



CONVERSATIONS OF CHANGE

# RWANDA





Rwanda has benefited from ‘hard’ agricultural investment projects in the past two decades, promoted by a supportive and responsive government in collaboration with various donors and development actors. CDAIS looked to increase the impacts of such investments through strengthening ‘soft’ skills in three innovation niche partnerships surrounding significant public, private or donor-funded infrastructure developments, and linking this to organisational and national levels. Of these, this story focuses on experiences from the Rwangingo–Karangazi catchment partnership, where a dam and irrigation scheme had led to conflicts between different groups of water users and not the immediate benefits expected. CDAIS brought everyone together and, through structured and facilitated dialogue, rapid progress was made, consolidated through meetings and training, and brought local issues to the national level through policy dialogues. The concept of the need for strengthening functional capacities has gained ground and is now increasingly accepted as a crucial component in future agricultural projects.

## From conflict to cooperation and consensus

Near the dam, a small group of the catchment’s water users’ association members discussed what had been achieved in recent years. “Before the irrigation system all this marshland was only rough grazing”, recalled Frida Bamurange. “Then when it was built and the land divided into plots, people started growing rice here, and this benefited women especially by giving them a new source of income. But immediately this caused conflicts, because the rice farmers took all of the water.

*“Thanks to the water users’ association I have more water for my maize and my animals. And more maize means more food, more feed, and more money”, said Steven Ruhima, maize farmer, Rwangingo (right), to Gilbert Kayitare, CDAIS Country Project Manager (centre) and Yussuf Nkurizabo, Vice-President of the water users’ association (left).*



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This left little or none for others in the catchment such as those growing maize and horticultural crops, and the livestock and dairy farmers.”

“Before, we knew nothing about water management”, said rice farmer Jonas Karanuva. “Now I am sure to have the water I need, which gives us more security.” Bamurange agreed: “As a maize farmer, I only started to benefit when our association was established, because it was only then that we began to share the water between us.” Yussuf Nkurizabo, farmer and association vice-president, explained the changes: “Before CDAIS, everyone did what they wanted and took what water they could, with no ownership or maintenance of the infrastructure. But through the CDAIS meetings and training, everyone got to know each other, learnt to listen, leading to better communication, understanding, and a new mutual trust. We saw the problems more clearly and what we could do to improve the situation. Now we look after the canals and sluice gates, and saw other benefits too, like from planting our crops at the same time.”

“The main irrigation canal runs for 33 kilometres from the dam in Rwangingo, Gatsibo district, into Karangazi in Nyagatara district”, Nkurizabo continued. “This also led to conflicts based on the district boundary. A really big achievement of CDAIS was to get the two local governments to work together, and now we have only one catchment, and can work ‘as one’.”

“CDAIS has led to great changes, through regular meetings with others, and a training course that taught us about better management, governance and our responsibilities, and which we then took back and shared with our members.”

**Gerard Simparinka** maize farmer, member of a maize growers’ group and the water users’ association

At the bottom of the catchment is the Terimbede Mworozu milk collection centre. “Before CDAIS, cattle keepers were in conflict with others in the water users’ association as we felt that we had a right to free access to water”, said Godfrey Mpambara, President of the livestock farmers’ group and the collection centre. “Then we understood the whole system, the needs of others, and that we should pay and play a part in the upkeep of the infrastructure.”



*Travelling down the catchment, the main crop on the valley floor changes from rice to maize, and the slopes on each side change from maize and horticulture to grazing. The four main value chains (rice, maize, horticulture and livestock) each have their own producer associations, and all are represented in the umbrella water users’ association.*

## Innovation partnerships in Rwanda



### Cassava value chain

Cassava is a major food crop grown by smallholders, especially in the south of the country. A processing factory was constructed, the Kinazi Cassava Processing Plant, but it was unable to source enough roots to make it profitable, initially running at only 7% of capacity. But since CDAIS became involved, partnerships developed between farmers, traders, public and private research and extension services, seeing the problems and agreeing ways forward. Now, only a few years later, business is booming for all involved – farmers with a secure market, producers of improved disease-tolerant varieties, and the factory itself that has increased production and now employs 43 permanent staff and up to 200 temporary workers. Led from district level, partners include the Rwanda Agriculture Board, and this work supplements the current phase of the national strategic plan that emphasises market-oriented and privately driven commodity development systems. Further identified steps included the need to (i) facilitate the private sector to take over cassava multiplication to improve supply to farmers, (ii) establish a risk-sharing (agri-insurance) scheme, and (iii) strengthen the capacities of small and medium-sized enterprises to improve cassava processing and marketing.



