



# HISTORIC IMPACT CAPITALISATION OF SDC'S BILATERAL COOPERATION IN LATIN AMERICA AND THE CARIBBEAN

**NICARAGUA**

## DEEP DIVE REPORT | SECTOR WATER (GOVERNANCE) & SANITATION

**PRESENTED TO**

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## Historic Impact Capitalisation of SDC's bilateral cooperation in Latin America and the Caribbean

### Nicaragua

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## LIST OF ACRONYMS

<b>ANA</b>	Autoridad Nacional del Agua
<b>CABEI</b>	Central American Bank for Economic Integration
<b>CAPS</b>	Comités de Agua Potable y Saneamiento
<b>COSUDE</b>	Cooperación Suiza para el Desarrollo
<b>CCAD</b>	Central American Commission for Environment and Development
<b>CCRD</b>	Comité de Cuenca de Río Dipilto
<b>CdC</b>	Comité de Cuenca
<b>CNRH</b>	Comisión Nacional de Recursos Hídricos
<b>DRR</b>	Disaster Risk Management
<b>ENACAL</b>	Empresa Nicaragüense de Acueductos y Alcantarillados Sanitarios
<b>ENDESA</b>	Encuesta Nicaragüense de Demografía y Salud
<b>ERSAPS</b>	Ente Regulador de los Servicios de Agua potable y Saneamiento
<b>DHAS</b>	Derecho Humano al Agua y Saneamiento
<b>FISE</b>	Fondo de Inversión Social de Emergencia
<b>HRWS</b>	Human Rights Approach to Water and Sanitation
<b>INAA</b>	Instituto Nicaragüense de Acueductos y Alcantarillados
<b>INTA</b>	Instituto Nacional de Tecnología Agropecuaria
<b>INETER</b>	Instituto Nicaragüense de Estudios Territoriales
<b>INAFOR</b>	Instituto Nacional Forestal
<b>INATEC</b>	Instituto Nacional Técnico
<b>INIFOM</b>	Instituto Nicaragüense de Fomento Municipal
<b>IWRM</b>	Integrated Water Ressources Management
<b>JAAPS</b>	Juntas Administradoras de Agua
<b>MAG</b>	Ministerio Agropecuario de Nicaragua
<b>MARENA</b>	Ministerio del Ambiente y Recursos Naturales
<b>MEFCCA</b>	Ministerio de la Economía Familiar, Comunitaria, Cooperativa y Asociativa
<b>MINED</b>	Ministerio de Educación
<b>MINSA</b>	Ministerio de Salud
<b>MIREX</b>	Ministerio de Relaciones Exteriores
<b>RASNICA</b>	Red de Agua y Saneamiento Nicaragua
<b>RASHON</b>	Red de Agua y Saneamiento Honduras
<b>PROATAS</b>	Programa de Asistencia Técnica en Agua y Saneamiento (GIZ)
<b>SERNA</b>	Secretaría de Recursos Naturales y Ambiente
<b>SANAA</b>	Servicio Autónomo Nacional de Acueductos y Alcantarillados
<b>UNAN</b>	Universidad Nacional Autónoma de Nicaragua
<b>W&amp;S</b>	Water and Sanitation

# 1 INTRODUCTION

The Historic Impact Capitalisation (HIC) project is embedded in a comprehensive institutional knowledge management initiative accompanying the gradual phasing out of the bilateral cooperation activities of the Swiss Agency for Development and Cooperation (SDC) from Latin America and the Caribbean (LAC) until 2024. The HIC project has three main components: 1) a meta-analysis covering Nicaragua, Honduras, El Salvador, Peru, Bolivia, Ecuador, Cuba and Haiti, 2) five sectoral/thematic deep-dives in Nicaragua, Honduras, Bolivia, Cuba and Haiti, and based on that, 3) the development of communication material showcasing the key results and lessons learned identified in the framework of the project.

In line with SDC's HIC Approach Paper, the deep-dives serve to analyse SDC's engagement in selected sectors in the current five priority countries along the OECD DAC evaluation criteria (all except for efficiency) and to identify relevant sectoral and institutional lessons learned. The analysis focuses on the last two decades in order to ensure continued relevancy and data availability. The deep-dives build on the results of the preceding meta-analysis. Although the deep-dives have a specific thematic focus, it is expected that further overall insights on SDC's engagement will be gained, which will then be taken up in the final summary meta-analysis and capitalisation report. It must be stressed that **the deep-dives are not an evaluation**; rather, they are a reflection on information received from the concerned actors in the field, triangulated with literature review.

In Nicaragua, the sectoral deep-dive focused on “**Water (Governance) and Sanitation**” as decided by SDC Bern and the SDC country office in Nicaragua, given SDC's strategic engagement in this sector for more than 20 years. It was furthermore agreed that the study would also focus on the **regional** aspect of the topic, thereby including Water (and Sanitation) related projects from **Honduras** as well

The table below provides the basic data of the deep-dive's in-country mission. The table below highlights basic data on the field mission of the HIC Team to Nicaragua.

**Table 1: Overview Deep Dive Nicaragua**

GFA Team	Mission dates	Projects included in the deep-dive	Interviews & documents
Nadia Kovalcikova Oscar Escobar	12.03.2023 – 24.03.2023	(1) AGUASAN Nicaragua (2) AGUASAN Honduras (3) AGUASAN Regional (4) Local Governance Program PGL APIM (5) Pequeñas Ciudades y Escuelas (6) Cosecha de Agua (7) Cuenca Río Dipilto (8) Gobernanza Hídrica (9) Nuestra Cuenca Goascorán	35 interviews (including group interviews and 2 focus group discussions)  4 project visits  Approximately 70 documents reviewed (including ProDocs, interim and final reports, technical reports, internal and external evaluations, etc.)

## 2 METHODOLOGY OF THE DEEP-DIVE

In the context of **deep-dive planning**, SDC together with the HIC team examined whether the deep-dive sectors initially selected in the approach paper were still reasonable or whether they had to be adapted in order to guarantee current and future relevance of the topics for SDC. In the case of **Nicaragua**, it was decided from the beginning that the topic would cover water. It was however discussed whether the topic should be “Water & Sanitation” or the “Triple Nexus”, covering technical assistance, humanitarian aid, and (blue) peace. It was ultimately decided to focus on “Water & Sanitation”, to the abstract “water governance”, meaning the range of political, social, economic and administrative systems implemented for the development and management of water resources and the provision of water services at different levels of society. In this document, it is referred to the sector sometimes as simply “water” although entailing a broad range of systems connected to the use of water. Based on the sector selection, and in consultation with the SDC country office, the projects to be included in the deep-dive were selected, and interviews were arranged with government representatives, development partners, private sector, civil society organisations, implementers and beneficiary groups. A joined kick-off meeting with SDC Bern, SDC country office, SDC technical focal point and the HIC Team was also organised.

During **deep-dive implementation**, the relevant (project) literature was analysed, and structured, semi-structured or open interviews with implementing and partner institutions, beneficiaries, independent experts and other stakeholders were undertaken, in addition to focus group discussions, workshops and debriefing sessions. Some of the deep-dive interviews were already conducted as online interviews before or after the field trip. The major part was, however, carried out as in-person interviews in the country. For those projects that were still ongoing, selected project visits were organised.

The HIC Team used an **evaluation and capitalisation matrix** including guiding questions (categorised by the OECD DAC criteria plus lessons learnt), assessment criteria, and methods of data collection and data sources. All collected data including relevant documents, interview protocols etc. were analysed applying elements of a **qualitative content analysis**, a method for deductive systematic text analysis. The coding of the text material was done using the software MAXQDA.

Based on the literature review and interviews, a **thematic theory of change** and **historic political time-line** was developed showing the assumed impact logic and important political framework conditions. On the basis of the models, elements of a **contribution analysis** were applied, meaning that through the collection of empirical evidence it was sought to gauge whether and to what extent contributions to observed changes can be attributed to SDC's engagement in the respective sector.

### 3 OVERVIEW OF SDC'S COOPERATION WITH NICARAGUA AND HONDURAS IN THE FIELD OF WATER AND GOVERNANCE SINCE 2000

#### 3.1 SUMMARY OF RELEVANT SDC PROJECT IN THE SECTOR

The below table provides the basic information of the projects that were included in the deep dive<sup>1</sup>. As indicated above, the selection was made jointly by the SDC Country Office and the HIC Team, based on the projects' proximity to the sector "Water and Sanitation" and "Water Governance".

In total nine projects in **Nicaragua and Honduras** were selected for the capitalisation. The Nicaraguan projects are: AGUASAN Nicaragua, Cuenca Río Dipilto, Cosecha de Agua and Pequeñas Ciudades y Escuelas (PCE - implemented in both countries). The governance project PGL APIM – although not being implemented directly within the water sector - was also included in the list of selected projects, as it (partially) covered topics related to AGUASAN and introduced the important aspects of "local governance" into the water thematic. The only project in the water sector that was excluded from the list of projects was the "Program for Productive Users of Hydroelectricity on a Small Scale" that provided financing to cover the costs related to the construction of small scaled water plants, as it did not fit overall in the selection of the projects. The list furthermore includes three projects from Honduras: AGUASAN Honduras, Nuestra Cuenca Goascorán and Gobernanza Hídrica. These projects were included into the list as they cover both water and governance sectors. As SDC in Central America operates under a regional approach, this offers an opportunity to compare experiences in both countries and at the regional level.

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<sup>1</sup> The data in the list (project volume, duration etc.) was retracted from the 1.) project documents (credit proposals, evaluations, Pro-Docs) and from a list provided by SDC HQ. Both sources do not provide complete information for the past 20 years, hence some data may be missing in the table. The data considers only SDC contribution to the projects.

Table 2: List of projects in the thematic field

PROJECT TITLE	IMPLEMENTATION PERIOD	BUDGET (SDC)	IMPLEMENTING ORGANISATION	MAIN PARTNERS (SELECTION)	REGION
AGUASAN Nicaragua	1982 – 2017 Phase 13: 01/08 – 02/13 Phase 14: 08/11 – 02/13 Phase 15: 03/13 – 10/17	Total: 55.290.000 CHF Phase 13: CHF 8.8m Phase 14: CHF 1.1m Phase 15: CHF 9m	Save the Children, CARE, FISE, ENACAL, INAA	<u>Public sector:</u> FISE, ANA, INAA; <u>Civil Society:</u> ONGAWA, RASNIC	Departments of León, Chinandega, Estelí, Nueva Segovia, Madriz, Matagalpa, Jinotega and the North Caribbean Coast Autonomous Region.
<b>Overall objective:</b> Contribute to the improvement of the living conditions of the poor population of Nicaragua within the framework of the principles of equity and sustainability. <b>Objective Phase 13 &amp; 14:</b> Increased sustainable access and adequate use of water, sanitation and hygiene services for families living in the intervention areas, within the framework of an inclusive pro-poor approach, protection of water resources and risk management. <b>Objective Phase 15:</b> Increased access of the population to sustainable drinking water and sanitation services for its proper use and application of good hygiene practices					
Agua y Saneamiento en Pequeñas Ciudades y Escuelas (PCE)	2010 – 2017 Phase Nicaragua: 12/10 – 12/2017 Phase Honduras: 10/11 – 12/17	Total: CHF 20.5m Nicaragua: CHF 5m Honduras: CHF 15.5m	Nicaragua: FISE Honduras: ERSAPS	<b>National:</b> Nicaragua: INAA, MINED Honduras: SE, SANAA <b>International:</b> Nicaragua: CAESB (Environmental Sanitation Company of Brasilia) Honduras: PAS/BM	<b>Nicaragua:</b> Departments: Matagalpa and Jinotega Municipalities: Río Blanco, Matiguas, San Ramón, La Dalia and El Cuá, <b>Honduras:</b> Departments: Alauca, Teupasentí, Jesús de Otoro, San Juan, Morocelí and Jacalaeapa, Municipalities: Intibucá and El Paraíso.
<b>Objective:</b> contribute to the reduction of poverty by reducing morbidity attributable to lack of water, sanitation and hygiene in small towns and schools, increasing school attendance and contributing to the massive scaling up of sustainable access to water and sanitation services.					
PGL APIM Nicaragua	2000 – 2020 Phase: 01/09 – 06/13 Phase: 01/13 – 06/18 Phase: 01/16 – 12/20	Total: CHF 34.6m Phase: CHF 7.65m Phase: CHF 9m Phase: CHF 9m	SDC	<u>Public sector:</u> MINREX, MHCP; INIFOM, General Direction General of Public Inversions, DGI, Contraloría General de la República	“Zona Norte”, North and South Caribbean Autonomous Regions of the country, “Corredor Seco”
<b>Objective:</b> Contribute to access to basic services and development opportunities by promoting inclusive local governance in order to improve the living conditions of poor people.					
Cosecha de Agua	2013 – 2024 Phase 1: 02/13 – 12/18 Phase 2: 11/18 – 12/22 Phase 3: 11/22 – 04/24	Total: CHF 19.75m Phase 1: CHF 9.8m Phase 2: CHF 7.95m Phase 3: CHF 2m	Phase 1: MEFFCA Phase 2 & 3: CATIE (Centro Agronómico Tropical de Investigación y Enseñanza)	Phase 1: <u>Public sector:</u> INTA, MAG, municipalities Phase 2 and 3: <u>Public sector:</u> INTA, MEFFCA, municipalities	Departments: Nueva Segovia, Madriz, Estelí Municipalities: Ciudad Antigua and Mozonte, Somoto, Totogalpa, Telpaneca, Palacagüina, Yalaguina and San Lucas, Pueblo Nuevo and Condega
<b>Overall objective:</b> Increase the resilience of poor families living from agriculture and livestock to the consequences of climate change and climate variability by introducing water harvesting technology					
Community based Watershed Management/ Cuenca Río Dipilto	2016 – 2023 Phase 1: 01/16 – 08/20 Phase 2: 06/20 – 06/23	Total: CHF 11.15m Phase 1: CHF 8m Phase 2: CHF 3.15m	Phase 1: MARENA Phase 2: GOPA	Phase 1: <u>Public sector:</u> FISE, ANA, INIFOM Phase 2: <u>Public sector:</u> MARENA; FISE, ANA, INETER, INIFOM, INATEC, INTA, ENACAL	Department: Nueva Segovia Municipalities: Dipilto and Ocotal



PROJECT TITLE	IMPLEMENTATION PERIOD	BUDGET (SDC)	IMPLEMENTING ORGANISATION	MAIN PARTNERS (SELECTION)	REGION
<b>Overall objective:</b> Contribute to increasing the resilience of the ecosystems, the individuals, the families and the urban and rural communities in the Dipilto River watershed, in the face of natural hazards and climate change effects					
AGUASAN Honduras	1998 – 2017 Phase 4: 01/08 – 02/03 Phase 5: 08/11 – 02/13 Phase 6: 03/13 – 06/17	Total: CHF 30m (approx.) Phase 4: CHF 6.2m Phase 5: CHF 1m Phase 6: CHF 8m	FHIS, ERSAPS, SANAA Municipalities	<u>Public sector:</u> CONASA, RAS-HON, AMHON COCEPRADDII, JAM el Paraíso	Departments: Intibucá, La Paz, Comayagua, El Paraíso, Sur de Francisco Morazán
<b>Overall objective:</b> Contributed to the improvement of the living conditions of the poor population of Honduras, within the framework of the principles of equity and sustainability					
Programa Gestión Comunitaria de Cuencas "Nuestra Cuenca Goascorán" (Honduras)	2015 – 2023 Phase 1: 12/13 – 12/18 Phase 2: 04/19 – 03/23	Total: CHF 16.2m Phase 1: CHF 7.9m Phase 2: CHF 8.3m	Phase 1: UICN, FUNDER, IDE, RAIN Phase 2: GFA Consulting Group Swiss Red Cross	<u>Public Sector:</u> MIAMBIENTE/SERNA, COPECO, SAG, ICF	Departments: La Paz, Valle, Comayagua y Francisco Morazán
<b>Objective:</b> Producer families in the Goascorán watershed promote, through their watershed organisations, the governance of natural resources and reduce vulnerability to climate change and natural disaster risks.					
Programa Gobernanza Hídrica Territorial en la Región del Golfo de Fonseca (Honduras)	2017 – 2024 Phase 1: 04/17 – 03/21 Phase 2: 04/21 – 06/24	Total: CHF 12.75m Phase 1: CHF 8.05m Phase 2: CHF 4.7m	GFA Consulting Group. IDE, Ecopsis	<u>Public Sector:</u> MIAMBIENTE, ICF	Departments: Valle, Choluteca, El Paraíso y Francisco Morazán.
<b>Objective:</b> Contribute to the gradual development of a territorial water governance system being assumed by three Watershed Councils (Consejo de Cuenca - CC) in the Gulf of Fonseca region, ensuring water management in an integral, sustainable and equitable manner.					
AGUASAN Regional	1992 – 2018 Phase 7: 01/08 – 02/13 Phase 8: 08/11 – 02/13 Phase 9: 03/13 – 06/16 Phase 10: 01/16 – 12/18	Total: CHF 8.1m Phase 7: CHF 1.3m Phase 8: CHF 400k Phase 9: CHF 2m Phase 10: CHF 1.22m	SDC	<u>Public sector:</u> FOCARD-APS, FOPREL, CSUCA <u>International Donors:</u> World Bank, IDB RRAS-CA, RASHON, RASNIC AGUASAN Nicaragua and AGUASAN Honduras	Central America
<b>Objective Phase 9:</b> Contribute to the improvement of living conditions of the poor population in Central America, respecting equity and sustainability principles.					
<b>Objective Phase 10:</b> Contribute to the universalisation of access to water and sanitation for the population in the region					
<b>Objective Phase 11:</b> Increased access to sustainable drinking water and sanitation services for the population and the application of good hygiene practices.					

