Brochure

Incorporation of DRR and CCA in Other SDC Projects

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Cooperación Suiza en América Central

Sendai Framework for Disaster Risk Reduction 2015-2030
Priority 3: Investing in disaster risk reduction for resilience.

The ***Disaster Risk Reduction Programme (DRR Programme)*** is one of SDC's most emblematic achievements in Central America. It began in 1999 in the wake of Hurricane Mitch with projects in Honduras and Nicaragua, was later expanded to include El Salvador and, finally, the entire Central American region. More than 1.5 million persons benefitted directly and at least 19 million did so indirectly. With participation from a variety of partners, almost seventy projects were implemented from 1999 to 2024. These were structured along six **thematic lines:**

- **Natural hazard mapping and local risk management**
- **Early Warning Systems**
- **Integration of DRR and CCA into universities**
- **Construction of safer housing and infrastructure**
- **Strengthening of national and regional DRR systems**
- **Incorporation of DRR and CCA in other SDC projects**

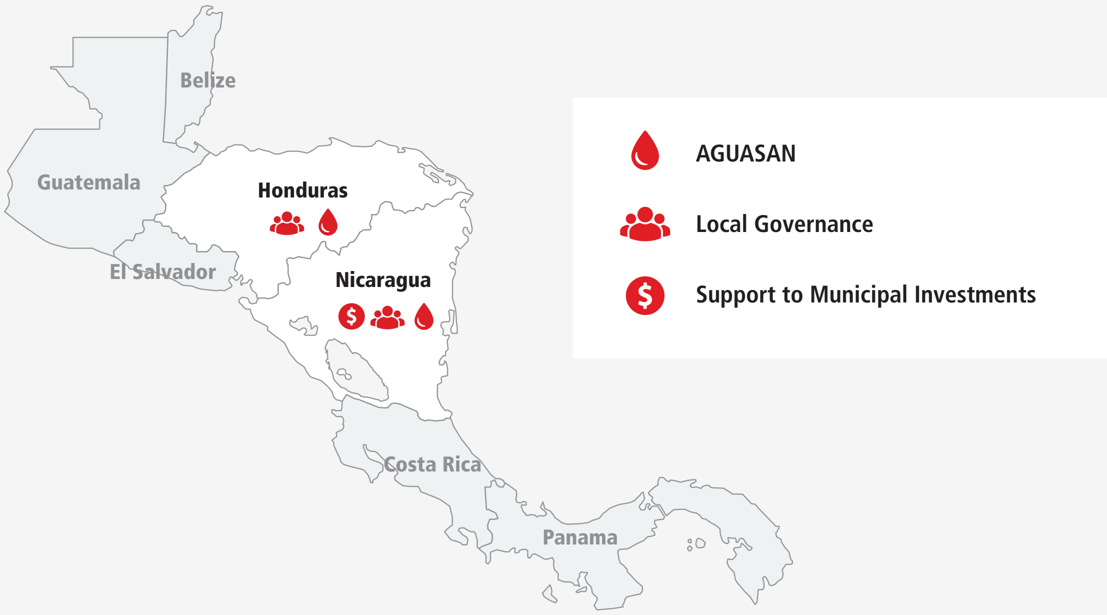
No projects were carried out under the thematic line titled *Incorporation of Disaster Risk Reduction (DRR)* and *Adaptation to Climate Change (CCA) in other SDC projects*. Still, a little over CHF 127,000 was allocated to it, equivalent to 0.30% of the total budget, in support of activities to three selected programmes: *Water and Sanitation (AGUASAN), Local Governance* and *Support to Municipal Investments (APIM).* These programmes were implemented in Honduras and Nicaragua.

Training members of the drinking water and sanitation committee, Nicaragua. © SDC

The process of incorporating DRR to other projects of the Swiss Agency for Development and Cooperation (SDC) began at the very onset of the *DRR Programme* in 1999, given the concern over the impact disasters might have on project sustainability, in particular those regarding water and sanitation and productive infrastructure.

