



Good Practice Note COLOMBIA





→ HIGH

# BUILDING A SUSTAINABLE PRODUCTIVE FUTURE

GOOD PRACTICES IN CAPACITY DEVELOPMENT FOR

AGRICULTURAL INNOVATION SYSTEMS

Strategic alliances and innovative methodology of the Integra Program in the production of sugar cane in Colombia



## CONTEXT

Colombia produces more sugar per month on one hectare of land than any other country. This privilege is due to the productivity of sugar cane grown in the Cauca River valley, where 14 processing plants operate nearly year-round to produce sugar, honey, bioethanol, and electrical energy. The cane is supplied by 2,750 growers, owners of 75% of the 240,000 hectares planted, and by the sugar mills themselves (25% of the area). The sugar cane chain provides more than 286,000 direct and indirect jobs. In 51 municipalities in 5 departments, 6 out of every 10 families depend on this productive activity.

In 2016, the Fénix Program, now known as the Integra Program, was created in the Cauca River Valley. Since 2020, this initiative has been led by the Colombian Sugar Cane Research Center, Cenicaña, as an opportunity to proactively prepare for the future. Between 2016 and 2023, 255 producers have joined the program (41,300 hectares in 430 farms), and nearly \$1,125,000 has been invested for the program.



HIGH CENICAÑA (Private sector) Role: Technical, management, and financial leadership **PRODUCERS** (Private sector) Role: Beneficiaries: 255 (25% women) **EXTENSIONISTS** (Private sector) Role: Support and follow-up to growers **INGENIOS** (Private sector) **Role:** Strategic allies of the value chain REGIONAL AUTONOMOUS CORPORATIONS, MINISTRY OF SCIENCE, TECHNOLOGY AND INNOVATION, NATIONAL DEPARTMENT OF PLANNING (Public action) ASOCANA, PROCANA, AZUCARI, RIVER USER ASSOCIATIONS (Private sector) **Role:** Strategic allies of the value chain (Public sector) **Role:** Strategic government allies. External financiers NGO FUNDACION SOLIDARIDAD (Public/private sector)
Role: Indirect beneficiaries. We seek their well-being and life LOW

INTEREST

#### With technical support of:









#### METHODOLOGICAL APPROACH

The goal of the Integra Program is to strengthen the transition process and continuous improvement of sugar cane growers towards sustainable production and management. Its main result indicators and defined targets for the coming years (starting in 2024) are:

- 150 new cane growers subscribed to the Program in the next three years.
- 30% increase in the sustainability level of sugar cane farms in the next five years.

Integra is a voluntary and free program offered to all sugar cane producers. The methodology includes eight (8) steps:



#### **RESULTS**



Since 2020, when Cenicaña took over leadership of the Integra program, remarkable progress has been made in its mission to promote sustainable practices in Colombian sugarcane farming. These advances include a significant increase in the program's coverage, from 186 to 430 production units, and a 40% increase in the number of producers linked to the program (from 182 to 255 farmers), representing an 85% increase in area. In addition, cooperation with sugar mills has been expanded to include 8 additional processing plants throughout the process, for a total of 12 mills.

The main results correspond to the adoption of sustainable practices, which, since 2020, have reached a total of 1,974 adoptions distributed among the farms of participating sugarcane growers and include practices such as strengthening biological corridors, use of plant cover, planting green manures, responsible use of agrochemicals, attention and care for workers, and financial planning. Finally, thanks to active management, almost 80% of the program's implementation budget comes from external financing sources.