### 3.2 STAKEHOLDER MAPPING

Over the past two decades, SDC projects have been engaging with a broad range of stakeholders in the water sector in Honduras and Nicaragua. The figure below provides a condensed snapshot of the currently relevant actors in the sector, accompanied by a short narrative description, highlighting the most important changes over the past 20 years.

Two points are worth mentioning; the portrayed actors operate on a national level in Nicaragua and Honduras, as well as on an international (regional) level. In the “public sector cone”, Honduran actors are presented on the left side and the Nicaraguan actors on the right side. Actors in the centre of the cone do not have a particular national specification (such as the municipalities). **Key actors** in this scheme are the direct beneficiaries (water and watershed committees/councils) of the projects as well as the municipalities. **Primary actors** are mostly the national institutions engaged in the relevant sector(s) as well as local NGOs in the sector and the World Bank, the Central American Bank for Economic Integration and the International Development Bank. **Secondary Actors** are mostly other donors engaged in the sector, as well as regional platforms in the water sector in Central America.

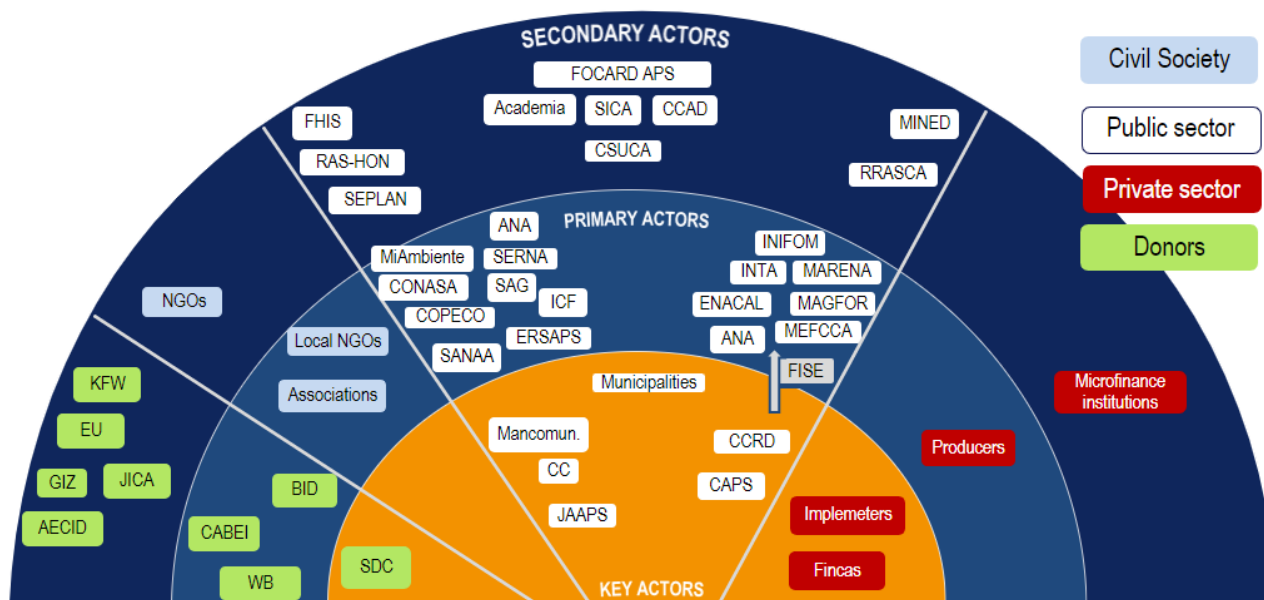


Figure 1: Actor's map

**Project partners** and their roles did undergo changes in the past 20 years. Whereas the situation in Honduras remained overall unchanged - meaning that national public sector institutions, local governments, communities, associations and private sector actors were involved in all projects from the start to a different degree, have not shifted significantly in their positions. In Nicaragua however, there were two noticeable shifts that are worth mentioning, as they significantly affected the roles of the national institutions in the project implementation. After Daniel Ortega assumed power in 2007, the political setting in Nicaragua changed as the Ortega government introduced a more centralistic approach to policy making. In **2013**, with the adoption of the national Water Sector Reform, FISE, the Nicaraguan national Emergency Social Inversion Fund, overtook the implementation of SDC's water projects. Due to this shift, FISE catapulted itself to the **most important national actor** in the Water Sector in Nicaragua. In **2018**, following the socio-political crisis in Nicaragua, SDC changed its modus operandi and shifted from direct cooperation with all national institutions (in the form of direct allocation of funds). Therefore, no Nicaraguan national institution is currently included in the area of current “key actors” in the figure, although FISE used to be seen as a primary actor.

Historically, FISE has played an important role in the implementation of AGUASAN and PCE as its direct implementation agency. In Honduras, AGUASAN was executed by ERSAPS, the Honduran Regulatory Agency for Water and Sanitation Services. PGL APIM was implemented directly by SDC. National counterparts in the PGL APIM Programme are not included in this map (except INIFOM), as the programme

did not have a strong focus on the water sector and hence they did not influence the sector in a significant way. In the currently running projects, implementing organisations are private sector actors and a research institution. These include GOPA Consultants, GFA Consulting Group and the Centro Agronómico Tropical de Investigación y Enseñanza (CATIE).

Over the past two decades, the project documents indicate that the target groups in this sector were mainly rural and urban populations (in previously selected areas and in watershed communities) and the corresponding municipalities, as well as small scale producers. The selection criteria always have had an explicit focus on vulnerable populations – with vulnerability closely tied to the incidence of poverty within the respective region. Poverty maps were used to define and select targeted populations. A particular focus was put on the poorest regions in the country, in particular the “*Corredor Seco*” and in Nicaragua the North Caribbean Coast Autonomous Region. Gender as such seems not to have represented an important criterion in the selection of target groups, as there is no indication to this in the reviewed documents.

### 3.3 THEMATIC THEORY OF CHANGE & HISTORIC POLITICAL TIMELINE

Despite the fact that Central America is well endowed with water resources and is home to one of the largest freshwater lakes in Latin America, the region has faced challenges with low water access and underdeveloped water infrastructure. Particularly the most vulnerable, rural, populations, who are concentrated in the “*Corredor Seco*”<sup>2</sup> area, which covers both Nicaragua and Honduras, lack basic services, such as access to (potable) water or sanitation. In 1982 for instance, only **17%**<sup>3</sup> of Nicaragua’s population had access to water.

Despite significant national efforts in the past decades<sup>4</sup>, the **lack of access to water** remains a serious problem. According to data collected by the Nicaraguan Demographic and Health Survey (ENDESA) in 2012, only 66% of the total population had access to drinking water. In rural areas, 69.5% of the inhabitants live without access to a reliable water supply, unlike those who live in urban areas, which have access to supply in 91.2%<sup>5</sup>.

The importance of the water sector in terms of national development is in both countries two folded. Firstly, poverty and access to water are interlinked: increased water access seems to be **closely related to poverty reduction**. Additionally, the **primary sector** has played traditionally an important role in the Central American region.

In terms of poverty and according to the Human Development Index (HDI), Nicaragua had a score of 0.667 in 2020 and stood at 128<sup>th</sup> place in the worldwide rank. This represents a slight yet somewhat insignificant improvement: in 2003 it stood at 0.578 (123<sup>th</sup> place in the worldwide rank)<sup>6</sup>. Furthermore, according to the latest numbers published by the World Bank, poverty decreased significantly from **48.3%** (2005) to **24.9%** (2016). Poverty is mostly concentrated in the Northern Region, in the *Corredor Seco* and the North Caribbean Coast Autonomous Region.

The situation in Honduras is similar: the country has a high rural population (more than 50%), out of which approximately 70% lived in poverty in 2004<sup>7</sup> and 76% in 2021<sup>8</sup>. It is probable that the poverty rate in rural areas increased even further due to Covid and the respective national containment measures. Honduras

<sup>2</sup> The geographical area crosses from the state of Chiapas in Mexico to the northwest of Costa Rica, passing through El Salvador, Honduras and Nicaragua.

<sup>3</sup> According to AGUASAN numbers, see: Incorporación de la Reducción del Riesgo de Desastres en AGUASAN: Sistematización de la experiencia Nicaragua (2015)

<sup>4</sup> Nicaragua as well as Honduras have introduced a water sector law to regulate the water sector, which has kicked off a process of further water regulation.

<sup>5</sup> ENDESA 2012

<sup>6</sup> UNDP (2023)

<sup>7</sup> WORLD BANK HONDURAS REPORTE DE POBREZA: Logrando la reducción de la pobreza

<sup>8</sup> LXXII Encuesta Permanente de Hogares de Propósitos Múltiples Julio 2021

HDI stood in 2020 at 0.621, representing an increase to 2003, when it stood at 0.573. The rural poor overwhelmingly depend on rain-fed agriculture as their principle livelihood and are concentrated in the southern and western regions of the country, the *Corredor Seco*. Although both countries have made progress in supporting human development over the past twenty years, this has not brought any substantial changes within the existing systems. Particularly the rural areas continue to struggle with high rates of poverty, low education rates and strong dependence on the agricultural sector. With regard to the water sector, sectoral law reforms were enacted both in Honduras (2003) and Nicaragua (2007). While this has deregulated water service in the countries and helped to create water sector governance, the provision of W&S continues to be insufficient – particularly in rural areas.

**Water resources** make a significant contribution to regional and national socio-economic development in both countries. Agriculture has been important in both countries, albeit decreasing. In Nicaragua, agriculture represented approximately 19% of the domestic GDP in 2011 and approximately 15% in 2021<sup>9</sup>. Approximately 30%<sup>10</sup> of the actively working population in the country were employed in the sector in the past 20 years. In Honduras, this number has fallen from 36% in 2003 to 25%<sup>11</sup> in 2021.

Moreover, Central America is highly impacted by changing climate conditions. According to UN's Economic Commission Latin America and the Caribbean (2016), Honduras and Nicaragua are countries most threatened by climate change worldwide. The climate risk index, published by the organisation German Watch, ranks both countries as highly affected by climate change in the period 1995-2014. Conflicts around the **use of water** have become a hardly to be ignored problem: Extreme weather driven by **climate change** has had a devastating impact on the livelihoods and food security of rural families that are dependent on agriculture, while disasters such as Hurricanes Eta and Iota left many people without basic necessities in 2021. During **drought periods** between July and August (the so-called *canícula*), the water deficit for crop production is high, causing significant economic losses in terms of agriculture production, as rural families rely heavily on domestic production of basic grains and seasonal coffee revenues. Anticipated changes in climate are projected to increase the importance of irrigation in the coming years.

It is expected that climate change will elevate the frequency and severity of water scarcity and climate-related hazards, and put additional strain on the Honduran and Nicaraguan governments' capacities to address ongoing development barriers, including extreme inequality, low levels of education, acute environmental degradation, and rampant violence as well as socio-political crisis.

The below presented **historical political timeline** (Figure 2) presents a selection of these briefly discussed factors, focusing on the events in the past 20 years and hence, putting them into context with SDC's engagement in the last two decades.

Politically, Nicaragua has been experiencing a stark centralisation of power since Daniel Ortega assumed power in 2007: whereas in the 1990s the country initiated under neoliberal political direction decentralisation and deregulation processes, the Ortega government sought to re-centralise power and took an increasingly hostile position against critical voices. These included national opposition but also foreign, critical donors in the country. As such, national spending is highly centralised and municipalities governed by opposition parties often receive less money than forecasted. Since the 2018 protests in the country, which constituted the biggest protests against the Ortega regimen in the past years, the polarisation in the country has drastically increased.

In Honduras, the situation has stabilised since the 2009 coup d'état against then president Manuel Zelaya. This event led to significant political unrest and international condemnation, as it was seen as a violation of democratic norms. In November 2013, Honduras held general elections and Juan Orlando Hernández, from the National Party, emerged as the winner and his presidency brought about changes to the country, albeit facing similar structural issues as his predecessors. Whereas Nicaragua is marked

<sup>9</sup> <https://www.statista.com/statistics/457857/share-of-economic-sectors-in-the-gdp-in-nicaragua/>

<sup>10</sup> World Bank (2023)

<sup>11</sup> World Bank (2023)

by high political centralisation, the Honduran administration has been battling weak local and national institutions.

Additionally, environmental challenges have been a crucial concern for both Honduras and Nicaragua. Deforestation, climate change, and water scarcity pose significant threats. Consequently, the preservation of natural resources and the development of sustainable policies, especially concerning water management and conservation, have become prominent political issues.

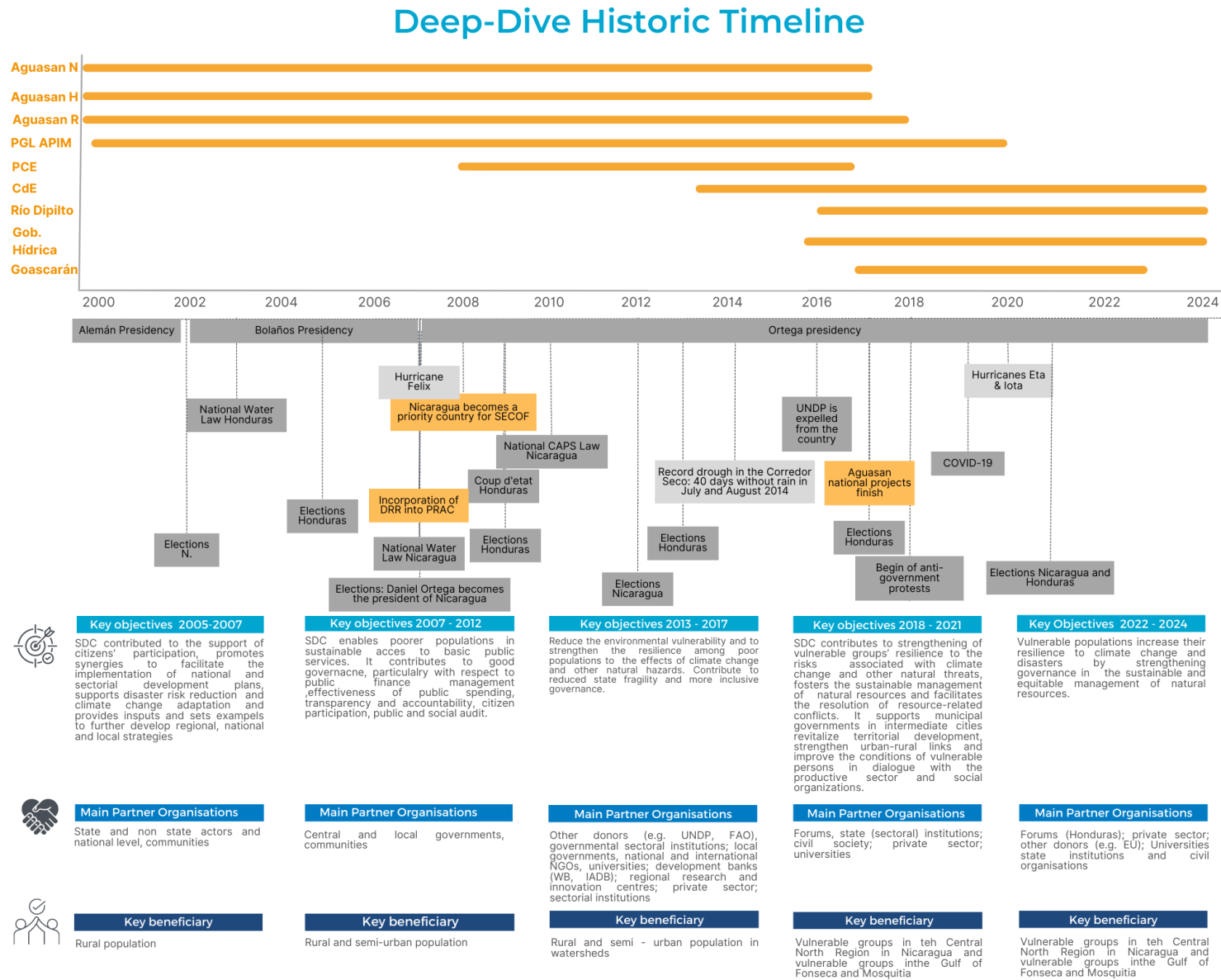


Figure 2: Historical Political Timeline Water Sector in Nicaragua



The **Thematic Theory of Change (ToC)** for SDC engagement in the sector “Water & Sanitation” in Nicaragua and Honduras is shown in Figure 3. It is based on the respective intervention logics of the selected projects. The logical frameworks were first extracted individually with the aim to then identify commonalities and build coherent clusters of outputs, outcomes and impacts.