Up until 2008, the incorporation of DRR concentrated entirely on the *AGUASAN* and *Local Governance* projects. However, starting in 2009, when the *Climate, Environment and Disaster Risk Reduction Integration Guidance* (CEDRIG) was approved, it began to be used also in other programmes and projects in the three domains of SDC interventions in Central America, namely *Governance and Rule of Law, Inclusive Economic Development and Climate Change, DRR and Natural Resources.*

Programmes that incorporate DRR and CCA



Impact hypothesis

The systematic integration of DRR and CCA to SDC projects and programmes contributes to improving the sustainability of the investments and increases the resilience of systems and the population when a disaster occurs.

Objective

To provide technical accompaniment and advisory services to selected SDC programmes, with the aim of incorporating the DRR and CCA approach, thus contributing to the sustainability of investments by reducing losses and damage caused by disasters.

Swiss added value

SDC adds value by sharing its knowledge and making a methodological and conceptual contribution to the region by means of Swiss experts. The region also benefited from guides and instructions prepared at headquarters, such as, for instance, the *Disaster Risk Reduction Guide*, which stimulated the development of different instruments which in turn were developed in Nicaragua and Honduras.

Innovation

The process allowed for the participatory preparation of a *Technical Guide for Reduction of Vulnerability in Drinking Water and Sanitation Systems* by the Nicaraguan Institute of Aqueducts and Sewerage (INAA). This was done in the framework of AGUASAN and institutionalised. The innovation here is that the guide is based on the analytical structure of CEDRIG and its elements. In addition, it includes designs and specific indicators for each sector and components of the infrastructure to be analysed.

Another innovative process carried out by the *Local Governance* programme was that in Nicaragua, the General Public Investment Directorate (DGIP) participated in the preparation of the *Methodological Guide and Typical Designs for the Design of Neighbourhood Roads as DRR and CCA Measures* and the *Technical Guide for the Formulation of Terms of Reference For Drinking Water Supply Project Pre-Investment Studies Incorporating DRR and CCA.* In fact, the DGIP headed the process and ensured the incorporation of these guides to institutional regulations regarding project approval.

From 2008 to 2012, the process focused on developing tools and sectoral capacities by training 300 technicians and municipal contractors in Honduras and Nicaragua.

Work with governing entities and partners in the water and sanitation sectors was also prioritised, among them INAA in Nicaragua and the Autonomous National Aqueducts and Sewage Service (SANAA) in Honduras. Under *Local Governance* and *APIM*, work was done with the Association of Municipalities in Honduras and the DGIP in Nicaragua.

By the time the *AGUASAN* and *Local Governance* programmes came to a close, ten courses and workshops had been held, at which training in DRR and risk management took place for some 300 leaders in water and sanitation, as well as technicians and leaders in the municipalities and among national entities, construction contractors and NGOs in Honduras and Nicaragua. Synergies in the DRR projects facilitated the presence of specialists who shared their expertise at the training events.

Members of the Drinking Water and Sanitation Committee (CAPS) at the water treatment plant, strengthened with bioengineering works to avoid landslides. Community of El Jobo, Matiguás, Matagalpa, Nicaragua. © SDC

Stages

In order to carry out projects that incorporate DRR and CCA, it is necessary to undergo the following three stages:

Stage 1

Awareness-raising (1 to 5 years)

Objective: To raise awareness among technical teams and key authorities at the Cooperation Office on the importance of the ways to incorporate DRR and CCA to the projects and programmes as elements that contribute to their sustainability.

Main activities:

- Hold meetings with persons charged with programme and project management in order to convince them that it is important to incorporate DRR and CCA to their work.
- Hold workshops and courses with officers and technicians at programmes and projects, which are interested in DRR and CCA, with the aim of increasing awareness on these topics.
- Form working groups to organise and plan the incorporation of DRR and CCA to other SDC programmes and projects, which may be interested. Such groups should be made up of programme officers in DRR and other SDC programmes.
- Create instruments that support the incorporation of DRR and CCA in the projects.
- Offer technical support to the interested projects.
- Prepare and approve strategies and work plans.