### Dairy value chain

The dairy processing centre at Burera is one of several community processing centres set up as public-private partnerships. It opened in September 2015 to source milk from 25,000 cattle farmers and process it into cheese, yoghurt and fermented milk. But it immediately had problems, having no organised supply chain. But from November 2016, CDAIS helped by bringing different actors and interests together, followed by more meetings and coaching sessions. A series of reflection meetings in 2018 and 2019 assessed the achievements and remaining challenges, and also identified that benefits went far beyond just the dairy. The business is now developing and has passed a point of no return. Main recommendations from the national policy dialogue were to (i) improve milk handling infrastructure and increase

the capacity of the dairy to diversify the products produced, and (ii) expand local markets and enhance the quality of milk products across the whole value chain.



### Rwangingo–Karangazi catchment

Under the crop intensification programme in Gatsibo district, this innovation niche partnership is centred on a reservoir and irrigation scheme for producers of rice, maize and horticultural crops, as well as livestock keepers. The core objective was to promote fair, effective and efficient use of water, alongside conflict management by improving communication and collaboration among all those who could benefit from more equitable water use. It stimulated a framework amongst water users, service providers including extensionists, input suppliers and a water users' association, and supporters. In less than three years, the multi-stakeholder partnership has implemented effective resource management, eradicated conflicts, and improved animal and crop productivity and farm incomes. Main recommendations from the national policy dialogue were to (i) provide incentives to the private sector to address post-harvest losses and lack of adequate technologies, (ii) establish the water users' association as a private business to maintain and operate the infrastructure, and (iii) review policies to allow the inclusion of competitive markets for milk and rice.

**Facilitators:** In Rwanda, each of the national teams worked in all partnerships. The National Innovation Facilitators are: Straton Habumugisha, Augustin Mutijima, Leon Niyibizi, Corneille Ntakirutimana and Gisèle Ntakirutimana; supported by consultants Désiré Mushumba, Jean-Pierre Bizimana and Pascal Gahire.

“CDAIS has improved communication between farmers, and between us and them.”

**Ernest Nsigayehe** Director of Agriculture and Natural Resources, Gatsibo district



## Knock-on benefits

“There has also been a great change in how managers and members in our centre work together, and how we run our business”, explained Mpambara. “We learnt about record-keeping, the importance of market intelligence, and the need for formal contracts with our clients.” Member Eugene Kalisa concurred: “Before we didn’t consider ourselves as entrepreneurs, but after the business training we realised that we were a commercial enterprise. And after advocacy training, we now identify and prioritise our issues, weighing them up, and are seeing what we can resolve ourselves and what we need help for. And none of this would have been possible without the skills we learnt from CDAIS.”

“CDAIS has changed us completely, in how we plan things, do things, how we operate together. CDAIS has opened our minds, and through the reflection meetings, has also changed our mindsets.”

**Athanase Mahoni** President of the water users’ association

## A catchment-level perspective

The President of the water users’ association, Athanase Mahoni gave his views: “CDAIS really changed the way we see and do things. Before we just waited for the government to come and make repairs, but now we have organised ourselves and undertake most of the needed maintenance ourselves. But in the lower reaches of the catchment the water flows slower, and the channels get choked with weeds and eventually silt up completely.”

“But after the advocacy training, we realised we can be more proactive”, continued Mahoni. “Now, with help from CDAIS, we are preparing a fully costed ‘catchment management plan’ that we intend to submit to central government and other potential donors for support. The government

constructed the infrastructure but then went away before we had matured as a user group, but we thank CDAIS for helping us to ‘graduate’. We now understand that we are the collective owners of the infrastructure, the dam, channels, sluice gates, but that we are also a business as well as an association. And the business training gave us ideas ... At a committee meeting in November 2018 we agreed to clear the weeds at the edge of the reservoir and stock it with tilapia. We then requested sealed bids for the fishing rights for 2019, and accepted the highest offer – four million francs (€4000) for the first year alone! This is a great new source of income for our association and, again, this would never have happened without CDAIS.”