In the earlier sectoral approach, SDC primarily focused on specific aspects of water and sanitation, such as infrastructure development, access to clean water, and sanitation facilities, as demonstrated in the implementation of both national AGUASAN projects as well as PCE. While these efforts were crucial for addressing immediate needs, it became evident that a more holistic and integrated approach was necessary to effectively tackle the complex challenges related to water governance. PGL APIM sought to connect these challenges by incorporating water into local governance structures. This shift emphasized the importance of decentralisation strategies and progressively contributed to a territorial strengthening of institutions in rural communities.

The W&S sector has “evolved” into a water governance system over the years: Whereas SDC interventions started with AGUASAN in the W&S sector, by applying increasingly a multi-sector approach (including health, education and governance) they have evolved to a territorial, basin based approach. This approach allowed to focus on water governance: It reflects a broader recognition of the interconnectedness between water management and the social, economic, and environmental dynamics within a given territory. From the selected projects, there are some differences between Nicaragua and Honduras: whereas in Nicaragua SDC supports one basin project, in Honduras it is currently supporting water basins as well as the institutionalisation of a national water authority. This particularity is also portrayed in the figure.

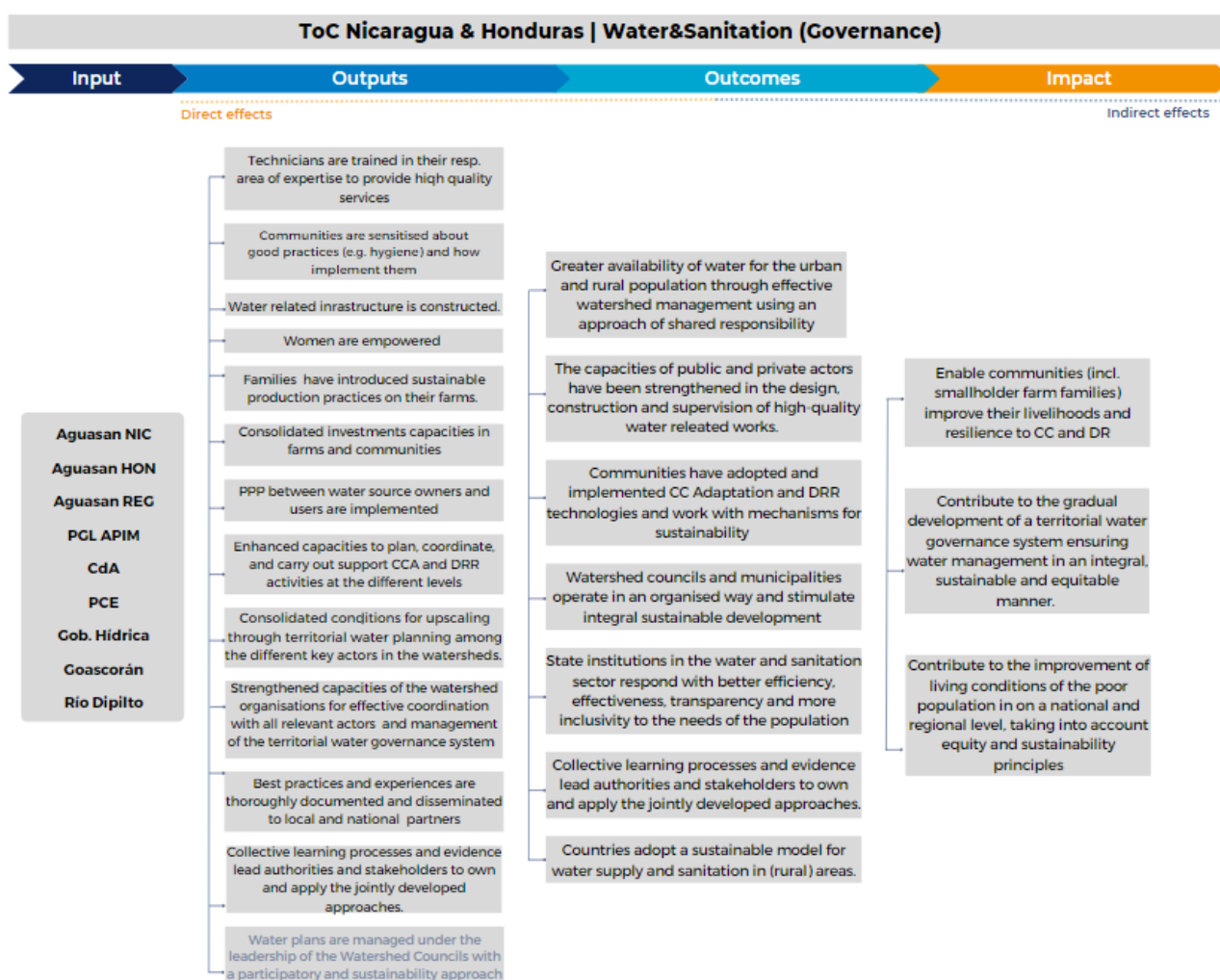


Figure 3: Thematic theory of change

## 4 PRESENTATION OF RESULTS

### 4.1 MAIN ACHIEVEMENTS OF SDC'S COOPERATION IN THE FIELD OF WATER (GOVERNANCE) & SANITATION

#### 4.1.1 RELEVANCE

The available documents and interview partners have confirmed an overall **high relevance** of the water sector thematic in the region, and to Swiss priorities in the international development in the past 20 years.

The scope of the W&S (and governance) must be approached in a comprehensive manner. Initially rooted in W&S infrastructure during the early 2000s, it has evolved into a water governance model, using a territorial approach in Nicaragua and in Honduras. For SDC, this shift is reflected in the necessity of adopting a more comprehensive, holistic approach in the water sector, aligned with the sector's evolution. As the 2018 – 2021 **Swiss Cooperation Strategy for Central America (PRAC)** - for its acronyms in Spanish) highlights: *“the pressure on water resources due to inefficient use, population growth and climate change demands more sustainable water usage. Rational water management helps to prevent conflict and to promote climate-friendly agriculture.”*

An examination of the early project designs in the water sector in Central America unveils a strong focus on technical aspects. In order to bolster **democratisation processes** in the region, SDC re-focused<sup>12</sup> with PRAC 2007-2012 and prioritised “good governance” components in water projects on the local level. This strategic shift emphasized the importance of decentralisation strategies and progressively contributed to strengthening of institutions in rural communities (as the most vulnerable groups) and at the national level. As a consequence, relevant actors adapted a more strategic approach: Municipalities included drinking water projects in their development plans and governments drafted sector programmes (Nicaragua), or quantified the investment requirements for achieving sector goals nationwide (Honduras).

Central America is highly vulnerable to **climate change and disasters**. In 1998, Hurricane Mitch had overall a catastrophic impact particularly on Honduras and Nicaragua and displayed the environmental vulnerability of the region. To cultivate a more resilient society, SDC's strategic orientation additionally focused on adaptation to climate change (**better management of water resources** and **disaster risk reduction – DRR**) and centred subsequently on the most vulnerable populations in rural territories. A territorial approach was seen as a mean to an improved thematic coherence by strengthening the articulation between interventions (water, agriculture, CC, DRR, governance) in territories and combining them at municipal level.

In Nicaragua, the past four **National Human Development Plans**, highlighted the importance of long-term water strategies to expand coverage, improve quality and contribute to the improvement of health. The current Plan (2022 – 2026) takes this into account, integrating a water basin approach.

In Honduras, the strategic frame for Water (and Governance) was set currently in the 2010 published **Country Vision** (2010 – 2038) and the **Plan of the Nation** (2010 – 2022).

The nine projects selected for this deep dive show a high coherence with Swiss interests. There is a clear link to the **Swiss Foreign Policy Strategies**, where environmental protection and sustainable use of natural resources are promoted.

#### 4.1.2 COHERENCE

In general, it was confirmed in interviews, project documents and evaluations that the compatibility of SDC's engagement in the W&S sector with other interventions showed a strong **external coherence** over the past two decades. The example from **AGUASAN Nicaragua** (ProDoc, Phase 2008-2011) exemplifies this alignment: *“Partnership building is very important for SDC, mainly for two reasons: i) The determinants of the Paris Agenda with the need to seek alignment and harmonisation; ii) The limited*

<sup>12</sup> SDC support to both, municipal development programs, including WATSAN programs and governance sector programs began in 1996, but took further momentum in the period 2007-2012.



*scope of SDC, both at the level of policy dialogue and at the level of local projects (...), makes it imperative to complement actions with other actors at macro, meso and micro levels. While partnership can have various meanings and take different forms, SDC considers it appropriate to establish, beyond a general exchange, more formalised forms of cooperation. AGUASAN will strengthen 24 alliances.*” Particularly robust synergies were observed with **World Bank’s** projects within the water sector in the region, resulting in close coordination between the two donors in both countries.

Moreover, the **AGUASAN** Regional Programme proactively supported the regional high-level forum in the W&S sector (FOCARD-APS), hereby playing a pivotal role in regional cooperation among all Central American countries and Dominican Republic. At the national level, both AGUASAN projects demonstrated a particularly close coordination and collaboration, facilitating mutual learning.

Similar patterns of strong collaboration were evident in Honduras. The **AGUASAN Honduras** ProDoc (Phase 2013-2015) emphasized that *“the Programme’s participation in spaces for dialogue and coordination has enabled it to form alliances with other donors and key actors in the W&S sector in order to emphasise issues for discussion, influence national policies and reach agreements on the implementation of actions. It is perceived that among cooperation agencies, SDC is more willing to align and harmonise in the sector.*

The 2020 evaluation report on **SDC’s global engagement in the Water Sector** confirms its leading role within international cooperation in the water sector in Central America, *“promoting a mapping of interventions that contributed to complementarity and coordination. Other donors confirmed that AGUASAN methodologies were a reference for the design & implementation of other cooperation actions within the sector.”*

Considering the retrospective span of two decades, it's imperative to underscore SDC's distinct role in the water sector. Its long-term and sustained engagement led to a form of coordination among donors that is more integrated and comprehensive. This longevity enabled SDC to establish a robust position in the sector and collaboratively formulate enduring strategies with fellow donors in the countries.

With regard to **internal coherence**, there are apparent strong synergies and interlinkages among the selected projects, reflecting a consistent progression: A “common thread” has woven through the interventions across the past two decades. This methodological approach is evident across various examples: while AGUASAN specialised in rural water infrastructure support, subsequent PCE programme(s) focused on urban water provision, benefitting from AGUASAN's long-standing experiences in the sector and complementing its work. The formation of the **Humanitarian-Development Nexus** helped programmes in the water sector to capitalise on existing experiences in CC and DRR that AGUASAN incorporated into its design in 2011. Subsequently, DRR Guidance was incorporated into all developed projects. This guidance was universally applied to all formulated projects, entailing comprehensive site assessments at every location where primary project infrastructure was erected. As a result, the projected DRR measures were actively implemented during the execution of these sub-projects. The objective of the Río Dipilto Watershed project, for example, is to aid the inhabitants of the Dipilto Basin to strengthen their resilience in the face of climate change.

In summary, the HIC Team observes that SDC projects in the area of water in the last 20 years exhibit important internal coherence (synergies and interlinkages with other SDC projects) and external coherence (complementarity and coordination with others). By taking a leading position in the sector, SDC was able to effectively regulate and lead cooperation between the donors and national institutions.

#### 4.1.3 EFFECTIVENESS

The accomplishments within the programmes have varied across different timeframes and projects. Some highlights achieved in the WASH sector, categorised according to micro, meso and macro level, as well as thematic considerations, are presented here.

Overall, and according to the available documents and interviews, on the technical level, programmes in the water sector have contributed to a higher number of water dwells, latrines, washing facilities and

water infrastructure. They have furthermore contributed to the construction of water harvesting and irrigation works in the targeted communities. On the societal level, they have improved availability, access, coverage and quality of water. Communities, municipalities as well as national institutions were supported in their capacity building processes in a broad variety of topics. Moreover, SDC's interventions are very likely to have contributed to behavioural change in disaster reduction within the communities, such as changes in environmental awareness. This was confirmed during interviews with target group members in the Dipilto Watershed and was also mentioned in the screened evaluations<sup>13</sup>.

## WASH

According to the reviewed documents, both national AGUASAN programmes led to an overall higher and improved availability, access, coverage and quality of water in the targeted communities in both countries. Moreover, interventions improved hygiene and sanitation practices in urban and rural communities. On average, in each programme phase, approximately 20.000 – 50.000 people received access to water systems along with access to sanitation solutions, including hydraulic latrines, drains and family sanitary landfills, improved floors and cookers. In total, AGUASAN Nicaragua provided drinking water and sanitation services to approx. 369,000 individuals in rural Nicaragua, encompassing 6% of the national population and 21% of the intervention area. AGUASAN Honduras (phases IV-VI) played a pivotal role in enhancing access to sustainable services for the disadvantaged population, benefiting 61,422 people with improved access to drinking water and 59,066 people with enhanced sanitation facilities<sup>14</sup>. In Honduras, the application of good hygiene practices was achieved in 84% of the trained families<sup>15</sup>. In schools, students and teachers were capacitated in topics connected to water and sanitation infrastructure, hygiene knowledge, health, school gardens and environment. For instance, the 2013 - 2015 AGUASAN credit note for Nicaragua states that 50 schools in the country were capacitated on issues related to WASH and 9000 households received information on hygiene topics. Furthermore, access to WASH services influenced positively school attendance of particularly girls during their menstrual period<sup>16</sup>.

## Increased support to communities

At community level, support in empowerment of the communities has been standing for many years at centre of SDC interventions and as support from the state has been seen as limited. SDC supported with WATSAN community managed W&S projects, however reoriented towards a more strategic focus in 2007. In line with its decentralisation strategy, SDC increasingly shifted its focus on strategic support to communities and started implementing community-led projects (PGC) in 2007. This supported rural communities in their organisation systems as they managed the funds to contract W&S works and purchased services and goods for their water projects. In 2012, 27 municipalities and communities executed their own planned projects. In the last AGUASAN phase in Nicaragua, it increased to additional 32 communities. This programme model has been further supported by elaborating its own methodology and was later up-scaled to the level of a watershed.

Throughout the past years, communities and selected community members (e.g. volunteers) were also capacitated in a broad range of topics that traditionally included technical subjects around W&S, but it subsequently broadened to issues connected to gender, environment, water harvesting, crop production and production diversification, adaptation to climate change and disaster risk reduction, hence contributing to a high level of ownership of the different topics not connected only to W&S.

Likewise, a system of attention within the communities is actively supported already during the implementation of AGUASAN. As such, the Potable Water and Sanitation Committees (Comités de Agua Potable y Saneamiento - CAPS) in Nicaragua, and the Juntas Administradoras de Agua (JAAPS) in Honduras – who both act as service providers in the rural areas (and watersheds) were further strengthened

<sup>13</sup> See: Evaluación Intermedia Externa: "Programa Gestión Comunitaria de la Cuenca del Río Dipilto en Nicaragua" (2019): p.95, Evaluación Final Externa de la segunda fase del "Programa Gestión comunitaria de la cuenca del Río Dipilto" (2023): p.29

<sup>14</sup> Independent Evaluation of SDC's Engagement in the Water Sector (2020): p. 99

<sup>15</sup> ibid

<sup>16</sup> ibid

in their role as rural water managers and are actively integrated in the projects. Today, they stand at the centre of the work in the communities and are also in charge of the collection of tariffs. Furthermore, and in order to deal with growing communities, a system of community auto-support was endorsed. A so-called system of “*brigadas*”, communal volunteer units, who support and educate the communities on a different range of topics (health, environment etc.) was supported. Interestingly, it was noted in one of the interviews with SDC officers that COVID-19 has also probably contributed to a better hygiene behaviour in the communities. The so-called *Fincas*, small scale producers/families, are supported in terms of production and diversification, resulting in a higher resilience against climate change and in higher income. In Honduras, more than 9,000 families were supported through the construction of 80 works aimed at CC and DRR within the framework of the Nuestra Goascorán Project.

Whereas it is usually difficult to measure the level of awareness within a population, both Evaluations of the first and second phase of the Dipilto Watershed Programme registered a high ownership in the volunteer working groups. Key accomplishments in the Cosecha de Agua Project include the establishment of water harvesting and irrigation infrastructure for 1,171 families, the training of 25 local extension workers supporting 2,560 families, capacity-building for service providers, notable research outputs, technical publications, and effective communication of achieved outcomes. In Honduras, over 20,000 rural families within the Goascorán River Basin, in collaboration with 23 basin organisations, are actively advancing integrated water resources management and comprehensive basin management via the implementation of Water Action Plans.