Stage 2

Tools and capacities (2 to 4 years)

Objective: To strengthen capacities among sectoral partners for the effective incorporation of DRR and CCA to the project cycle through the instruments adapted and the availability of human resources.

Main activities:

- Identify and develop technical sectoral tools in DRR and CCA, working jointly with the governing entities on each subject, as well as other partners, such as the Central American and Dominican Drinking Water and Sanitation Forum (FOCARD-APS) and the World Bank, among others.
- Hold practical training events for sectoral and municipal technicians and contractors, focusing on the use of the technical tools developed.
- Validate and adjust the technical tools to the projects.

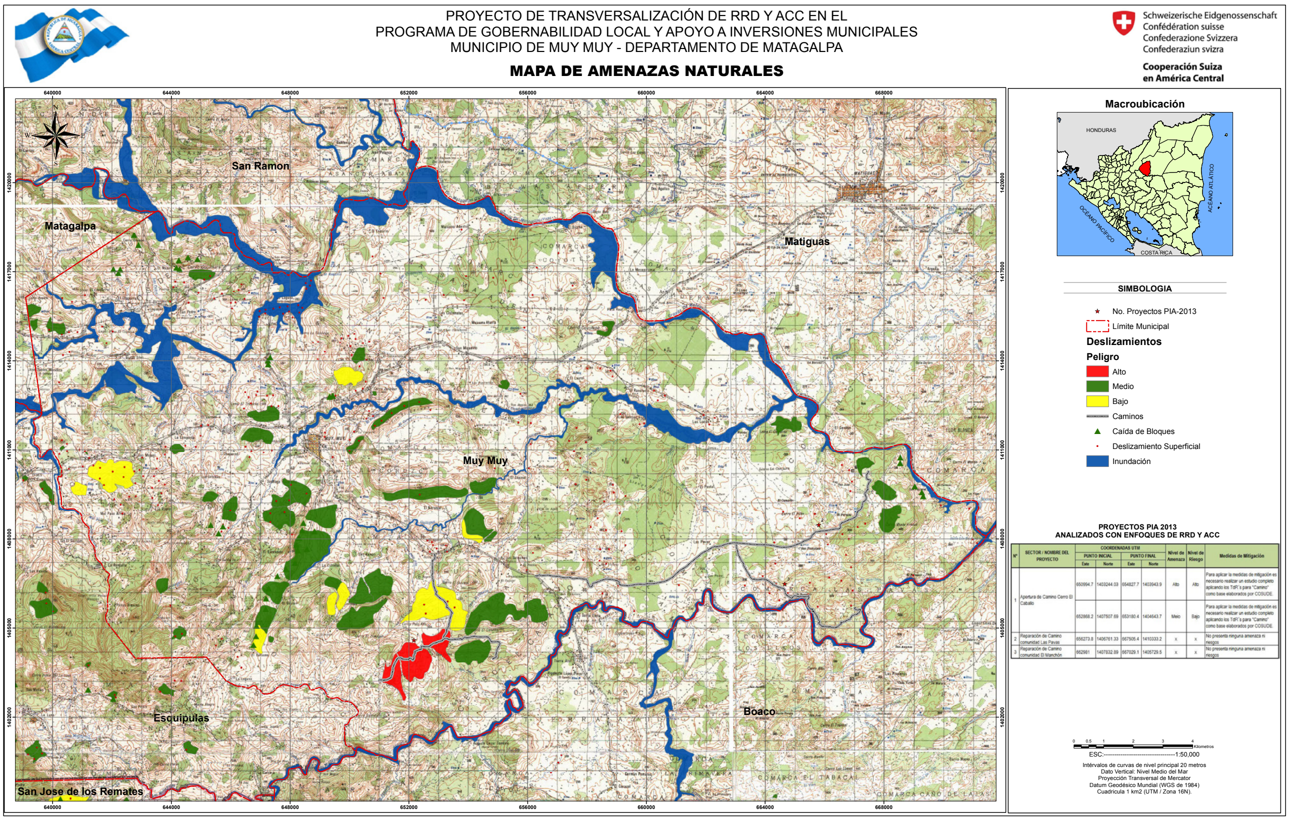
A member of the Drinking Water Committee analyses risks in the drinking water system. Siuna, Nicaragua. © AGUASAN

Stage 3
Consolidation and institutionalisation (4 years)

Objective: Consolidate the processes and ensure their institutionalisation at SDC and among participating partners.