## From partnership to organisational changes

“I have really appreciated the CDAIS project, and I have seen great changes in how water is managed in the Rwangingo–Karangazi catchment”, stated Ernest Nsigayehe, Director of Agriculture and Natural Resources in the Gatsibo district local government. “Farmers also work better together now to reduce post-harvest losses and increase the marketing of their products. CDAIS is a strong methodology that could also show the way for other projects with similar capacity gaps. As such, I am advocating for the use of CDAIS in other projects at district level. The vice-mayor also took part in several of the sessions and the national policy dialogue, and is very supportive.”

A key partner in the dairy innovation niche partnership in Burera district is the milk producers’ cooperative (Coopérative des Eleveurs pour le Production et Transformation du Lait, CEPTL). CEPTL President Pierre Celestin Mbonaruzza explained that the cooperative buys from individual farmers via six community collection centres and aims to become a hub for the provision of innovation support services in the dairy sector. As such, it was selected for CDAIS organisational assessment.

CDAIS consultant Désiré Mushumba, who led the process, described what happened: “An organisational capacity needs analysis was carried out in July 2018, through individual interviews with guiding questions, to objectively reflect on what was needed to become



*Godfrey Mpambara, President of the livestock farmers' group (left) taking a delivery at the milk collection centre that he also leads.*



*"There is a lot we can do, but clearing so many kilometres of blocked channels like this is beyond us", says Athanasie Mahoni, President of the water users' association.*

a successful service hub in terms of the three dimensions, (i) internal organisation in terms of production and supply, (ii) resources (finance, markets, staff), and (iii) service provision (capacity to deliver) and internal and external relationships (capacity to relate). Before, they had significant management issues and were on the verge of collapse, but they elected a new committee and became more communicative. Since the process started there was new commitment from the leadership to restructure the cooperative, including representations from the different collection zones. A new level of trust has been built, and

members are now more engaged. And, more aware of the need to build networks, they have improved their external relationships with the main dairy, input suppliers, vets, and the Rural Dairy Development Programme."

But the final validation and visioning meeting in February 2019 indicated that CEPTL does not yet have the capacities required to become an innovation hub and, according to the members, the level of services provided is still low. More services are needed and the quality of the existing ones needs to be improved to reach out to more members, as well as to the entire local dairy livestock community. And CEPTL will need more functional, financial and organisational capacity to get to this level.

## Making the links between levels

Building on partnership-level discussions in 2018, a CDAIS national dialogue event brought together 50 participants in Kigali on 31 January 2019. Twenty were from the three CDAIS partnerships, including producers and private sector partners, with representatives from the Ministry of Agriculture and Animal Resources and other government institutions, FAO-Rwanda and the CDAIS national team. Most of the priority policy issues identified across the three CDAIS partnerships related to increasing production to ensure food security and nutrition, changing monopolistic market structures, improving linkages between farmers and markets, increasing farmer participation in fixing minimum reference prices, and training farmers on calculating costs of production to better inform their price setting.

"Why are we talking about policy?", asked Gualbert Gbehounou, FAO Country Representative in his opening address. He explained that capacity development is fine, but that a conducive policy environment is also needed. And that that was the reason for this dialogue: as a platform for discussions between institutions and actors. Gbehounou also highlighted the achievements of CDAIS in Rwanda, which will lead to a national action plan on agricultural innovation systems. Three innovation niche partnerships were established, each having strengthened capacities including increased advocacy, lobbying, access to markets and negotiation skills. And thanks to this there is better collaboration with the Rwanda Agricultural Board

in the milk value chain in Northern Province and with the cassava value chain in Southern Province.

The dialogue resulted in a set of recommendations for enhancing the enabling environment for agricultural innovation in Rwanda, and an action plan outlining the way forward, summarised in a policy brief, 'Strengthening agriculture and livestock value chains in Rwanda through

agricultural innovation systems'. Straton Habumugisha, Lead National Innovation Facilitator and the monitoring, evaluation and learning focal point added other observations: "The concept is so simple, and effective. Another great achievement was that the issue of price setting was raised, and government officials said that they would now consider local consultations to assess and consider actual costs of production before deciding the price."

## Uptake of CDAIS methodologies

CDAIS approaches were valued by the project team and have been adopted in their other work. As professionals in the field, many already knew of a number of the concepts, tools and methods, but not in the combination that CDAIS proposed. Here are views from four of them.