### Municipal/watershed actors as managers

The achievements at the municipal level in both countries are diverse. Initially, a capacity building process tailored for the local level was pursued in the AGUASAN programmes. Municipalities and the respective technical units for W&S were trained in different aspects that would help them to formulate and manage W&S projects at the local level. SDC foresaw an active role for the municipalities in the sector: “*The municipalities are the **main actors** for the implementation of the decentralised model promoted by the government and also adopted by SDC*” (Programme Document AGUASAN Nicaragua 2008 – 2011).

In 2013, the Nicaraguan Government developed the **Integral Water and Sanitation Sector Programme**, to be implemented by FISE. This caused in Nicaragua a **shift in the intervention model** in 2013, as FISE assumed the role of formulation and overall supervision of SDC’s then running water programmes: AGUASAN and PCE. Municipalities were not able to further appropriate of the municipality based model, and acted “only” as executors of the W&S projects. Therefore, a planned integration between the AGUASAN and PGL APIM Governance programmes – trying to offer a more systematic approach – could also not be achieved. According to the HIC Team, this shift constituted a break in the implementation model and hindered further opportunities in the local governance sector. Nevertheless, municipalities constitute an important actor, particularly due to their role as the provider to the population.

In the currently running project **Río Dipilto Watershed Programme**, the Dipilto Watershed Committee (CCRD) is officially incorporated in the management of the River Dipilto watershed. It consists of 6 members from the municipalities and the communities in the basin. Being regarded as a weak actor in the first phase of the Dipilto Watershed Project, due to its “*incipient and fragile*”<sup>17</sup> position, there is an aim to strengthen the Committee to make it to one of the key actors in the watershed. In the second phase of the project (2020 – 2023), the role of the committees was further strengthened within the legislative framework of the reform of the General Law on National Waters. It solidified the communal aspect of the Committees, which stand as the primary authority for water governance, functioning as a designated “forum for consultation and coordination”<sup>18</sup>. In **Honduras** municipalities have occupied a somehow more active role in the programmes – this is also due to a different political setting in the country, which gives local actors more elaborated institutional power than in the case of Nicaragua. **Watershed Councils** in Honduras seem to have established a more entrenched position within the management of watershed

<sup>17</sup> Evaluación Intermedia Externa: “Programa Gestión Comunitaria de la Cuenca del Río Dipilto en Nicaragua” (2019): p.27

<sup>18</sup> This is further specified in the Article 35 of the Law.

programmes, as they have gained high credibility with technical and organisational support to the communities.

### Institutionalisation of the water sector

In **Honduras**, the programme supported the country's Sector Reform, strengthening the institutional framework created with the enactment of the **Water and Sanitation Sector Framework Law**. It played a pivotal role in supporting the Regulatory Entity (ERSAPS) for water and sanitation and aided in developing and implementing the Regulation and Local Control Methodology, expanding from 10 to 150 municipalities, covering 50% of the country—an upscaling of 1.400%. AGUASAN's contribution extended to the Water and Sanitation Network of Honduras: It strengthened dialogue platforms, developed standards for system design, and played a pivotal role in the National Sanitation Plan. In Nicaragua, AGUASAN contributed significantly to the legal framework in the water sector with the support of enacting the **National Water Law** (Law 620) in 2007. This set for the first time a comprehensive legal framework for management of the country's freshwater resources. Furthermore, in 2010, SDC supported its national counterparts in the drafting of the **Special Law of Potable Water and Sanitation Committees** (Law 722). The CAPS Law afforded water committees in Nicaragua a pathway to official legal status as community-based organisations in addition to a formal political recognition of their work as water managers and service providers within the broader framework of freshwater management. It also supported FISE with capacity building measures, aiming at strengthening their role as project implementation institution of AGUASAN. In recent years, due to the shift to a territorial approach, focus has been lying primarily on cooperation at the community and municipal level. Furthermore, in Nicaragua, after the 2018 political crisis, SDC has shifted from direct cooperation with state institutions. However, the Dipilto Watershed project has the potential to serve as an example for similar watersheds, opening the doors for others to receive recognition from ANA under the Law 722 and possibly from MIGOB.

### Regional exchange – AGUASAN Regional

At the **regional level**, several achievements were reached in the water sector, connected mainly to the establishment of a regional knowledge exchange mechanism between the member countries. This included exchange on the innovations within the projects, but also supported an exchange in transversal topics, such as gender, DRR or Adaptation to CC on the regional level. Particularly strong was the exchange between Honduras and Nicaragua during the implementation of the AGUASAN programme. Moreover, the exchange with other Central American countries was supported via the FOCARD-APS forum, which implemented studies on progress on the abovementioned topics in the member countries. As such, the AGUASAN Regional Programme also sought to facilitate the integration of AGUASAN with the Local Governance Program (a predecessor of PGL APIM), taking a regional approach to the matter. As mentioned in the 2014 Evaluation of the Programme, this was not possible to achieve, due to conflicting political architecture of the programmes.

### Gender

Gender, as a transversal topic, was tackled in all programmes and has shown different results in the programmes under review according to the reviewed evaluation documents for AGUASAN, PCE, CdA and the Watershed projects. The concept of Gender as a transversal topic has undergone changes over time: For example, in the AGUASAN projects, Gender was assessed by gauging women's participation in the CAPS. According to the Law 722, 50% of the CAPS members were to be female. This result was not reached in all communities, as such, in only 2 of 4 interviewed CAPS where AGUASAN was active, approx. 50% were female members.

However, this approach of gender was criticised in interviews with SDC representatives and was also highlighted in evaluation documents for its perceived oversimplification. It was noted that this approach did not adequately consider the intricate social context encompassing women in both countries. This context involves complex issues tied to underlying structures, such as the deeply ingrained culture of machismo, which is frequently linked to violence against women.

The currently running projects have adopted a more elaborated approach to the empowerment of women, particularly the Dipilto Watershed Programme, which seeks to implement a broad sectorial empowerment of women and to support behavioural changes within the communities. This is visible in Dipilto: as the Final Evaluation of the second phase (2023) project highlights, training processes within the programme have offered women a space to strengthen their leadership, acquire knowledge and recognise their capacities and abilities to develop technical, organisational and planning activities. They contributed to women playing a leading role within the communities, becoming hence visible in the initiatives undertaken by the programme.

From a gender perspective, the National Institute of Technology (INATEC) has contributed to the socio-cultural development of women, which is very important for the country. In the context of the programme, INATEC has trained 362 people, 234 of whom were women. Within the framework of the Technological School, 348 producers were trained.

At the national level, the incorporation of gender practices in all actions is fundamental, and finds legal basis in Law 648 (Equal Rights and Opportunities Act). Likewise, in Nicaraguan Government's Gender Policy all national institutions are mandated to incorporate gender equity in all their actions.

### DRR and CCA

Overall, the programmes have put an emphasis on capacity building on the community level in the past few years. As such, in both watershed projects in Honduras and in Nicaragua, community members, including community leaders, *brigadistas*, and technicians attended workshops and events related to DRR and CC. In both countries facilities with a focus on DRR and CC were built, one of them was visited during the project visit in Dipilto. In the Goasocrán Watershed Project, 9,291 vulnerable families were supported through the construction of 80 works aimed at CCA and DRR. These efforts included the construction of works beneficial to the community. Notably, a municipal investment fund was established for such projects, featuring contributions from local governments and communities as counterparts. In the Cosecha de Agua project, *planes de finca*, the finca plans, have integrated a DRR/ACC component. In Honduras, the so-called *cajas rurales* support the financing of construction of community facilities for DRR/CCA.

### Successful Approaches

A high results effectiveness was achieved given SDC's particular (participatory) **bottom-up approach**, as well as its **high flexibility** and **good dialogue** with national institutions.

According to the HIC Team, **the integral, multi-level and multi-actor** approach that SDC has elaborated throughout the years in the design in the selected projects has been seen as a key contribution towards project effectiveness. By enhancing community participation in the design, implementation and operation of the water infrastructure the interventions contributed to the sustainability of service delivery. The implementation of community led projects, is seen as a success, as it strengthens the sense of organisation and resilience.

**Capacity building measures** in form of the training/coaching on different methodologies were provided to a broad range of actors: families, schools, volunteers, CAPS/JAAPS, municipalities/UMAS and national institutions. It was confirmed in several interviews that this approach was successful as it offered tailored knowledge across the society involved in the water sector.

The Human Rights to Water and Sanitation (**HRWS**) framework, introduced in 2008, has also proved to be extremely successful and was praised in several interviews as transformative in the approach of the interventions: it set a framework of human rights based standards (safe, acceptable, affordable, accessible and sufficient) in W&S project formulation and acted as an empowering tool for the communities in W&S projects.

It also seems that the **mix of interventions** in the projects (such as investments, targeted capacity building and participation, co-financing schemes) achieved cost-effective interventions and served as a catalyst for development processes and contribute to programme effectiveness.



## Stakeholders

Overall, water programmes have managed to involve a broad variety of stakeholders: particularly the territorial approach has involved previously “excluded” stakeholders, such as private business – at least in Honduras. One can clearly observe a different situation in Nicaragua. Due to an increasingly authoritarian political context, the Nicaraguan government has centralised its position in the sector of international development and acted as the primary contact in many of the projects. The participation of civil society actors (e.g. NGOs) in the projects within the national development sphere was reduced after Daniel Ortega assumed power in 2007. In Nicaragua, large landowners in the upper Dipilto basin played a role in water conservation efforts, particularly within the micro-basins, which are vital for water preservation. However, there was a lack of significant engagement from forest owners and cattle ranchers in the lower basin. Additionally, there is no concrete evidence to suggest that all major coffee farmers have fully embraced essential water management practices. Nonetheless, the active participation of certain coffee farmers is setting an example for others, provided they are approached with mutually beneficial proposals.

### 4.1.4 IMPACT

As previously mentioned in the meta-analysis, the question whether or not the selected projects have reached the desired impact criterion cannot be ascertained in a straightforward way. None of the reviewed evaluations included impact evaluations. There are, however, aspects that bear weight when assessing the impact of the interventions. In general and according to the revised documents, as well as to the executed interviews with SDC officials, stakeholders and target groups, it is likely that the selected projects have (had) a significant impact on the target groups' lives in terms of poverty reduction and reduction of inequalities.

The dimensions of poverty are **manifold**: individuals (or communities) in poverty not only lack economic benefits, but also grapple with the absence of fundamental and basic services, such as education, employment, security, health or infrastructure, among others. Those in poverty are more exposed to natural hazards, with rural populations particularly susceptible due to limited access to the infrastructure accessible to urban dwellers. Furthermore, they suffer from the consequences of climate change as it affects their income in form of agricultural products.

Both in Nicaragua and Honduras, the incidence of diseases like cholera and diarrheal illnesses experienced a significant decline during the 2000s within the targeted communities. In the visited communities in Nicaragua, it was also confirmed that illnesses connected to contaminated water have been “drastically reduced” as a result of the better water quality and education on the topic.

### Community level

One of the key contributions of SDC's interventions is the direct focus on and support to the communities. This ignited a process of self-appropriation within the group of beneficiaries, allowing them to increase the sense of ownership of the different processes and decrease their dependence on external assistance.

The implementation of the PGC<sup>19</sup> model facilitated greater community involvement in construction endeavours. It generated ownership of the social and organisational processes, encouraged accountability and social control as well as saving resources, destined for physical works: it established a **micro-system** that can act up to a certain level in a self-sustained way. The communities visited had a basic maintenance system worked out: financial processes were regulated, tariff collection (if present) was controlled – one community even had even a special arrangement with a local hardware store for replacements.

The water committees constitute the community leadership as groups, who follow through with implementing local rules. These rules include provisions for elected leadership turnover on the water committee; financial management of community funds, local environmental stewardship and participation of system beneficiaries in water management responsibilities, including maintenance and payment for water

<sup>19</sup> Proyecto guiado por la comunidad – community led projects implementation model

services. In the (rural) Nicaraguan communities visited, some of the communal water infrastructures have outlived their initial life span of 20 years – a feat largely facilitated by CAPS/JAAPS maintenance. In the communities visited, the CAPS members knew their role, the issues in the communities and their problems as and were able to provide – to certain grade – (technical) solutions if needed. Their legal status strengthens their organisational level: for instance they are able to open a bank account, and can buy spare parts or replacements for the water wells. As one of the CAPS member remarked: *it's so much easier now, before we had received cheques that we used but it was a different process, but now we can simply open up a bank account and manage our spending.*

Vice-versa, their role in the communities is acknowledged and respected. Tariff collection and the use of micro-meters as a source of income remain however a key challenge. Although guidelines on the calculation of tariffs and usage of micro-meters were established in the AGUASAN projects, these were never formalised in form of a national law. Therefore, there is no national (or even municipal) agreement on the topic. Some communities have only very basic tariff agreements, whereas other communities have established a more sophisticated system of tariff collection depending on the use of water and according to micro-meters. In the visited communities with a use based tariff system, eventually yielding better revenue collection.

The efforts inserted in the capacity building and awareness raising have tangible impact on the targeted populations. The **Dipilto Watershed** evaluation of the first phase (2019) states that in terms of an *increasing diversification* of the fincas in the Rio Dipilto watershed zone, this contributes to greater resilience to climate change. It observes also a *high level of environmental awareness among protagonists and young people*. In the Dipilto watershed, rain constitutes a serious problem, as it can have impact on the water sources that ran across the mountains. In the visited Dipilto watershed the community had implemented safeguards to preserve its waters sources and understood what the challenges were and how they can be counteracted upon.

On the farm (finca) level, an (economic) the interventions' economic impact is evident: *"overall profitability was observed during the field visit of the evaluation mission: The farms and families consulted and the focus group participants who had water harvesting systems installed confirmed higher production volumes and in some cases the production of new products for local sale; irrigation contributed to an increase in harvests, an increase in the planting area of perennial and annual crops, diversification of production and in some cases in the reduction of time spent giving water to animals, the use of the water harvesting system to wash and pulp coffee and an increase in overall farm value."* (Cosecha de Agua, 2022)

The impact that the interventions in projects can have on people's lives is well described in the following paragraph: *"Being the master of your life as you don't replicate inherited production systems" was a comment from a young woman farmer during a focus group discussion. The option of intelligent and diverse water management and use opens the way to a self-determined future.*" (Cosecha de Agua, 2022). During the field mission to Nicaragua, the HIC Team encountered other stories that confirm a sense of empowerment within the beneficiaries. In one of visits to the fincas benefiting from CdA, the team met a 17-year-old girl managing the family-owned finca alongside her grandfather and who exhibited a profound understanding of processes and aspirations for an agricultural career.

### **Municipal / Watershed Level**

Whereas in Honduras SDC already supports several watersheds and the establishment of a Water Authority, in Nicaragua it is strengthening the institutional framework of the Dipilto watershed. Looking at the **municipal/watershed level**, different impacts of the interventions are observed. In general, municipalities in both countries are a weak political stakeholder, nevertheless a key actor in the projects. In Nicaragua, they depend highly upon the decisions in the central institutions, resulting in diminished local authority. The available documents suggest that this constellation bears a risk that certain actions or decision from the central government may affect negatively actions on the local level, without the possibility of reversing the action.

Support for municipal actors has been a continuous effort in both countries. Yet, as already briefly highlighted in 4.1.1., their role in Nicaragua was weakened after FISE took over project implementation of AGUASAN in 2013. Furthermore, the Technical Units in W&S (UMAS) – responsible for assisting the CAPS – often lack clarity in their roles and guidance, leading to inconsistency in their involvement across different communities. A similar situation is evident in **Honduras**, despite a different political setting. In 2003, a new framework law for water supply and sanitation was passed. It included service decentralisation from the national utility, SANAA, to the municipalities and created a policy council and a regulatory agency. Nevertheless, the new institutions remain weak and the process of decentralisation has been slow. The absence of a clear sector financing policy exacerbates the situation.

The role of *Comités de Cuenca (CdCs)* in the watershed can be seen as the carer of the basin. Being a rather young form of organisation, they show a much lower degree of organisational level than the CAPS/JAAPS. Although CdCs in Nicaragua lack the legal status of the CAPS, which significantly weakens them as they are not formally recognised as a formal body of the watershed – they are recognised as "forum for consultation and coordination". This deficiency complicates their financial management, similar to the challenges faced by CAPS: as the Dipilto Watershed Committee CCRD is not recognised as a legal body, it is not allowed to have a bank account and must undergo a protracting cheque system to pay services connected to its role as managers of the watershed. CCRD members, motivated by community duty rather than financial gain, often find their role burdensome due to the absence of reimbursement for their efforts.

The *Consejos de Cuenca* in Honduras pose a contrasting picture. Integration of big producers into the CdCs allows for additional funding avenues and serves as a mechanism to resolve conflicts directly, thus potentially ensuring sustainability. Furthermore, NGOs in the Goascorán zone provide the CdCs with support on topics related to the leadership of the basin.