#### **LESSONS LEARNED**

- Building solid alliances as a fundamental factor in the success of the Integra Program;. Over the years, it has established collaborations with various key actors in the sector, international NGOs, and public sector bodies.
- The process of adapting the Sustainable Sugar cane Guide has been a valuable learning experience for the Integra Program, allowing it to adapt to the changing realities of the sector.
- The incorporation of the digital tool Extension Solution® as a functional information system has facilitated the collection and analysis of information by extensionists to evaluate sustainability, which has strengthened informed decision making and identification of opportunities for continued improvement.
- The process of adopting sustainable practices in sugar cane has proven to be a multifaceted and dynamic challenge, with multiple factors influencing decision making and implementation of change.
- Sharing experiences among producers has been a key strategy to address this complexity; sharing successes, challenges, and lessons learned among peers creates an environment of learning, trust, and cooperation that allows them to take a more proactive stance toward sustainable innovation of their agricultural systems.



The Integra program began in 2016 as a replication of an experience from Brazil thanks to a cooperation agreement between Procaña and the NGO Solidaridad. It started with a phase of adaptation of the Brazilian Sustainable Sugarcane Guide to the Colombian context, and its implementation in the digital tool "Horizonte Rural". The pilot started with 17 farms.

Currently, the Integra Program is managed by Cenicaña and has 430 participating farms, reflecting its success in promoting sustainable sugarcane practices in Colombia. The projection of this program is based on the ability of the Sustainable Sugar Cane Guide to adjust and adapt to different contexts, facilitate the collection of data, and evaluate the sustainability of the crop. On the other hand, the establishment of strategic alliances with different entities has been key to ensuring the scalability and long-term sustainability of the program.

#### **RECOMENDATIONS**



Build alliances with key actors in the value chain. Collaboration between different actors will increase the impact of the program, provides access, and facilitate the mobilisation.



Promote spaces for exchange and learning among producers, extensionists, and other stakeholders; collaboration and trust are essential to accelerate the adoption of sustainable practices and to address challenges together.



The agricultural environment is dynamic and faces constant challenges. Establishing training and continuing education opportunities to extensionists and farmers will develop complex management skills.



Implement mechanisms that encourage reflection and continuous learning. This will create spaces to evaluate progress, analyse results and discuss lessons learned.



Use digital tools to collect, analyse, and monitor data in real time. This will facilitate decision making and identification of opportunities for improvement.





#### **TESTIMONIES**



I really liked the Program because I had always sought to have a continuous improvement in my crops, but without a guide it was very complicated to do so. Today I have that guide... it is the only program that will be able to guide the sugarcane sector in Colombia to achieve better practices and support those who want to be certified. It is necessary that mills and growers work together on sustainability goals.



Josefina Barona - Sugar cane grower



With the certainty of working together, with Integra, it will be possible for both growers, mills and other actors in the value chain to contribute to the environment, the development of the regions and the economic results of the processes. We thank Integra for this important initiative.



Felipe Naranjo - Sugar cane grower



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### The TAP-AIS project

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For more information, see: www.fao.org/in-action/tap-ais www.twitter.com/TAP G20

#### **Good Practice Note Series**

The Food and Agriculture Organization (FAO) of the United Nations, the Tropical Agriculture Platform (TAP), and the DeSIRA (Development Smart Innovation through Research in Agriculture) initiative, together with the Inter-American Institute for Cooperation on Agriculture (IICA) and the Latin American Network of Rural Extension Services (RELASER), are committed to strengthening national agricultural innovation systems (AIS) for their transformation towards sustainable food systems in Latin America and the Caribbean.

In 2020, a Joint Rapid Assessment on Strengthening Agricultural Innovation Systems in Africa, Asia and Latin America was conducted to analyse the innovation environment to identify and document initiatives to strengthen AIS, in the context of the TAP-AIS project funded by the European Union through the DeSIRA initiative.

The report presents challenges and opportunities for innovation, especially through the improvement of functional capacities and the ways in which regional, global and national organisations can support the strengthening of AIS using the approaches and tools of the Tropical Agriculture Platform (TAP).

The publication of this series of Good Practice Notes is a contribution by RELASER and IICA to documenting cases that have contributed to the development of an effective AIS by addressing relevant challenges in Latin America.

The same effort was made in the Asia-Pacific region, whose good practice notes can be found <u>here</u>