"The most important thing I learnt was the value of platforms, as spaces for farmers and other partners to resolve problems, by helping them to understand their situation and find realistic solutions. Now I use this concept in other training courses and work I am involved in. For example, in a WFP [World Food Programme] supported project on maize value chains, I established a platform following my experience with CDAIS, involving farmers, other market actors and local government. This led to good results, and the 17 cooperatives involved now solve many of their problems on their own."  
*Jean-Pierre Bizimana, entrepreneurship and business management consultant*

"The organisational assessment methodology was more useful than others I have used before, especially as applied to innovation support services. Also, some of the monitoring, evaluation and learning tools were very good, in particular in the analysis of qualitative issues for assessing impacts for development projects. What was also very valuable was being able to participate in CDAIS global consultations, and to hear first-hand from those working in other countries, to see commonalities and that, with flexibility, this approach can lead to sustainable change."  
*Désiré Mushumba, agro-economy consultant*

"I was used to the conventional system of one-way knowledge transfer, but CDAIS taught me the value of working with people and building on local knowledge with complementary approaches. This was amazing for me. And we applied the capacity to collaborate to ourselves, building a cohesive country team. I also saw how strengthening functional capacities leads to changes in attitudes and practices, such as from new interpersonal connections leading to better market access – the capacity to navigate complexity. But it is a gradual process ... And I now understand the components of an ideal innovation system, and what we need to do to ensure that they are there. Now, I am planning to apply CDAIS approaches with cooperatives in a World Bank project I am about to start on."

*Straton Habumugisha, Lead National Innovation Facilitator*

"I really appreciated the CDAIS tools and methodology for capacity needs assessment and especially for R&R [reflection and refinement]. They are really good. In February 2019, I used the R&R approach in my other work with a KOICA technical vocation and learning project and it worked very well, so I will use it again for sure. And by using progress markers, which were new to me, I can now analyse changes in functional capacities over time. I have also seen personal changes, as through CDAIS I now have more facilitation and organisational skills, which has given me much more self-confidence in meetings and workshops."

*Gisèle Ntakirutimana, National Innovation Facilitator*

## Key lessons learnt

As part of the ‘dual pathway’ of the CDAIS methodology, capacity-strengthening efforts occur at partnership, organisational and national levels, with that at organisational level focused on innovation service support providers. But in Rwanda, organisations seemed reluctant to see the value of self-assessment, and this was eventually undertaken in only one of three that were targeted. The process of engaging actors in policy dialogue was, however, very effective for identifying, clustering and prioritising policy issues, proposing means of addressing them, and defining institutional roles and responsibilities in a participatory manner. This helped to distinguish which policy actions are needed at farm, district and national levels, and the responsible actors in each case.

Arnaud de Vanssay, Rural Development Team Leader of the EU delegation in Rwanda, in conversation with Gilbert Kayitare, CDAIS Country Project Manager, confirmed that, “CDAIS fits well with national strategies. It has established a link between local and national levels, and has been systematic in showing that much more can be achieved by strengthening ‘soft skills’. In Rwanda, however, there is a focus on ‘hard’ infrastructure and investments, and the value of soft skills is somehow underestimated though they can have great impacts, perhaps because they are also so difficult to measure.” Kayitare concurred: “Strengthening



*Conversations of change – Country Programme Manager Gilbert Kayitare (left) discussing ways forward with Arnaud de Vanssay, Rural Development Team Leader of the EU delegation in Rwanda.*

functional capacities should go hand-in-hand with such hard investments if they are going to have the expected impacts.”

“But seeing that CDAIS is a good example of the possible benefits from well-organised value chain platforms, working at local level and linking them to markets, we could invest more in this approach?”, asked de Vanssay.

Kayitare concluded with a simple recommendation: “To ensure local ownership and long-term sustainability of any agricultural programme or project, 5–10% of the total budget should be allocated to strengthening partnerships and soft skills.” Agreeing in part, de Vanssay added, “but this should also ensure continuity, so even a fraction of one per cent of a project’s funds invested every year in building platforms and soft skills might be enough. But at the EU we already want to use CDAIS methodologies in projects being planned.” Other means of advocating CDAIS approaches at national level were shared and considered. But what was clear is that the concept has definitely taken root, grown and set seed. Now those seeds need to germinate.

This story of results from the work of the CDAIS Rwanda country team is based on interviews with them, CDAIS National Innovation Facilitators and various other partners.

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See also: Resolving conflicts in water use (Habumugisha, S. and Mushumba, D.), pp 186–195, in: Agrinatura and FAO. 2018. *Building Competence and Confidence in Agricultural Innovation Systems. Stories of Change*. Agrinatura, Paris, and FAO, Rome. 196 pp.

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