Despite a visible progress in recent years, it is not clear whether the CdC in Dipilto will be able to assume the role of an active actor in the management of watershed after SDC's exit from the project.

### National Level

Considering the potential impact at the national level, an assertive statement made by one interviewed expert bears relevance: *"All the experiences developed by SDC are implemented in public institutions"*. This assertion finds substantial support in multiple interviews, underscoring SDC's influence in the legal and institutional framework of the water sector in the past two decades in both countries. Notably, SDC played a pivotal role in shaping guidelines, legal norms, and laws that significantly shaped sector regulation and benefitted targeted communities. Due to a shift in the SDC implementation model towards a territorial approach in both countries, coupled with political decisions<sup>20</sup> in Nicaragua, it has somewhat reduced its direct engagement with state actors. Consequently, SDC's capacity to impact national policies has been diminished.

### Regional level

The regional programme of AGUASAN seems to have served particularly to both national AGUASAN projects as a good tool of exchange. Furthermore, the programme supported good regional exchange processes between the different donors (particularly with the WB). This has however changed. What was striking is the fact that despite having two watershed programmes in territorial proximity to each other, no exchange pattern between them exists. It was mentioned that there were efforts from the Nicaragua side, however formal exchange processes were rare. Due to SDC's upcoming exit from the countries, an already established exchange scheme could facilitate further cooperation in the future.

## 4.1.5 SUSTAINABILITY

Assessing sustainability entails determining the enduring viability of intervention benefits across financial, economic, social, and environmental dimensions. When considering the interventions within the W&S

<sup>20</sup> In Nicaragua, on not to pursue a direct cooperation system between SDC and state actors (e.g. direct resource allocation).



domain (along with water governance) gauging the sustained impact of the chosen projects' outcomes presents a formidable challenge. However, it is possible to identify illustrative instances that either facilitate or impede the continued effect of interventions results. Moreover, exploring the potential for replication or expansion is pertinent. Notably, delving into the processes undertaken since the completion of some projects five years ago offers valuable insights.

Drawing from the observations against the preceding criteria, it becomes evident that AGUASAN national projects were seen as highly relevant and pertinent project designs with efficient interventions that caused impact in the targeted communities. This affirmation resonated during visits to these communities, where AGUASAN water infrastructure remains operational, even over two decades after its construction – a noteworthy extension beyond its initial projected lifespan. In the following, some of the pivotal aspects in contributing to the sustainability of water governance will be discussed.

### Close involvement of national institutions during project implementation

In the context of AGUASAN Nicaragua, FISE assumed an active role as it acted as the implementing body of the programme. This enabled the institution to capitalise on existing experiences as well as benefit from capacity building opportunities. In a sense, it experienced growth in tandem with the project's evolution. Once AGUASAN model based projects concluded it was able to incorporate them into the national framework.

Ongoing projects in Nicaragua also see national institutions engaged in the project's execution. However, projecting whether these institutions will be able to internalise the ongoing processes remains intricate. As one CATIE official said: *we have done our work, now it's the state's turn to implement this into the national arena*. Conversations with the mayor of Pueblo Nuevo, a municipality where the CdA initiative is being implemented, as well as with the accountable representative from the national counterpart, INTA did not yield concrete insights into how the state intends to assimilate the measures into its broader structures. Instead they referred to the fact that the interventions in CdA are part of their own development strategy. Whereas the HIC team recognises the importance of a national government strategy, the question on how the findings from the programme will be integrated remains.

Retaining knowledge, once it reaches the beneficiaries, is pivotal. The evaluation mission of the second phase of Cosecha de Agua (2022) concluded *“that an important factor contributing to the sustainability of family production systems is the knowledge generated and the continuous improvement of their livelihoods: soils, water, water recharge zones, increased livestock capital, etc. Therefore, they have better conditions and/or options to face risks such as drought.”*

In order to ensure the sustainability interventions benefits, the HIC Team assumes that communities and municipalities need stronger backing from national institutions in form of technical and financial support. In the absence of a sound technical support system, relevant knowledge could potentially disappear from the communities or stagnate without necessary updates, hence limiting the scope of continued efforts of the work.

A positive example can be observed in the municipality of La Dalia, which has benefitted from the AGUASAN intervention model through the PCE project. In 2002, the community established the Municipal Water Company (Emagua), whose mandate lies in 1.) Constructing, maintaining and managing municipal aqueducts and household supply networks in La Dalia and 2.) Ensuring that the water service is provided in the quantity and quality necessary for human consumption. In the past 20 years – and supported by ENACAL – the company has implemented a sophisticated water infrastructure system, substantially broadening access to a W&S system for a vast majority of the population. The company caters today 3.275 water users (from initially 640) and extends sanitation services 1.583 users. The company is financially self-sustained (and generates income by tariff recollection in the municipality) and employs 27 people, among them technicians and administrative support. In discussions with the representatives, there were references to plans for extending this model to neighbouring parts of the La Dalia village.

### Multi-sector and multi-actor alliances

While drawing a conclusion on the sustainability of currently active projects might seem premature, there are benefitting factors in place worth mentioning. The establishment of strategic alliances with territorial stakeholders from the public and private sector, particularly at the local level, offer an opportunity. To ensure future scalability and replicability of the interventions, it is vital to implement a **multi-sector** and **multi-actor approach** in the interventions. Consequently, forging and strengthening alliances with strategic partners, both public and private, regional, national and/or international cooperation, emerges as a requisite in line with the objectives and results of the respective project. The difference of the currently implemented projects to AGUASAN is that, whereas W&S claimed centrality in AGUASAN, the ongoing programmes are viewed more as governance sub-sets. This helps to create a culture of cooperation between the sector and the actors and strengthens the foundations of the intervention framework. This integral approach helps to create a link between W&S, health, agriculture and CC to name some.

Within the **Goascorán Watershed Project**, the *Consejo de Cuenca* leads alliances of NGOs, private business, state actors and community leaders. This diverse consortium of actors offers the watershed communities the possibility to capitalise on specific technical knowledge, while reducing reliance on external support, therefore increasing the likelihood of its continuation after the end of the project. In this case, the territorial approach offers the communities and actors from the different sectors a more concentrated approach and allows them to forge partnerships more easily and directly. For instance, the local *Consejo* receives support from a local NGO based in the watershed in matters connected to leadership. Notably, the inclusion of private businesses in the Goascorán watershed, has facilitated financial influx into one of the *Consejos* through their Competitive Funds, the *Fondos Concursables*. Producer families have access to microcredits (that are managed through the *Consejo*).

In Nicaragua, there is also a pronounced interest among various institutions at different levels and sectors to learn about the different project results. As such, in the **Cosecha de Agua** project, municipalities, private business, service providers as well as the academia is interested in the project results. The generation of knowledge has been an important part of this project. A stronger cooperation with these institutions could resume in the up-scaling and possible replicability of the achievements on a departmental, national or even regional level. Meanwhile, in the **Dipilto Watershed Project**, the 20 CAPS in the watershed are tasked with the creation of investment budgets, proposal of solutions and updates to water demand according to population growth. Without the support of SDC, these tasks may seem as very ambitious without technical support. Therefore the inclusion of the large producers and Civils Society Organisations could provide specialised educations and support an external financing option of the watershed, as in Honduras.

### Financial sustainability

Transitioning from a period of free water to one where the economically disadvantaged also bear the costs marks a major shift. The debate around refinancing on a community level has been an issue on the international stage as well. The reality is that full cost recovery, which encompasses resources for running and maintenance and capital cost is hardly ever feasibly in low endowed, income-poor communities – especially across the Global South. As a result, having a cash flow that enables running costs and maintenance over a lifespan of 25 years and beyond is a major sustainability achievement.

A conspicuous challenge across all selected projects is, however, the absence of financial sustainability. Municipalities in Nicaragua are supposed to allocate 7.5% of their budget they receive from the government towards W&S services. However it became apparent in all visited communities that this allocation does not meet the actual needs.

Despite the fact that much of the W&S structure has over-lived its foreseen lifespan – yet, even these structures will eventually reach their operational lifespan and will have to be replaced. Establishing a robust financial cushion to accommodate such costs, such as those associated with a new water source for instance, hinges on the implementation of a reliable community collection system. In the visited communities, two factors appear instrumental in this regards 1.) A sophisticated tariff implementation system and 2.) The use of micro-meters to measure water use in each family.

Likewise, the majority of the interviewed CAPS, CdCs, municipalities and state actors mentioned that they lack mostly financial resources. While communities are able to maintain their W&S infrastructure through funds from the revenues from the tariff system, the funds are limited to basic repairs or minor replacements. When confronted with more substantial overhauls, the existing funds fall short. This issue represents a serious problem, as it will be increasingly difficult to the Nicaraguan government to generate the needed (financial) resources to the institutions and municipalities as 1.) The income that the state is generating is not increasing 2.) Donors (particularly bilateral) have been retreating from the country in the past few years. In Honduras, the case may not be as politically loaded as in Nicaragua, but public institutions face the same problem as they lack financial resources.

In order to sustain financially the ongoing interventions, project specific solutions can be taken into account. The previously mentioned *fondos concursables*, which were also implemented in the Dipilto Watershed Project in the second phase, have proved to be a successful modality of implementing small scaled community projects, similar to the modality of the PGCs. However, it's imperative to note that once SDC concludes its involvement, a substantial funding channel for community-based initiatives will vanish.

A solution to this problem could be a stronger integration of the private business in the management of the watersheds, as seen in Honduras. This could open the door to external funding sources and could additionally serve as a conflict resolution tool. In Nicaragua however, due to an intricate political situation within the country, this proposed remedy remains an uphill struggle for implementation.

### Gender equality

The impact on Gender has been showing different results and an evolving process throughout the years. Whereas the approach to gender was criticised during the implementation of the AGUASAN projects, in the Dipilto Watershed Project for instance the impact on gender is seen as overall good, according to project documents from the second phase of the project. When comparing to the first phase, where the gender approach was seen as “underdeveloped”, the second phase of the project (2020 – 2023) has displayed a more systematic approach, which has helped to tackle issues connected to gender.

As highlighted in the Dipilto Watershed Evaluation for the second phase (2023) the training processes promoted by the programme have been a space where women have strengthened their leadership, acquiring knowledge and recognising their capacities and abilities to develop technical, organisational and planning activities. They contributed to women playing a leading role, becoming visible in all the initiatives undertaken by the programme. There is representation of women in the community organisational structures for governance, such as the CdC and its CAPS. Similarly, women are seen as the majority in the water promoters, as promoters who have graduated from the field schools and in the “champions” promoters.

During the visit to the Dipilto Watershed community, there was a sense of empowered women. Many of them mentioned that due to the participation to trainings, their roles in the communities and the educational training done by the community their roles changed. Hence, working on gender dimensions at watershed level shows stronger impact potential than if only tackling it on community level, mainly because it can affect more actors and affects a broader environment connected to a transversal empowerment of women. A territorial approach could hence be effective in counteracting the underlying structures connected to the *machismo* issue.

### Migration

Migration is an important phenomenon that has a significant impact on the projects. For instance, it was observed in the earlier water projects that migration within the communities, but also in the institutions, impacted communities in the topic of retaining knowledge. This displayed a problem as gained knowledge was “lost”, as trained individuals left their communities (or the respective institution). By incorporating an economic outcome in the projects, an important impact can be observed in Cosecha de Agua Project, where one of the beneficiaries reported during a visit of the Evaluation Mission in 2022: “Wow, this takes my mind off the idea of leaving”(…) Water harvesting opens up new options and motivates people to look

for alternatives that can reduce the need to migrate. During the visit to the projects, no visible migration trends were observed, it is however believed that the impact of the *fincas* have both in Nicaragua and Honduras a positive impact on the families running them.

While the impact of SDC's interventions is seen as overall positive in targeted communities, it is difficult to assess whether it has overall contributed to a reduction of poverty and inequality in the countries. This was also mentioned during the interview with a SDC programme manager: *"It is a very ambitious thing to say that SDC projects have contributed to the reduction of poverty."* Or, as one former SDC programme manager said: *We invested so much money in this area and I am convinced that we did many good things. But poverty and inequality continue to represent a substantial problem in the region.* Nevertheless, the territorial approach seems to have a stronger impact on the communities rather than the dispersed, national approach in the past.

### Political environment

Although not explicitly outlined, this factor has significantly impacted SDC's programme management in the past few years. Whereas this factor seems to be self-explaining, one is reminded by its importance every time the opposite of an open political environment is encountered. The current situation in Nicaragua has been showing in the past years increasingly authoritarian tendencies, which aim to keep the power and the centre of the government and undermine political processes in the country. A very poignant point was made in one of the revised documents: *How can SDC foster in a country democratisation processes "from below", when this is what the government actually suppresses?* Looking at the present state of affairs, predicting the trajectory of these interventions becomes an intricate task. The visible absence of potentially important actors (such as private business, NGOs) in Nicaragua serves as a limiting factor when juxtaposed with Honduras. Moreover, the precarious position and high dependence of the municipalities on national institutions curtails potential opportunities. This, however, does not imply that local institutions are deprived from transformative potential – rather, their efficacy is heavily dependent on the individuals in charge. In this vein, the young mayor of La Dalia and her support to the water company Emagua described at the beginning of this chapter, proved to be a positive experience of change that can be brought forward.

## 4.2 MAIN LESSONS LEARNT

### 4.2.1 SECTORAL LESSONS LEARNT

**Lesson 1:** The "integrated approach" in W&S projects proved to be as a successful type of articulation of interventions and allowed SDC to promote significant changes that remained over time and became reference for new actions.

Water governance is a complex concept with multiple dimensions, sectors and levels. As such, it cannot be effectively addressed solely through a narrow sectoral approach. Whereas access to water and access to sanitation remain an important challenge, the past 15 years have seen a growing emphasis on tackling other obstacles tied to economic, social, cultural, and physical factors surrounding W&S. These factors are not directly connected to the water sector itself but are closely tied to the distinctive local circumstances.

Therefore, in the project implementation of W&S programmes, adopting an integrated approach means investing and building capacities across different levels and for various actors involved in the matter. As shown in AGAUASAN, this approach strengthens individual participation as well as engagement from all involved parties, including national institutions, ministries, municipalities, service providers, and communities. Moreover, it offers opportunities for interventions in governance.

Whereas a multilevel approach was sensed in the past as a successful, adopting a watershed approach in the planning and implementation of WASH systems enables a broader perspective. This facilitates a focus on various aspects, such as environmental considerations. The use of water hence serves different purposes: protection of water sources, wastewater discharge, and the interrelationship with other water uses such as agriculture, energy, industry and ecosystems.

**Lesson 1a:** The empowerment of the local population is a key factor towards the sustainability of the projects as it is able to accommodate specific conditions in the targeted communities and ensure continuity.

In this sense, building the organisational fabric from the micro level has been successful by focusing on the bottom-up approach (instead of top-down processes), as empowerment is generated at the individual level. As shown in this study, by focusing on communities, not only organisation structures at the micro level can be supported, but also behavioural changes and individual expectations, e.g. in the area of hygiene. This was shown particularly in the case of AGUASAN, where the focus on the communities has contributed significantly to a sustainable W&S infrastructure. The results in Gender also seem to have a stronger transformative power when focusing at the individuals, as shown in the Rio Dipilto Watershed Project. By empowering the individual, one assures that knowledge reaches individuals at micro level, hence assuring that processes can continue even if formal processes are not in place. As shown in the Cosecha de Agua project, this can even impact migratory flows as it impacts people's decisions on leaving the country.

This transformative power can be also shown on the example of the rural committees. Literature on the empowerment of the CAPS<sup>21</sup> and the effects of this process highlight this. The author of the book claims that CAPS in Nicaragua have undergone a process of empowerment, which has led them to become a political actor in Nicaragua. During the field mission in Nicaragua, interviews with representatives from the CAPS seemed to confirm this.

**Lesson 1b:** The strengthening of capacities of W&S state institutions and implementing agencies in Nicaragua helped the state to take ownership of the actions and hence contribute to sustainability of the projects (particularly in the case of AGUASAN).

Despite being a highly criticised move, the incorporation of FISE in Nicaragua as the implementing agency in AGUASAN has helped the institution to take ownership of the W&S system. Although this point has been reiterated several times in the study, the change in the implementation model enabled FISE, despite initial problems, to get a deeper understanding of the sector and support activities and national programmes in the sector. Therefore, it seems that SDC's direct support has had an overall positive impact.

Furthermore, close cooperation schemes at the community and state level allowed SDC to forge partnerships and act in a complementary way. This way it was able to guarantee that action at the community level were simultaneously supported by strategies at the state level. This is particularly in the case of the support to the CAPS, which ran in line with efforts at the national level, resulting in the CAPS Law in Nicaragua.

In Nicaragua however, it seems that there is a difference between the AGUASAN and the rest of the projects, where the national counterparts have not played such an active role like FISE in the projects. Additionally, after 2018 SDC has halted direct cooperation with all national institutions. This seems to have impacted the sense of ownership within the institutions in the respective sector and may impact negatively sustainability factors.