Main activities:

- Promote the exchange of experiences between national and regional actors regarding the application and effectiveness of the technical DRR and CCA tools.
- Hold training courses with partners, governing entities, donors and actors in the sector.
- Carry out advocacy to further and ensure the institutionalisation of the technical tools.
- Continue with the monitoring and technical accompaniment, so as to ensure their proper use.
- Develop similar actions in other SDC projects and programmes.



Example of a municipal investment plan which, upon analysis, takes risks into account. Muy Muy, Matagalpa, Nicaragua.
© SDC

Sustainability

Sustainability is classified as moderate, because most of the instruments were institutionalised and there are well-trained sectoral and municipal technicians who know how to implement them. However, there are only scarce economic resources with which to ensure technical accompaniment and the strengthening of the capacities needed so partners continue using them systematically in their projects and programmes.

Resources

Human resources are needed who are specialists in DDR and CCA, as well as sectoral experts on water and sanitation, road construction and hydraulic works. **Reference costs:** CHF 20,000 per year (expenses for training and works are financed by the programmes).

Implementation options

Although no projects were carried out in this thematic line, financial resources were used to engage specialised consultancies, in order to ensure technical accompaniment, as well as to co-finance the training and exchange activities. However, it is also feasible to implement projects directly, above all in the early stages of DRR and CCA incorporation. This can be done using the direct implementation model or through a mandate to specialised organisations.

Success factors

1. Personnel that is interested, motivated and sensitive to DRR and CCA in the *AGUASAN, APIM* and *Local Governance* programmes and among partners. The selection of these programmes was crucial, because the investments made are repeatedly affected by disasters. These investments are of vital importance to improve living conditions among rural populations as regards water and sanitation and access to goods and services using rural roads.
2. Work hand-in-hand with governing institutions such as INAA and DGIP allowed for institutionalising the methodological guides and to develop capacities capable of implementing their contents. This was possible due to the existence of legal frameworks and regulations that opened opportunities for the incorporation of DRR and CCA and, as part of these, to update the regulations and guides.
3. Having clear guidelines by which to advance with the process of incorporating DRR and CCA to the programmes and projects which are part of the SDC strategy in Central America through the Disaster *Risk Reduction Guide and the Climate, Environment* and *Disaster Risk Reduction Integration Guidance (CEDRIG)*. Likewise, the selection of Nicaragua as the pilot country in which to implement these guides and strengthen capacities using experts from headquarters reaffirmed the commitment of the Cooperation Office and its partners in the process.
4. Developing and implementing a strategic concept, an annual work plan, and the allocation of human resources to provide systematic technical accompaniment to interested projects, as well as a budget with which to undertake activities.

Main challenges and lessons learnt (LL)

1. To convince those in charge of these topics, as well as management at the Cooperation Office of the importance of actively incorporating DRR and CCA actively in the projects cycle, in the absence of specific mandates from headquarters.

   LL. The incorporation of DRR and CCA in development projects is a long-term endeavour that requires approval and guidance from headquarters. Furthermore, it must be well-planned, a budget and human resources need to be allocated, and the latter must have specific and clear roles and functions. The motivation and commitment of key staff members is important to get the process of incorporating DRR and CCA underway, but not sufficient to guide and give it coherence.

2. The high frequency of disasters (for example, tropical storms Stan and Beta in 2005, followed by Hurricane Felix in 2007) caused heavy losses and damages in the water and sanitation projects.

   LL Losses and damages caused by disasters can also be opportunities to energise the incorporation of DRR to development projects and promote the *build back better*[1] approach to reconstruction processes.

