uruguay** | 12 | 6 | 3 | 33 |
| **Total** | 39 | 24 | 16 | 149 |

The following presents an analysis of the project results by country, focusing on the specific activities carried out: the tasks the producers completed. This approach will allow for an evaluation of how actions were implemented in each national context, highlighting key areas of impact and progress toward adopting sustainable practices in each region.

In Brazil, **58% of the completed tasks addressed key environmental issues by implementing a suitable environmental impact management plan**. The previous included 29 tasks dedicated to integrated pest management (IPM) and 1 on soil conservation. Legal compliance also played a key role, with 10% of the tasks focused on improving rest and meal areas, agrochemical disposal, and completing a task related to sanitation. Additionally, one producer advanced a level in Raízen's ELOS program thanks to the practices adopted through IMPULSA.

Turning to Colombia, **the focus was on environmental and agronomic practices, which 51% of the completed tasks had an impact on legal compliance.** Among these were actions to ensure rural worker health and safety, including 11 tasks related to worker welfare and 9 focused on the safe handling of agrochemicals. An additional 14% of completed tasks aimed at formalising contracts to comply with laws governing planting and harvesting services. The project's positive impact on farm working conditions is clear, particularly in promoting better health and safety standards while encouraging practices aligned with legal and regulatory requirements.

[2] A task is a specific activity or duty assigned to be completed within a set period. In this context, the tasks to be completed are in accordance with the Bonsucro SFH 1.0 protocol or aligned with local Sustainability Programs.

On the other hand, **in Uruguay, 36% of the completed tasks were tied to legal compliance, primarily in health and safety for rural workers and the safe handling of agrochemicals**. The project also addressed the critical issue of personal protective equipment (PPE), dedicating 12% of tasks to ensure its availability and maintenance. These efforts underline the project's contribution to improving labour conditions, particularly within the health and safety realm, and highlight its alignment with the social pillar of promoting the well-being of workers.

Finally, **a different focus emerged in Paraguay, with 67% of tasks centred on soil analysis, ensuring that acceptable pH limits were maintained**. Additionally, 26% of the tasks addressed worker well-being, and 6% aimed to foster transparency and participatory processes. These results reflect the project's substantial impact on enhancing farm practices, particularly in sustainable soil management and worker welfare, while demonstrating its commitment to environmental sustainability and social progress.

The farmers with the best results in each country were the ones who received rewards. Table 3 shows the type of rewards given in each country and the selection criteria used to choose the winners.

**Table 3: Selection Criteria and Reward Types by Country**

| Country | Rewards |
|---|---|
| **Brazil** | Farmers were ranked based on the number of best practices adopted by the end of September 2024 and received **cash prizes ranging from £132 to £394,** along with a coffee machine. **Three prizes were awarded.** |
| **Uruguay** | Farmers were ranked based on the highest number of best practices adopted by the end of September 2024. **Three prizes were awarded**, including a paid trip to visit Bonsucro-certified farmers (converted to a $1,000 cash prize), a design for an agrochemical storage facility, and a dinner for two at a local restaurant. |
| **Colombia** | The **two best performing farmers** were rewarded with cash prizes of $500 each. Two criteria were considered to rank the farmers: Number of practices improved during the project period and total number of best practices. In addition, the farmer's active participation in project activities, such as meetings, field days, and technical visits, was also taken into account. |
| **Paraguay** | For the distribution of rewards, farmers from each group (organic and conventional) were ranked according to the quantity and complexity of improved practices, **awarding the top 4**, with prizes ranging from large or small leather-wrapped thermoses with laser-engraved logos for higher ranks, to thermal bottles for lower ranks. |

## 3. Lessons Learned

Throughout the project's implementation, several valuable lessons were learned. A **blended approach** is essential to support smallholder farmers effectively. While **digital tools** are handy for providing tailored experiences, supporting knowledge

exchange, and improving efficiency in managing data, they cannot replace the need for **in-person support**. Farmers need to build trust with someone they can rely on for guidance and digital channels alone are unlikely to drive significant behaviour change. **Face-to-face technical assistance** remains crucial, as it helps farmers make informed decisions and fosters personal connections.

Another critical lesson learned is the importance of **behavioural change** alongside rational decision-making when it comes to sustainability. While farmers may respond to clear business cases that promise increased yields or better market access, factors such as **social recognition**, **fair compensation**, **and psychological aspects** are also key drivers in encouraging behaviour change. Understanding these deeper motivators can lead to more effective support for farmers in adopting new practices.