**Lesson 2:** The territorial approach has played a pivotal role in elevating the capacities of stakeholders. It has facilitated the cultivation of productive opportunities and ensured improved access to essential public services, safeguarded ecosystems, and maintained alignment with the SDG Agenda. It is, however, not clear whether it contributed to an upscaling of the interventions.

The focus on concentrated actions in a selected geographical area seems to have impacted positively on communal actors. By combining water with sanitation, as well as with health, governance and DRR, a better impact within the region was ensured. First attempts were made in the PGL APIM Projects that

<sup>21</sup> see "Transforming Rural Governance" from Sarah T. Romano (2021)



were implemented in the same area as both AGUASAN national projects. In the case of Honduras, involvement of the productive sector has also played an important role.

In the case of Honduras, adopting a watershed approach has seemingly and according to the revised documents led to an easier decision making process, higher flexibility and a more coherent way of working between the actors, as shown in the Goascorán Watershed Project. The assumption is also that in case of a conflict, the parties involved can discuss directly the underlying matter. In the case of Nicaragua, the watershed approach supports communities in the Dipilto and Ocotal municipalities.

However, the hypothesis that a territorial approach can support transformative process within national institutions cannot be confirmed. Cooperation with national institutions can be difficult: much of the success depends on the interest and resources and capabilities of the institutions. It was mentioned in one of expert interviews that the Honduran state has currently “*more serious problems to deal with*” than the strengthening of water governance, hence not supporting a further upscaling of the strategies or guidelines. In Nicaragua for instance, a bottom-up approach runs against the centralistic policy architecture of the Nicaraguan state.

**Lesson 3:** Promotion of female leaders, as well as engaging with youth within the water sector, evolved over time and contributed to dynamism and overall (female) empowerment in the communities.

Gender as a transversal topic has evolved over the years. Although gender is not a direct indicator in the projects, the understanding of female empowerment and participation has evolved over the years and contributed to the project outcomes.

In the early AGUASAN years, gauging gender “success” was primarily based on metrics like the proportion of women in water committees, with a target of 50% female membership or a simplified approach that aimed to enhance female involvement. However, concerns arose about the adequacy of these methods to accurately measure the impact of gender strategies in projects. Critics considered this approach as overly simplistic and insufficient in addressing the complex environments women in communities faced.

While there is room for further development, project activities in recent years managed to support a more strategic female empowerment. By involving women in activities connected to hygiene, governance, DRR, environment or finca/farm management, among others, thereby ensuring a more holistic approach. Women have also become integral to various processes and have taken on roles as brigadistas. Simultaneously, the youth has become increasingly active in community affairs. Consequently, women and youth are now more engaged in day-to-day activities, signifying a tangible transformation in community involvement.

**Lesson 4:** Transparent tariffs that are tailored to the needs of the communities represent a key factor towards the sustainability of W&S projects in Nicaragua and Honduras, they are however unlikely to be replicated.

A central challenge for the water sector is the setting of tariffs and the decentralisation of funding, capacity building and accountability. In both countries, addressing these challenges largely fell upon the projects and – according to the HIC Team – sometimes with an underlying and optimistic assumption that the political-economic landscape would eventually improve. Consequently, communities have approached the topic of self-financing in different ways: whereas some of the visited communities have established a tariff system largely independent from the financial support of the municipalities, others set up a unitary (basic) tariff system. It was observed that tariff calculation based on the actual needs of the communities foster more financially sustainable systems, enabling investment in the acquisition of spare parts as such. Conversely, communities adhering to a tariff system geared towards keeping prices low face continual financial struggle as they heavily depended upon municipal funding.

Consequently, the HIC Team assumes that although the existing community based approaches are viable without institutional reforms and adequate sector financing through government transfers and tariffs, the approach is unlikely to be replicated on a national level without initial support.

**Lesson 5:** Active international and national networks and platforms represent an important factor in the exchange of knowledge and innovation in the water sector (Central as well as Latin America).

International as well as national networks and platforms are effective tools that have made it possible to communicate with experts, stakeholders and the interested audience with relevant information on a wide range of issues in the water sector. They also serve as an efficient knowledge exchange tool between the entities. However, their sustainability is difficult to sustain as it depends highly upon the willingness of their members to carry on and invest into exchange. In the case of AGUASAN Regional, its support to FOCARD APS supported regional exchange on best practices of the projects, as shown in the documents. Whereas the regional exchange played an important role during the implementation of AGUASAN projects, dialogues between the projects have diminished. A stronger exchange between the projects in Nicaragua and Honduras could have been beneficial for the projects in view of SDC's phasing out of Latin America.

**Lesson 6:** The Humanitarian-Development Nexus gave space to a more holistic view and contributed to disaster risk reduction (DRR) and integration of protective measures of vulnerable groups in both countries as it is closely linked to the needs of the above mentioned groups.

Incorporating the Nexus framework into project implementation extends the focus beyond water, cultivating an awareness of water's ultimate use and forging connections to governance, decentralisation, health, gender, climate change, DRR, and the environment. SDC has provided assistance to national and local governments, as well as grassroots communities, in organising, training, and equipping brigades and committees. These initiatives have included the development of contingency plans, conducting drills, and facilitating roundtable exercises, all aimed at ensuring preparedness for rapid response of the watershed population. An illustration of this can be seen in both Nicaragua and Honduras, where this approach empowered communities to undertake precautions and adaptations, particularly in regions significantly affected by heavy rainfall and landfall. Additionally, this strategy empowered local communities to enhance their technical capabilities in water and irrigation infrastructure, as evident in the Dipilto Watershed and Cosecha de Agua projects.

#### 4.2.2 INSTITUTIONAL LESSONS LEARNT

**Lesson 7:** Flexibility within the SDC project infrastructure has paved the way for the creation of demand-driven W&S methodologies with high prospects of appropriation for local institutions and population. This flexibility has also facilitated adaptation to external changes (e.g. connected to political changes) and ensured a long project duration.

The flexibility in SDC in the project implementation has been perceived by national counterparts, as well as the implementing organisations, as a strong asset. Despite undergoing several and partially drastic changes in its 36 years of implementation, AGUASAN has managed to adapt to the different circumstances surrounding it. This includes its ability to adapt to a changing political environment (e.g. changing political environment in Nicaragua), and to adapt to a different set of implementing partners (transitioning from NGOs to state institutions as implementing partners) as well as change in the implementation model according to the needs and political situation (e.g. PGC model). SDC's flexibility was seen as one of the key factors contributing to this successful model. This can also be seen as a mean to attain the desired objectives. As one of the experts mentioned: *"We have to adapt all the time, but this way we can secure that we actually reach our goals"*.

**Lesson 8:** Continuity of support in the water sector (in Nicaragua for more than 36 years) has meant that SDC has been able to build up credibility with partners and a strong contextual understanding of the country and sector. This has provided SDC with a strong position and enabled a virtuous circle that benefited from past experiences and supported the development of the water sector in the country.

A long implementation duration of projects makes it possible to establish structures that sustain the durability of effects (mainly at the community level). As the example of AGUASAN has shown, particularly long duration of the project has helped to establish good dialogue and relationships with communities

and institutions. It also represented a solution towards the scarcity of funds that were needed to cover the costs of the W&S infrastructure. The relationship of trust that was built between SDC and the Nicaraguan Government (as well as other donor agencies) also allowed to build upon the experiences and pursue additional projects in the country, a comparatively better position than other donors had in the country.

**Lesson 9:** A more pronounced focus on replication and/or scaling up without further donor support could be beneficial.

Replication involves formulating policies, institutionalising approaches, methodologies and capacities, and securing public and private resources for the issue from the country concerned - which may differentiate the implementation of programmes in the different regions. Whereas phasing out strategies are formally implemented (or designed) in the projects, a more pronounced focus on the replicability of the interventions could be beneficial. As such, the territorial approach in Dipilto and Ocotal has been proven to bring forward dynamism to the regions, however, the probability that the Nicaraguan government will be able to replicate this to other regions remains low. This is primarily due to the significant financial barriers involved, along with a dearth of capacities and fundamental structures in other regions that might impede the process. Due to its bottom-up structure, support processes in projects with territorial (and not sectorial) approaches may be even disregarded. Projects therefore run the risk that although interventions are sustainable to a certain degree, they stay local and are not translated to other regions.

**Lesson 10:** Regional exchange in Central America has proven to be successful in the past (particularly during the implementation of AGUASAN). To ensure synergies and better knowledge management and efficiency across projects, active support for inter-project exchange is essential. Otherwise, a regional approach may lose its purpose.

Regional exchange within the water sector has played an important role until 2017. During the implementation of the AGUASAN projects, a close exchange of experiences between the projects, as well as an exchange between projects in the water sector in the region, was ensured. In the past few years however, this exchange has significantly diminished and as indicated in certain evaluations: occasional meetings may occur, but formal knowledge exchange mechanisms are largely absent. The watershed projects in both countries have different set-ups, making a “common umbrella” infeasible.

Examining Honduras and Nicaragua, one encounters two quite different situations despite their cultural, economic and socio-political proximity. This situation mainly arises from different political developments within the two countries in recent years, resulting in varying needs, setting and programme structures. This poses the question in how far models can be replicated to the different countries. As Lesson 3 and 4 showed, different approaches may be necessary.

Another question that is posed here is the actual character of a regional approach: it is crucial to define what this “regional” entails – if this represents a set of guidelines for projects implemented in the same region, however under a national framework, or an approach towards regional infrastructure of projects with regionally managed interventions.

**Lesson 11:** The “Political momentum” in which support is granted is a key factor for the effectiveness of the intervention, as well as its adaptation capacity to the local needs in the partner country.

It seems that the political momentum in which support is granted, is a key element for aid effectiveness, as well as its adaptation capacity to the local needs in the partner country. Looking at AGUASAN, this project came to place when the country lacked the most basic services for its population.

In fact, having a majority of water systems kept running and functioning their entire lifespan and beyond is a major (sustainability) achievement that should not be underestimated. In the past, most water systems provided water for free (as was the policy) during the first Sandinista period in 1980s and 1990s. Because local capacity was built and no cost recovery assured, many of those systems became obsolete and dysfunctional well before their lifespan.



Its seamless integration within the system enabled it to navigate both successes and challenges. Yet, the question is if the current programmes will be able to capitalise on this approach as well. The high political centralisation in Nicaragua debilitates local actors and thus limits the sustainability of results. It allows leads to a low capability of the state to adapt to potential changes needed within the project implementation framework. This is very interesting when comparing the situation in Honduras and Nicaragua. According to the HIC Team, there are already visible differences between the countries in the implementation of the watershed projects which indicate that interventions in the water sector in Honduras may have a higher probability of sustainability, due to a more favourable overall business setting and broader involvement of actors in the watershed.

## 5 CONCLUSIONS AND RECOMMENDATIONS

The aim of this Deep Dive was to summarise SDC's bilateral cooperation with Nicaragua (and Honduras) over the past two decades in the sector of Water & Sanitation (and governance) topic. It has done so in the context of SDC's learning and knowledge management initiative accompanying the gradual phasing out of the bilateral cooperation activities in LAC. Methodologically, the deep-dive made triangulated interviews and literature review, made use of an evaluation and capitalisation matrix categorised by the OECD DAC criteria and lessons learned, applied elements of qualitative content analysis and contribution analysis. It was not an evaluation, but a collection of lessons learned and capitalisation effort.

Based on the reflections presented in this report, it is possible to state that Swiss cooperation in the sector has remained relevant through the last two decades, comprehensively dealing with challenges connected to political transformations, CC adaptation and mitigation, resilience, and in line with development priorities of the country. SDC has contributed to community empowerment, hereby allowing increase the resilience of communities and strengthening the relevant institutions in the sector.

Impact on poverty is hard to measure, yet the available evidence shows that the contribution to poverty reduction has been positive, and that there are other positive long-term effects in terms of social capital. As sustainable effects of the interventions evolve, SDC's impact on the sector are recognised on the national, regional and global level.

The HIC Team recommends the following with view to potential next steps of SDC's learning exercise:

### Recommendations for SDC's future work in the "Water Governance" sector elsewhere

- Global water problems are likely to increase in severity in the future years. **Therefore, it will be important to strengthen project approaches in water by linking them with wider processes within the SDC to obtain transformative and systemic change.** An option could be an advisory group or a specialised unit within SDC that helps programmes within the sector to communicate, exchange experiences and set common goals. The findings from the projects in Nicaragua and Honduras and their exchanges were for both programmes valuable and important. By taking a more systemic approach, this could reach overall more sustainable results.
- Finding means of re-prioritising water and using water more strongly as an entry point for climate, environment and governance/decentralisation interventions, elevating it to a transversal topic in programme implementation.
- **Maintain a flexible, long-cycle logic in the projects, conducting permanent evaluations between phases:** having medium/long-term projects has been of great importance to have a consistent line of action in the sector. Intermediate evaluations allow to follow up on the effectiveness of the project, and flexibility allows to redirect efforts in case is needed.

Overall, SDC's systemic approach to water in Nicaragua and Honduras has had a positive impact on the country's rural areas, where poverty and inequality are prevalent. While challenges remain, particularly in the areas of sustainability and long-term impact, SDC's engagement in Central America and in the sector leaves a number of mostly positive lessons learned, and is without doubts a valuable case study for SDC's future engagements in other countries.

## ANNEX 1: LIST OF INTERVIEWEES

The following persons were consulted by the HIC team as part of the Deep Dive in Nicaragua and Honduras.

NAME	SURNAME	Institution and position
Ever	Acuña	Technician Mayor's Office Pueblo Nuevo, Estelí
Alejandra	Alvarez	Community member and water user, CAPS El Jicarito, Telica, León
Maximo	Angulo	National Coordinator and Water Governance Advisor, Dipilto Community Watershed Management Programme, Phase II (2019-2023), GOPA
Raul	Artiga	Coordinator Climate Change and Risks Unit - Central American Commission for Environment and Development-CCAD, SICA
Carlos	Balladares	Technician INTA, Estelí
Peter Paul	Benavidez	Director of Agricultural Transfer, INTA
Juana	Canales	Mayoress of the municipality of Pueblo Nuevo, Estelí
Humberto	Castillo	National Programme Officer - DRRD/ACC/RRNNN, SDC
Fredy	Castillo	Fiscal J.D. CAPS-Comunidad El Socorro, municipio de Palacaguina, Madriz
José Luis	Chávez	Director of Planning, Mayor's Office of Telica, León
Virginia	Cordero	Responsible for the PGL-APIM
Angela	Cruz	Beneficiary of the Water Harvesting Project, Los Horcones Community, municipality of Pueblo Nuevo, Estelí.
Edgardo	Cruz	Territorial Process Manager, FISE
Yader	Espinoza	Former director of Empresa Municipal de Agua (EMAGUA), municipality of El Tuma-La Dalia, Matagalpa.
Nelson	Estrada	Water and Sanitation Sector Specialist Inter-American Development Bank, IDB.
Guillermo	Figuroa	General Manager, Mayor's Office El Tuma-La Dalia, Matagalpa
Neylin	Fortin	Secretary J.D. Comité de Cuenca Dipilto, Nueva Segovia
Luisa	Gámez	Monitoring Manager - Water Harvesting Project, CATIE
Angelina	Garcia	Treasurer J.D. CAPS-Comunidad El Socorro, municipality of Palacaguina, Madriz
Jose Santos	Gomez	Vice-Mayor of the Municipality of Dipilto, Nueva Segovia
Axel	Gomez	Vice Mayor of the municipality of Ocotal, Nueva Segovia
Aurora	Grijalba	Director of Operations, FISE
Yader	Grillo	Operations Manager, ENACAL
Ofilio	Hernandez	Municipal technician, UMAS-Alcaldía de Telica, León
Marlon	Herrera	Former Director of Planning, Mayor's Office El Tuma-La Dalia, Matagalpa
Gereon	Hunger	Director - Water and Sanitation Technical Assistance Programme (GIZ-PROATAS)
Manuel	Larios	Director General for Cooperation and Projects, MEFCCA
José Luis	Martínez	Social Promoter, Mayor's Office El Tuma-La Dalia, Matagalpa
Karla	Meléndez	Mayor of the municipality of Dipilto, Nueva Segovia
Ivette	Morazán	Director of Water For People (WFP)
Rodolfo	Morales	Social Specialist in Water and Sanitation, FISE
Martha Lorena	Mora	Former Country Director, CARE