3. Systematically ensure that the application of DRR and CCA instruments at the projects are of the needed quality, above all in contexts with high institutional staff turnover rates and other budgetary priorities.

   LL The incorporation of DRR and CCA requires expert external technical accompaniment through specialised consultants or institutions, in order to ensure the continuity and quality of instrument implementation. This could contribute to reducing the gaps occasioned by high turnover among institutional personnel.

4. The implementation of DRR and CCA measures may be considered an additional expense that makes projects more expensive, especially when institutions are made to function on low budgets.

   LL It is important to be able to demonstrate by means of cost-benefit analyses the value, gains and advantages of applying DRR measures as regards the sustainability of the investments, as well as to have ongoing training partners, as a way of negotiating a larger budget for DRR and CCA measures.

After Hurricane Felix swept through the Caribbean Coast of Nicaragua in 2007, the formation of a damage evaluation team made up of experts from the DRR programmes, AGUASAN and its partners allowed for identifying opportunities to "build back better".

A project was co-financed by DRR programmes and AGUASAN that already included training in DRR for sectoral and local partners on topics such as mapping, threat analysis, design and implementation of risk analysis and DRR measures in the rebuilt infrastructures, as well as awareness-raising among the population. There stands out the work done jointly with the Ministry of Transport and Infrastructure (MTI) in Nicaragua, to update and apply housing construction regulations. The consideration that hurricane-force winds may occur made a significant contribution to the formulation of the regulations now

[1] Build back better (BBB) is a strategy intended to reduce risk for people living in nations with vulnerable communities, in view of the likelihood of future disasters or upheavals. It includes DRR measures in its physical infrastructure, social system and housing restoration projects, as well as when revitalizing livelihoods, economies and the environment.

Good practices

1. Ensure there is specialised technical accompaniment in the programmes and projects in order to develop, implement and update technical DRR and CCA tools and their dissemination by means of exchanges among peers and with other countries and actors.
2. Develop capacities among programme partners and include them in the development and validation of the tools.
3. Hold ongoing theoretical-practical training, in alliances with universities and regional entities attached to the Central American Integration System (SICA) as well the Central American Higher Education Council (CSUCA) and the Central American and Dominican Drinking Water and Sanitation Forum (FOCARD-APS), which also promote exchanges and the dissemination of DRR instruments in water and sanitation projects, as well as municipal road construction.
4. Integrate indicators and specific goals by which to monitor and evaluate the progress made in DRR and CCA incorporation to water and sanitation programmes, local governance and support to municipal investments.
5. Develop these processes in projects that intervene in the same geographic zones in which DRR capacities were created, including risk mapping, for the purpose of avoiding the duplication of efforts and facilitating knowledge.
6. Incorporate DRR and CCA to the regional cooperation programme as a cross-cutting issue or strategic principle, as well as to planning (activities, indicators and goals in the logical framework and budgets) of programmes interested in incorporating DRR and CCA to their activities. For example, the watershed management projects in Honduras and Nicaragua took up activities such as the making of risk maps, the implementation of mitigation measures, and the adaptation of DRR tools. One example is MiResiliencia in Honduras, which contributed to strengthening resilience of population groups and investments.

> “All of our projects incorporate the risk component... Now, as part of our rules and procedures, risk analysis is part of our projects, and to ensure this happens, these are supervised by the Environment and Risk Unit”.
>
> **Marisol Ñurinda**, social expert in water and sanitation, FISE, Nicaragua

Information and contacts

Thematic Network on Climate, DRR and the Environment
climate.drr.env.newsletter@eda.admin.ch
André Wehrli: andre.wehrli@eda.admin.ch
Jacqueline Schmid: jacqueline.schmid@eda.admin.ch
Ali Neumann: ali.neumann@eda.admin.ch
www.shareweb.ch/site/disasterriskreduction/
www.weadapt.org/knowledge-base/sdc-network-climate-drr-and-environment

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Cooperación Suiza en América Central