Water and Sustainable Development From vision to action



Strategic Program for Climate Resilience in the Jamaican Sugarcane Industry

Katalin Solymosi, Inter-American Development Bank

Short summary

This case presents an ongoing IDB's Structured and Corporate Finance Department (SCF) project in Jamaica. Jamaica, in its national Strategic Program for Climate Resilience (SPCR), has put a focus on on measures to safeguard water resources, above all in the agriculture sector. While the IDB public sector has developed an 11 million USD program for the implementation of integrated climate change adaptation strategies in targeted river basin, planning and management, the largest private sector investment arm of IDB (SCF) is structuring a loan to a private sector client in the sugar industry. This will aim to upgrade water management and technologies as well as to develop a water efficiency onlending program for small farmers supplying the company.

The IDB has identified the following potential investments in water resource management and related issues with the private sector client:

- a) Drip-irrigation and fertilization practices on estate land and third-party suppliers' land;
- b) Mechanized harvest on estate land and third-party suppliers' land;
- c) Wastewater treatment investments at processing plant level;
- d) Training/capacity building to create more employment opportunities for youth and women in the company operations and supply chain;
- e) Training/capacity building to avoid illicit cane burning and on new irrigation technologies.
- f) Financial literacy and agribusiness management practices enabling different types of farmers (including women and youth) to participate in the loan program.

Above mentioned long-term investments in water efficiency and other sustainability measures are often perceived as risky by the private sector and commercial financing is therefore scarce. Such projects have longer payback periods, are subject to technology risks, and small farmers often lack the knowledge and financial capacity to make such investments without the backup of a strong offtaker in the supply chain. SCF is considering the use of blended concessional funds in order to overcome these barriers and to incentivize investment in efficient water management.

Key words:

Water scarcity, agriculture, efficient irrigation, wastewater management, Caribbean

Issues addressed:

WASH (inequalities, schools, health centers, refugee camps, women and girls)

Women and youth: capacity building program/training carried out at company level to ensure the participation of women and young farmers in lending program to upgrade farm technologies.

Water resources management (water-use efficiency, integrated water resources management, transboundary cooperation, sustainable extraction and supply of freshwater)

Replacing flood irrigation by drip irrigation.

Water quality (pollution, dumping of toxic materials, wastewater management, recycling, reuse, restore ecosystems and aquifers)

Investment in wastewater treatment technology at the sugar mill/ processing plant.

Tools for implementation:

Financing / economic instruments: IDB is using concessional donor funds to catalyze private sector investments in water efficiency and other sustainable management technologies in land use sectors. The newly created GEF-IDB climate smart agriculture fund for Latin America and the Caribbean, the energy efficiency finance facility and the Canadian climate fund for the Americas are examples of these financing mechanisms.

Capacity development: Additionally to above mentioned lending/guarantee instruments, IDB provides grant funding to private sector clients to carry out investment grade feasibility and cost benefit studies to develop knowledge and capacities in companies about green technologies.

Who is involved?:

- IDB Structured and Corporate Finance Department (SCF)
- Jamaican private sector client in the sugarcane industry
- 1,900 smallholder farmers in the company's supply chain
- Local environment authorities

What were the objectives of the intervention?

- To modernize the Jamaican sugar industry towards sustainable and water efficient production, in line with national level policies such as the Strategic Program for Climate Resilience (SPCR).
- To catalyze private sector green investments at processing, as well as at farm level, including 1,900 smallholder farmers with own land under sugarcane.
- To build capacities in one of the most important Jamaican agricultural sectors regarding sustainable technologies, especially water management.

Implementation challenges

- Low initial capacity of local stakeholders:
- Old processing infrastructure that has been mismanaged for decades
- Smallholder farmers use inefficient irrigation and practices burning of sugarcane fields before manual harvest
- Low enforcement capacity of local environmental authorities
- Limited experience of national/local authorities to work with the private sector
- Limited experience of private investor to work in Jamaica and with high number of small farmers in the supply chain

Main task/activities undertaken / Tools used:

- Technical assistance to analyze planned investments and prepare the loan structuring
- Based on those outcomes, structuring of loan to private sector client
- Based on those outcomes, structuring of financing program targeted at smallholder farmers in the client's value chain
- Based on outcomes of the technical assistance, design of a capacity building/training program for company employees and supply chain farmers on sustainable sugarcane production
- Monitoring and evaluation of investment project

Main outcomes / impacts (what has changed?): In progress.

Lessons Learned:

Triggers:

Factors that trigger sustainability investments in e.g. supply chains:

- Low productivity, especially in the supply chain (vs on land owned by company)
- Low incoming water quality
- Water scarcity
- Pressure from international buyers requesting higher sustainability standards
- Pressure from regulator to improve wastewater quality
- High energy costs

Barriers:

Sustainability investments face a typical set of barriers, not only related to water management nor only in Jamaica:

 Knowledge barrier: lack of knowledge about latest technologies and best agricultural and other practices that lead to reduced resource use

- Perceived risk of sustainability investments: longer payback periods, new technologies, high initial capital cots
- Capacity barrier: at corporate level, lack of experience with long-term financing, especially
 when onlending to supply chain actors; at producer level, lack of financial literacy, farming not
 seen as a business worth investing
- Institutional barrier: often the regulatory framework to support/incentivize sustainable investments is weak

The way forward: IDB is looking for private sector entities in Latin America and the Caribbean who are interested in similar investments at the corporate level, for defined projects, or to develop supply chain financing mechanisms with the purpose of catalyzing productivity investments that create positive environmental and social impacts.

Links:

IDB private sector: http://www.iadb.org/en/topics/climate-change/jamaica-ppcr-mainstreaming-climate-change-adaptation-in-local-sectoral-and-national-plans, 9896. html

IDB private sector climate solutions, including ecosystem service appraisals for improved water management:

http://www.iadb.org/en/structured-and-corporate-finance/climate-solutions,8136.html

IDB public sector program on climate resilience in Jamaica: http://www.iadb.org/en/topics/climate-change-jamaica-ppcr-mainstreaming-climate-change-adaptation-in-local-sectoral-and-national-plans,9896.html