NAME	SURNAME	Institution and position
Luvianka	Mendoza	Administrative Assistant, Dipilto Watershed Community Management Programme, Phase II, GOPA
Carmen Josefina	Montoya	President Junta Directiva-CAPS-Ríos de Agua Viva, Comunidad de Las Manos, Dipilto
Denise	Ordoñez	Secretary, CAPS-San Benito-Campana Azul, Chinandega
Pedro Pablo	Orozco	Water Harvesting Specialist, CATIE
Fabiola	Ortega	Water Directorate-ANA
Julius Caesar	Palaces	President of the Board of Directors, CAPS-Comunidad El Socorro, municipality of Palacaguina, Madriz
Maria Luisa	Pardo	Coordinadora AGUASAN, Honduras (2005-2016), SDC
Maryury	Paguaga	President Board of Directors, Dipilto Basin Committee, Nueva Segovia
Armando	Palma	Production Systems and NRM Specialist, Dipilto Watershed Community Management Programme, Phase II, GOPA
Carmen	Pong	Regional AGUASAN Coordinator, SDC
Henry Fanuel	Quintero	Beneficiary of the Water Harvesting Project, La Pava Community, municipality of Pueblo Nuevo, Estelí.
Bayardo	Quintero	Project Coordinator, Water Harvesting Project, CATIE
Rafael	Real	President of the Board of Directors, CAPS Comunidad San Benito-Campana Azul, Chinandega
Francis	Rivera	Technical Advisor-PROATAS (TBC)
Juan	Rojas	Treasurer, CAPS-San Benito-Campana Azul, Chinandega
Luis	Rosales	Unidad Municipal de Agua y Saneamiento (UMAS), Alcaldía de Palacaguina, Madriz
Maritza	Ruiz	Director of Municipal Planning, INIFOM
José Luis	Sandino	PGL-APIM Programme Officer
Daisy	Samayoa	Coordinator Gobernanza Hídrica Territorial en la Región del Golfo de Fonseca
Walkiria	Sujo	Social Specialist in Water and Sanitation, FISE
Sayra	Taleno	Coordinator and Team Leader, Community Watershed Management Programme - our Goascorán watershed PGCC-ncG Phase II. GFA Consulting Group-SRK Consortium
Sohrab	Tawackoli	Jefe de Equipo Programa Gobernanza Hídrica Territorial en la Región del Golfo de Fonseca
Rafael	Tercero	Fiscal, CAPS-San Benito-Campana Azul, Chinandega
Xiomara	Tercero	Mayor of the municipality of Ocotal, Nueva Segovia
Luz Maria	Torres	Delegate MEFCCA, Estelí
Francis	Torres Blandón	Mayor of the municipality of El Tuma-La Dalia, Matagalpa
José	Toruño	Coordinator AGUASAN Nicaragua (2009 - 2018), SDC
Peter	Toval	Community member and water user, CAPS El Jicarito, Telica, León
Deborah	Ubeda	Territorial Process Manager, FISE
Salvadora	Villalobos	Director Empresa Municipal de Agua (EMAGUA), municipality El Tuma-La Dalia, Matagalpa
Victorino	Villegas	Collector, CAPS El Jicarito, Telica, León
Adriaan	Vogel	Technical Coordinator and Team Leader Dipilto Watershed Community Management Programme, Phase II (2020-2022), GOPA
Participating families		Beneficiaries of the improved latrine system in Dipilto Viejo, Nueva Segovia

NAME	SURNAME	Institution and position
Participating families		Members of the community CAPS-El Jicarito, Telica, León
Participating families		Members of the community San Benito-Campana Azul, Chinandega
Participating families and CAPS		Users of the water and sanitation system and members of the CAPS in the town of La Dalia, Matagalpa.
Participating families		Users of the services of the CAPS-community El Socorro, municipality of Palacaguina, Madriz.

## ANNEX 2: LITERATURE

### AGUASAN HONDURAS

- Informe de Fin de Fase (IFF): Programa AGUASAN Honduras, 2008-2013 (2013)
- Documento de Programa: AGUASAN Honduras, 2013-2015 (2013)
- Kreditantrag/Proposition de crédit: Programm AGUASAN Honduras, 2008 – 2013 (2007)

### AGUASAN NICARAGUA

- Documento de programa: AGUASAN Nicaragua, 2013-2015 (2012)
- Evaluación Interna de Medio Término 2014: Programa AGUASAN Nicaragua (2014)
- Informe de Fin de Fase (IFF): Programa AGUASAN Nicaragua, 2013-2017 (2017)
- Informe de Fin de Fase (IFF): Programa AGUASAN Nicaragua, 2008-2013 (2013)
- Credit Proposal: AGUASAN Programme Nicaragua, 2013 – 2015 (2013)
- Documento de Proyecto: Proyecto Ampliación de la Cobertura de Agua y Saneamiento Rural en la Raan, Matagalpa, Jinotega y las Segovias, 2008 – 2011 (2008)
- AGUASAN, 2005. Estudio sobre el potencial de pequeñas sistemas de micro riego para familias pobres con pozos familiares en zonas rurales de Nicaragua - Experiencias de un proyecto piloto de COSUDE AGUASAN y CARE Nicaragua. Managua, not published
- Incorporación de la Reducción del Riesgo de Desastres en AGUASAN: Sistematización de la experiencia Nicaragua (2015)

### AGUASAN REGIONAL

- Credit Proposal: Programa AGUASAN Regional, 2016 – 2017 (2013)
- Credit Proposal: Programa AGUASAN Regional, 2013 – 2015 (2011)
- Plan Operativo de Fase (POF) 2016 – 2017: Programa Regional Agua y Saneamiento (AGUASAN) (2015)
- Documento de programa: AGUASAN Regional, 2013-2015 (2012)
- Koenig, Peter: Evaluación Programa AGUASAN Regional (2007)

### AGUA Y SANEAMIENTO EN PEQUEÑAS CIUDADES

- Change of Credit Duration: Agua y Saneamiento en Pequeñas Ciudades y Escuelas, 2011 – 2017 (2016)
- Modificación de la Duración de un Crédito: Agua y Saneamiento en Pequeñas Ciudades y Escuelas, 2011 – 2016 (2014)
- Modificación de la Duración de un Crédito: Agua y Saneamiento en Pequeñas Ciudades y Escuelas, 2011 – 2014 (2013)
- INFORME FINAL PCE, 12.2010-06.2017: Programa de Agua y Saneamiento en Pequeñas Ciudades y Escuelas (2017)
- Änderung der Laufzeit eines Kredites: Water and Sanitation in Small Towns and Schools, 2010 – 2013 (2011)
- Kreditantrag: Water and Sanitation in Small Town and Schools (Phase 01), 2010 – 2012 (2010)
- Kreditantrag: Water and Sanitation in Small Town and Schools (Phase 02), 2011 – 2013 (2010)
- Plan Operativo de Fase, de Pequeñas Ciudades en Honduras y Nicaragua (2011)

### COSECHA DE AGUA

- Informe de Evaluación Externa del Proyecto: “Adaptación de la agricultura al cambio climático a través de la Cosecha de Agua en Nicaragua” (2018)
- Informe de Fin de Fase del Proyecto Adaptación de la agricultura al cambio climático a través de la cosecha de agua en Nicaragua, 2014 – 2018 (2018)
- Documento de Proyecto: Adaptación de la Agricultura al Cambio Climático a través de la Cosecha de Agua en Nicaragua, Fase II (2018)
- Evaluación de medio término al Proyecto: “Adaptación de la agricultura al cambio climático a través de la cosecha de agua en Nicaragua” – Cosecha de Agua, Informe final (2022)

- Additional Credit: Cosecha de Agua, 2021 – 2022, (2018)
- Credit Proposal: Cosecha de Agua, 2018 – 2022 (2017)
- Reporte de resultados: Análisis costo beneficio de las obras de cosecha de agua desde la perspectiva privada, Proyecto: Adaptación de la Agricultura al Cambio Climático a través de la Cosecha de Agua en Nicaragua, (2023)
- Análisis Costo Beneficio de las obras de cosecha de agua desde la perspectiva privada, Proyecto: Adaptación de la Agricultura al Cambio Climático a través de la Cosecha de Agua en Nicaragua (2021)

### **PROGRAMA DE GOBERNABILIDAD PGL APIM**

- Informe de Fin del Programa: Programa de Gobernabilidad APIM, 2005 – 2020, (2021)
- Credit Proposal: PGL-APIM, 2013 – 2015 (2012)
- Informe Final: Autoevaluación Interna Programa de Inversiones Municipales en Nicaragua – APIM (2014)
- Additional Credit: Programa de Gobernanza Local Nicaragua (PGLIM), 2017 – 2019 (2017)

### **CUENCA RÍO DIPILTO**

- Gestión Comunitaria de los Recursos Naturales en la Cuenca Dipilto: Un Modelo basado en la experiencia del Programa Gestión Comunitaria de la Cuenca del Río Dipilto (PGCCRD) en su primera fase (2016 – 2019), MARENA, 2019
- Déjame que te cuente mi Historia: Testimonio de Mujeres Protagonistas del Programa de Gestión Comunitaria de la Cuenca del Río Dipilto, Nueva Segovia, Nicaragua, MARENA, 2019
- Convenio de Cooperación: Programa Gestión Comunitaria en la Cuenca del Río Dipilto (Cuenca Dipilto), 2020
- Credit Proposal: Community Driven Watershed Management for Climate Change Adaptation in Nicaragua, 2020 – 2023, Phase 02, (2020)
- Evaluación Final Externa de la Primera Fase del Programa Gestión Comunitaria de la Cuenca del Río Dipilto en Nicaragua, SIMBIOSIS, 2018 – 2019 (2019)
- Evaluación Final Externa de la segunda fase del “Programa Gestión comunitaria de la Cuenca del Río dipilto”, SIMBIOSIS, 2020 – 2023 (2023)

### **NUESTRA CUENCA GOASCORÁN**

- Informe de evaluación externa de la primera fase del Programa (2018)
- Memoria del Programa, PGCC-ncG Fase II (2019 – 2023), (2023)
- Documento de Proyecto: Fase II, 2019 - 2023

### **GOBERNANZA HÍDRICA**

- Informe de Evaluación Interna y Externa del Programa Gobernanza Hídrica en la Región 13 Golfo de Fonseca (PGHTR13GF), Fase I 2016 – 2021 (2020)
- Documento de Proyecto: Fase I, 2016 - 2021
- Documento de Proyecto: Fase II, 2021 - 2024

### **GENERAL**

- External Evaluation SDC's Engagement in the Water Sector, 2020
- SDC Memoria Cooperación Suiza en América Central 1970 – 2018
- Romano, Sarah T. (2019): Transforming Rural Water Governance. The Road from Resource Management to Political Activism in Nicaragua. University of Arizona Press.



## ANNEX 3: EVALUATION & CAPITALIZATION MATRIX

Guiding Questions	Assessment Criteria / Indicators	Results / Comments on the assessment
<b>1) Relevance</b>		
1.1 How and to what extent did SDC's aid thought the project X <b>respond</b> to pressing <b>multidimensional development needs</b> ? Were the investments done <b>coherently</b> and <b>proportionate</b> in relation to the <b>development priorities in the countries</b> at specific periods of time?	<p>1.1.1 Strategic documents and formulated objectives therein clearly refer to development needs of the target group.</p> <p>1.1.2 Strategic documents and formulated objectives therein are in line with development priorities of the countries according to national development plans and/or sector strategies as well as to specific needs and requests of relevant stakeholders and beneficiaries.</p> <p>1.1.3 Instruments, methods and chosen thematic focusses of projects are in line with defined overarching objectives.</p>	<p><b>AGUASAN NIC</b></p> <ul style="list-style-type: none"> <li>The <b>National Human Development Plan</b>, within the strategies and policies for drinking water and sanitation, considers it important to have long-term policies to expand coverage, improve quality and contribute to the improvement of health. In rural areas, they consider it necessary to have a <b>more efficient model of attention</b> to the communities and to generate citizen capacities to be an active part of the Water and Sanitation plans. In this sense, the AGUASAN programme is congruent with the National Human Development Plan and its contribution to poverty alleviation and the achievement of the MDGs. (<b>AGUASAN Nicaragua ProDoc 2013-2015</b>).</li> </ul> <p><b>AGUASAN HON</b></p> <ul style="list-style-type: none"> <li>W&amp;S runs in lines with the Water and Sanitation Sector is governed by the "<i>Ley Marco para el Sector Agua Potable y Saneamiento</i>" (hereafter Ley Marco), which was enacted in October 2003 and amended in 2008 to extend the period established to make the new institutional framework operational, (<b>ProDoc Honduras 2013-2015</b>).</li> </ul> <p><b>AGUASAN REG</b></p> <ul style="list-style-type: none"> <li>The 2016 - 2017 phase of the AGUASAN Regional Programme is in line with the Swiss Cooperation strategy for Central America 2013 - 2017, which <b>establishes the relevance of cooperation at the regional level</b>. In the Regional AGUASAN programme, strategic partnerships with regional and national partners make it possible to influence i) hygiene promotion, ii) development of rural water supply and sanitation systems iii) sector harmonization; iv.) strengthening of regional institutions; and v) development of sector information and monitoring systems. Furthermore, the Regional AGUASAN programme promotes the efficient ratification of regional policies by member states. Through the Regional AGUASAN, experiences gained at the regional level will be directly channelled to the national programmes. (<b>AGUASAN Regional, POF 2016 - 2017</b>)</li> </ul> <p><b>Cosecha de Agua</b></p> <ul style="list-style-type: none"> <li>Water availability, access and management in the Dry Corridor is of <b>paramount importance</b> confirmed by all parties interviewed: human health and hygiene, national production and economy, conservation of ecosystems and species depend on the amount and distribution of rainfall over time. Most of the national institutions involved in rural, agricultural and socio-economic development in Nicaragua include water management in their agendas and strategies as it is "part of the national strategy to fight poverty mainly water for human consumption - and to prevent or manage conflicts around the rights to use this resource." (<b>External Evaluation CdA, 2022</b>)</li> </ul> <p><b>Río Dipilto</b></p> <ul style="list-style-type: none"> <li>The Community Management Programme of the Dipilto River Basin in Nicaragua is framed within the framework of the National Strategy for Environment and Climate Change (<b>ENACC</b>) of the Government of Nicaragua. Within the National Environment and Climate Change Strategy (ENACC) of the Government of Nicaragua, which has prioritised the implementation of adaptation measures in the Coco River Basin and, as part of this, the Dipilto River basin, which is of great importance for the supply of drinking water to the city of Ocotal. The programme also takes up the guidelines of the Government's Human Development Plan to consolidate efforts to reduce the vulnerability of families in the basin through the adoption of environmental restoration measures. (<b>External Evaluation Río Dipilto, 2018</b>)</li> </ul>



Guiding Questions	Assessment Criteria / Indicators	Results / Comments on the assessment
		<p><b>PGL APIM</b></p> <ul style="list-style-type: none"> <li>The strategic frame is defined by the “<b>Plan Nacional de Desarrollo Humano</b>” that defines “Decentralization as the principle of human development, ensuring that <b>decentralization of political power</b> and institutional budget promotes participatory democracy”. (<b>PGL APIM, Credit Proposal 2013 – 2015</b>)</li> <li><i>Interview 2&amp; 29: Mitch highlighted the environmental vulnerability of the country. It showed the fragility of the infrastructure (roads, bridges, water systems and rural sanitation). There was a vision of dealing with emergencies, but there was no risk management approach. Site assessment was a Natural Disaster Risk Reduction (DRR) instrument. By regulation, in recent years, every project formulation had to include a DRR guide.</i></li> </ul>
<p>1.2 In how far was SDC's engagement through the project X in line with overall Swiss development cooperation priorities?</p>	<p>1.2.1 Strategic documents at country or LAC level and formulated objectives therein refer to overall Swiss development cooperation strategies.</p> <p>1.2.2 Strategic documents and formulated objectives therein at country or LAC level are in line with Swiss development priorities according to Swiss IZA strategies.</p>	<p><b>AGUASAN NIC &amp; AGUASAN HON</b></p> <ul style="list-style-type: none"> <li>Access to water and basic sanitation is a priority theme in the <b>federal bill on international cooperation 2013-2016</b>. In SDC's new strategy for Central America, water supply and sanitation are an integral part of strengthening service delivery at the municipal level. On the Nicaraguan side, the strategic frame is defined in the National Development Plan 2008-12. The proposed new phase of the water and sanitation programme AGUASAN is well in line with this plan. (<b>AGUASAN Nicaragua, Credit Proposal 2013-2015</b>)</li> </ul> <p><b>AGUASAN REG</b></p> <ul style="list-style-type: none"> <li>AGUASAN's strong networking at the national, regional and global levels contributes to SDC's expertise in the water and sanitations sector. (<b>AGUASAN Regional, Credit Proposal 2013 – 2015</b>)</li> </ul> <p><b>PGL APIM</b></p> <ul style="list-style-type: none"> <li>Local Governance and Citizen Participation is a priority theme in the <b>federal bill on international cooperation 2013 – 2016</b>. In SDC's strategy for Central America, inclusive governance is an integral part of strengthening service delivery at the municipal level. (<b>PGL APIM, Credit Proposal 2013 – 2015</b>)</li> </ul> <p><b>Cosecha de Agua</b></p> <ul style="list-style-type: none"> <li>Switzerland recognises climate change as a global challenge, is a priority theme in the current Strategy (2021-2024) for development cooperation, is one of the sustainable development objectives and a priority in the Central America Cooperation Programme 2022-2024. Its National Policy for Action on Climate Change highlights the objective of contributing to the fight against poverty and sustainable human development in Nicaragua and the preparation of a society that is more resilient and less vulnerable to climate variability and change, promoting environmentally sustainable technologies and good agro-climatic practices, including water storage and harvesting. (COSECHADEAGUA III_Solicitud de Crédito).</li> </ul> <p><b>Río Dipilto</b></p> <ul style="list-style-type: none"> <li>Swiss cooperation in Nicaragua builds on decades of relations between the two countries. In the Swiss cooperation strategy for Central America focused on Nicaragua and Honduras, three priority areas for cooperation are described: 1) inclusive economic development, with rural value chains; 2) strengthening of local governments and local participatory governance; and 3) vulnerability reduction, especially of the most vulnerable to natural disaster risks and climate change. The mission is of the opinion that the programme has a high level of relevance with these objectives and strategic lines, especially in the third line, to a lesser degree with the first two. (Reports_Cuencas Nicaragua_Río Dipilto).</li> </ul> <p><b>Gobernanza Hídrica</b></p> <ul style="list-style-type: none"> <li>The PGHT promotes a water governance model in the Golfo Fonseca, framed in the area "Climate Change, Disaster Risk Reduction (DRR) and Natural Resources" and its objective "Population in situation of vulnerability and exclusion, particularly women and youth, adopt sustainable water, soil and forest management practices in selected territories", of the Swiss Cooperation Strategy in Central</li> </ul>