**Incentives and rewards are effective tools** for generating commitment and motivating producers to adopt more sustainable practices. However, the experience also showed that the key to **success lies in clearly and promptly communicating these incentives**. The sooner producers are informed about the benefits and rewards, the quicker they commit to the project, highlighting the importance of providing information effectively and with adequate lead time. In Colombia, we highlighted that the farmers chose to invest the prize money in improvements on their farms, which further accelerated change and the adoption of good practices.

The **power of collaborative work** also emerged as a fundamental factor in the project's success. The active participation of producers, technicians, managers, and partners showed that **knowledge exchange and collaboration** are essential for generating sustainable change. Producers felt more motivated when they saw the commitment of various organisations working to support them, which increased the positive impact and effectiveness of the project.

Moreover, by putting **small producers at the centre** of the actions, the project not only promoted good agricultural practices but also highlighted the key role of these farmers. This **recognition** strengthened their commitment, fostered trusting relationships, and demonstrated that continuously valuing their efforts and improvements is a powerful tool for driving meaningful changes in their practices.

Finally, **adaptability** was crucial to the success of the project. Each country implemented the project uniquely, adapting to its local contexts and needs. For instance, the project design assumed a uniform rewards and incentives framework across all countries. However, this approach had to be adjusted early in the process, as the barriers faced—and the types of rewards valued by farmers—varied significantly. This flexibility transformed the project into a truly **collaborative effort**,

with activities co-designed and planned alongside producers and partners. As a result, implementation remained effective while staying true to the original objective: **assessing the effectiveness of incentive and reward mechanisms.**

### 4. Recommendations for Future Projects

Based on the experience gained from this project, several key recommendations can be made to improve the design and implementation of similar initiatives in the future. One of the most important is the need to **allocate sufficient resources for field technical assistance** right from the start. Having specialised personnel available to provide continuous support ensures that farmers receive the guidance they need, which facilitates better adoption of the recommended practices. Additionally, these experts can address any issues that arise promptly, helping to maintain momentum and engagement throughout the project.

**Effective communication strategies are also essential.** Throughout the project, it became clear that using accessible platforms, such as WhatsApp, effectively kept participants informed and engaged. This tool allowed for easy, real-time updates and fostered a sense of community among farmers. As a result, future projects should consider incorporating similar communication channels to enhance interaction and ensure that farmers feel supported and involved in the process.

Furthermore, it is essential to **set realistic timelines** for the implementation of new practices. Trust-based relationships take time to develop, and farmers need a gradual period to adapt to changes in their routines. By allowing for this gradual adaptation, projects can create a more positive and sustainable learning environment. Rushed timelines can hinder trust-building and cause resistance to new practices, so it is important to balance ambition with practicality when establishing project schedules.

For future initiatives, it is crucial to **identify and collaborate with local partners who already have established relationships with farmers.** Partnering with local entities that are trusted and credible within the community helps save valuable time in building rapport. Their existing relationships facilitate better engagement, communication, and collaboration, enabling initiatives to progress more quickly and effectively. Additionally, **including the initial research phase in future initiatives**, particularly the behavioural surveys, is essential, as these provide valuable insights into the drivers and barriers of behaviour change. This is especially important given that farmers in different regions may have varying mindsets, making a one-size-fits-all approach ineffective.

A challenge that emerged was using a 25-hectare threshold to define smallholders, which proved limiting in South America, especially in countries like Colombia and Brazil. Farm size alone does not capture the complexity of farming strategies, and

farmers managing larger areas may still be smallholders due to their production volume and business approach. **Future projects should consider factors like production capacity and business models to more accurately identify farmers who could benefit from these initiatives.**

**Peer-to-peer exchange and learning were also valuable, with farmers eager to learn from one another**. A challenge-based model, like ranking farmers, motivated participants and fostered a genuine interest in sharing practices. Creating dedicated spaces for these exchanges, as seen in Paraguay, proved meaningful for farmers and could be further emphasised in future projects to encourage continuous improvement.

Finally, designing **collaborative financing mechanisms** that involve various stakeholders across the value chain is another crucial recommendation. By engaging input suppliers, local organisations, and other key entities, farmers can access the resources needed to improve their crops. Such collaborative efforts ensure that incentives and rewards remain sustainable and accessible, benefiting all parties involved. This way, the project model can be extended and scaled more effectively, with long-term support from the entire agricultural ecosystem.

Incorporating these recommendations into future projects will help **optimise outcomes**, promote **deeper engagement**, and ensure a more lasting and sustainable impact on the adoption of best practices by small producers.

The Bonsucro Impact Fund supports projects that address critical sustainability challenges in the sugarcane sector. Using income from the Bonsucro Credit Trading Platform. Our Fund offers our members the chance to apply for thematic grants for projects that catalyse sustainable sugarcane production.

For more information please visit: **Bonsucro Impact Fund**