Guiding Questions	Assessment Criteria / Indicators	Results / Comments on the assessment
		<p>America 2018- 2021 and aligned with the Swiss Strategy for International Cooperation 2021- 2024. 2021 and aligned with the priorities of Switzerland's strategy on international cooperation 2021- 2024, with regard to water and governance issues. Given its direct effects on water governance and dialogue between the various actors involved for the peaceful management of water conflicts, the programme contributes to stability and the promotion of the rule of law. It also contributes to preventing migration through support and linkage with the local private sector. It relates to Sustainable Development Goal (SDG) 6 of the 2030 Agenda to "Ensure availability and sustainable management of safe drinking water and sanitation" (<b>External Evaluation Gobernanza Hídrica Phase I, 2020</b>).</p> <p><b>Cuenca Goascorán</b></p> <ul style="list-style-type: none"> <li>The key factor for quality of life in their communities is water availability, and any activity that improves it is highly relevant. The central focus of NCG, highlighted in the formal name of the Programme, is Community Based Watershed Management. Watershed management is not a traditional activity in Honduran communities, but the management of community water supply systems for human consumption is. In this context, the effectiveness of the Programme depends on its ability to add inter-community coordination to this community management and to facilitate an expansion of the approach to include water uses, water source conservation, and the other interactions within and between micro-watersheds that determine long-term water availability and quality (<b>External valuation Cuenca Goascorán, 2018</b>).</li> </ul>
<b>2) Coherence</b>		
2.1 Was the project <b>coherent</b> and <b>complementary</b> to other <b>SDC activities</b> (humanitarian aid, engagement in the field of peace and security, global programmes) as well as with the engagement of <b>other Swiss development actors</b> ?	<p>2.1.1 Strategy and project documents illustrate coherence/ complementarity with other SDC/SECO activities.</p> <p>2.1.2 Synergy potentials were used and duplication was avoided during project implementation.</p>	<p><b>AGUASAN NIC</b></p> <ul style="list-style-type: none"> <li>SDC supports four programmes in the water supply and sanitation and two programmes in local governance. These programmes have an important implementation component at the municipal level. Furthermore, SDC supports the strengthening of local economic development at the municipal level, and contributes to disaster risks reduction through humanitarian-aid programmes. SDC's new regional strategy Central America 2013-17 includes a concentration of these interventions in larger, territory-oriented programmes. (<b>AGUASAN Nicaragua, Credit Proposal 2013-2015</b>)</li> </ul> <p><b>AGUASAN HON</b></p> <ul style="list-style-type: none"> <li>The AGUASAN Programme will initiate efforts to harmonise interventions with the Local Governance Programme in order to achieve greater synchronisation and with partners and actors in the municipal government. For this, the monitoring systems of both projects will be tuned. Common indicators will be developed, valid for both programmes, on which achievements, successes and lessons learned will be reported. Further these indicators will be used for the analysis of the capacities of the municipalities of common and non-common interventions. These analyses will form the basis for the development of manuals, guidelines and tools for the strengthening and capacity building of the respective municipalities. The training tools will be piloted, adjusted and refined according to the experiences made during the course of their respective applications. The Water and Local Governance programmes will hold regular meetings, through a platform for the coordination of the different activities and promote the fine-tuning of the municipal training tools and the respective interventions. Manuals and guidelines for the formation of JAAPS and other committees for the operation and maintenance of basic services at municipal level will be designed using the good practices established by the respective programmes. The capacities of 3 to 4 municipalities where both programmes (AGUASAN and PGL) will be supporting local development will be analysed (<b>ProDoc AGUASAN Honduras 2013-2015</b>).</li> </ul> <p><b>AGUASAN REG</b></p> <p>In summary, it can be seen that the regional programme provides good support to the AGUASAN programmes in Nicaragua and Honduras in terms of issues, instruments and management. However, the Regional Programme was not able to fully assume the agreed</p>

Guiding Questions	Assessment Criteria / Indicators	Results / Comments on the assessment
		<p>role of facilitator of the integration process of the AGUASAN and PGLIM programmes for the reasons described above. (Mid-Term Evaluation AGUASAN Regional, 2014).</p> <p><b>PCE</b></p> <ul style="list-style-type: none"> <li>The project had advantages, having developed the integration of issues such as DRR, gender, citizen participation in water and sanitation projects, <b>taking advantage</b> especially of <b>the interventions in the territory</b> of AGUASAN Nicaragua and Honduras. (<b>PCE Final Report 2017</b>)</li> </ul> <p><b>PGL APIM</b></p> <ul style="list-style-type: none"> <li>The Committee welcomes the merging of PGL and APIM at the municipal level and the splitting of the regional governance programme into two separate country programmes as an intermediate step for the merger of governance and AGUASAN. This will allow a more flexible response to the different evolving country contexts. (SC APIM Nica 2016-2018 final)</li> </ul> <p><b>Cosecha de Agua</b></p> <ul style="list-style-type: none"> <li>The Cosecha de Agua project is coherent with national and regional strategic lines of competent institutions, as well as with development cooperation agencies and international climate funds active in the region. (<b>External Evaluation CdA 2022</b>)</li> </ul> <p><b>Río Dipilto</b></p> <ul style="list-style-type: none"> <li>Although an exchange with Goascorán was foreseen, no exchange formats were implemented. (Discussion with the Project Team)</li> </ul> <ul style="list-style-type: none"> <li><b>Interview 30:</b> <i>The regional W&amp;S agenda was not divorced from integrated water resources management. The regional approach focused on the H&amp;A network and the local development network: the experience in watershed management was replicated in Nicaragua. Nicaragua's experience in DRR was transferred to Honduras.</i></li> </ul>
<p>2.2 Was the project <b>coherent</b> and <b>complementary</b> to the engagement of <b>other international development actors</b> in the sector?</p>	<p>2.2.1 Strategy and project documents illustrate coherence/ complementarity with activities of other international donors.</p> <p>2.2.2 Synergy potentials were used and duplication was avoided during project implementation.</p>	<p><b>AGUASAN NIC</b></p> <ul style="list-style-type: none"> <li>The presence of the <b>WB, CABEL and SDC</b> as the main actors of cooperation for rural water and sanitation opens the opportunity to deepen coordination and dialogue among them, with the purpose of establishing common approaches on issues specific to the sector and to be able to influence the national authorities in each of them. One of the advantages currently observed is that the main decisions on water and sanitation are <b>taken at higher levels of government</b> (National Planning Council), which could allow for negotiating at this level the necessary changes that need to be made to make investments in the rural sector more efficient. (<b>External Mid-Term Evaluation AGUASAN 2014</b>)</li> <li>Partnership building is very important for SDC, mainly for two reasons: i) The determinants of the Paris Agenda with the need to seek alignment and harmonisation; ii) The limited scope of SDC, both at the level of policy dialogue and at the level of local projects (e.g. in terms of IWRM), makes it imperative to complement actions with other actors at macro, meso and micro levels. While partnership can have various meanings and take different forms, SDC considers it appropriate to establish, beyond a general exchange, <b>more formalised forms of co-operation</b>. AGUASAN will strengthen 24 alliances and will insist on redirecting investment in water in accordance with the sector strategy (<b>ProDoc AGUASAN Nicaragua 2008-2011</b>)</li> </ul> <p><b>AGUASAN HON</b></p> <ul style="list-style-type: none"> <li>The Programme's participation in spaces for dialogue and coordination has enabled it to <b>form alliances</b> with other donors and key actors in the Water &amp; Sanitation sector in order to emphasise issues for discussion, influence national policies and reach agreements on the implementation of actions. However, it is perceived that among cooperation agencies, SDC is more willing to align and harmonise in the sector (<b>ProDoc Honduras 2013-2015</b>).</li> </ul>

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		<ul style="list-style-type: none"> <li>SDC played a leading role within the international cooperation for the sector in Honduras, promoting a <b>mapping of interventions</b> that contributed to complementarity and coordination. Other donors confirmed that AGUASAN methodologies were a <b>reference for the design</b> and implementation of other cooperation actions within the sector and in gender and disaster risk reduction (<b>External Evaluation SDC's Engagement in the Water Sector, 2020</b>)</li> <li>Partnerships with other cooperation agencies such as the US Peace Corps, UNICEF, PAS-WB, PAHO resulted in concerted activities and coordinated support to partners and beneficiary communities (<b>Final Report AGUASAN, Phase 08-13</b>).</li> </ul> <p><b>AGUASAN REG</b></p> <ul style="list-style-type: none"> <li>Establishing strategic alliances with other actors in the sector, World Bank, IDB and AECID, has resulted in the recognition of SDC as an effective leader at the regional level (<b>Final Report AGUASAN Regional Phase 2016-2017</b>).</li> </ul> <p><b>Cosecha de Agua</b></p> <ul style="list-style-type: none"> <li>The Cosecha de Agua project is coherent with national and regional strategic lines of competent institutions, as well as with development cooperation agencies and international climate funds active in the region (<b>External Evaluation Cosecha de Agua, 2022</b>).</li> </ul>
<b>3) Effectiveness</b>		
3.1 What concrete development <b>results</b> were achieved through the project X?	<i>descriptive/illustrative</i>	<p><b>AGUASAN NIC</b></p> <ul style="list-style-type: none"> <li>Since 1982, SDC has invested CHF 46.3 million in the water and sanitation sector in Nicaragua. Local partners contributed approximately CHF 12.0 million. The very low initial supply coverage, a rapidly growing population as well as very scarce financial resources have contributed to a persistently high demand and explain the long-term involvement of SDC. During these years, the approach was continuously adapted and many innovations were introduced. To date, the programme has provided access to clean water for about 317,000 people, corresponding to 53 % of the rural population in the zone of influence. In the previous phase (1.1.2008 to 28.2.2013) about 54,000 people gained access to safe drinking water while about 33,000 obtained access to sanitation facilities. Two thirds of the beneficiaries apply several hygiene practices (water disinfection, hand washing, latrines), specifically improving the quality of life for women and children. Forty-three education centres benefiting 5,137 children have been provided with water and sanitation facilities. The focus on access, quality, sustainable water tariffs, community management and poverty targeting has worked well. The participation of women has remained high throughout the phase. In 30% of the established water committees, women hold influential positions. All water and sanitation projects have undergone a DRR analysis and the necessary mitigation actions have been undertaken. (<b>AGUASAN Nicaragua, Credit Proposal 2013-2015</b>)</li> <li>The municipalities are the main actors for the implementation of the decentralised model promoted by the government and also adopted by SDC (<b>ProDoc AGUASAN Nicaragua 2008-2011</b>)</li> <li>The intervention model initially envisaged was based on the central role of the municipality <b>as project executor</b> and the direct cooperation of AGUASAN with the municipalities for funding and training support. At present, the intervention model is implemented under the full responsibility of FISE, as a sectoral institution mandated to facilitate the strengthening of municipal bodies, while the AGUASAN programme would be providing technical assistance to FISE. (<b>Mid-Term Evaluation AGUASAN Nicaragua, 2014</b>)</li> <li>In the HRWS approach, it is necessary to strengthen the capacities of partners and municipalities to better address programme approaches and strategies in order to avoid exclusions and promote equity. Inadequate implementation of some strategies can lead to exclusion (participation, co-financing, cut-off points, technical aspects.) (<b>Mid-Term Evaluation AGUASAN Nicaragua, 2014</b>)</li> </ul> <p><b>AGUASAN REGIONAL</b></p>

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		<ul style="list-style-type: none"> <li>Referring to the homologation of management and monitoring instruments between the AGUASAN and Governance programmes, it was found that it is not possible to achieve it as stated, since both programmes were not planned jointly. The monitoring needs common indicators, but the separate planning resulted in different logical frameworks. The regional programme had no influence on this process (<b>AGUASAN Regional Programme - Internal Environmental Assessment</b>).</li> <li>In summary, it can be seen that the regional programme provides good support to the AGUASAN programmes in Nicaragua and Honduras in terms of issues, instruments and management. However, it was not possible for the Regional programme to assume the agreed role of facilitator of the integration process of the AGUASAN and PGLIM programmes for the reasons described above. (<b>Mid-Term Evaluation AGUASAN Regional, 2014</b>).</li> </ul> <p><b>AGUASAN HON</b></p> <ul style="list-style-type: none"> <li>The Programme has increased adequate access to drinking water systems for 28,771 people, surpassing the planned target of 20,000. Also, 32,018 people, out of 25,000 planned, have sanitation solutions that include hydraulic latrines, drains, family sanitary landfills, improved floors and cookers, which have allowed them to improve their quality of life by reducing the frequency of respiratory diseases, while saving the consumption of firewood in their homes. The additional projects will benefit 2,329 people. It was also possible to improve the sanitary facilities of the schools in 36 communities served. (<b>ProDoc Honduras 2013-2015</b>).</li> </ul> <p><b>PCE</b></p> <ul style="list-style-type: none"> <li>5 SMALL CITIES have improved drinking water and sanitary sewerage services (<b>SDC Memoria 1970-2018</b>).</li> <li>4,269 pupils with access to water and sanitation, according to the <i>Escuela Azul</i> concept (<b>Final Report AGUASAN Nicaragua, 2013-2017</b>).</li> </ul> <p><b>PGL APIM</b></p> <ul style="list-style-type: none"> <li>The program is <b>highly pertinent and relevant</b> and succeeded in promoting decentralized mechanisms despite the tendencies of (re-) centralization or de-concentration of political power. It has significantly improved the management and sustainability of municipal finances. The previous phase also contributed significantly to an increased coverage of basic services (rural feeder roads, bridges, water and sanitation) from which more than 150'000 people benefit (whereof an estimate of 48% women).</li> <li>Over 400 community-led maintenance committees (consisting of 2'000 men and women) maintaining rural roads and water and sanitation systems provide a sustainable solution to increase the life-span of local infrastructure.</li> <li>The drinking water system for the urban area of the municipality of San Juan del Río Coco was established.</li> <li>Local capacities were strengthened to ensure continuity of benefits</li> <li>To some extent the interventions were implemented with difficulties, because the central government influenced the strategic and operational decisions of the interventions, despite the existence of a law on citizen participation.</li> <li>The gender approach could not be completed. (<b>Final Report PGL APIM Nicaragua 2016-2018</b>)</li> </ul> <p><b>Cosecha de Agua</b></p> <ul style="list-style-type: none"> <li>The main advances achieved are the construction of water harvesting and irrigation works in 1,171 families, training of 25 local extension workers assisting 2,560 families, training of service providers, specific research and technical publications, as well as communication of results. A weak point remains the scaling-up process which was not clearly delineated from the design of phase 2.</li> <li><b>Benefits achieved:</b> Establishment of productive and silvopastoral systems; Increased herd size, increased production of milk and dairy products, seed harvest, year-round availability of fodder, availability of water for livestock; Diversify the production unit (planting of fruit trees); Availability of water for production activities and human consumption; Strengthened capacities of technicians and small farm owners.; Increased income of producer families (<b>External Evaluation Cosecha de Agua, 2022</b>).</li> </ul>



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		<p><b>Río Dipilto</b></p> <ul style="list-style-type: none"> <li>Satisfactory progress was recorded in the work with FISE in the <b>training of the CAPS</b> and their rural drinking water micro-systems and in the hydro-climatic risk reduction works carried out with the municipalities of Ocotal and Dipilto. Satisfactory progress has also been made in the areas of training, education and environmental awareness and support to brigadistas and the environmental units of the municipalities. Although it is difficult to measure the level of <b>environmental awareness of the population</b>, the mission recorded high levels of ownership in the Working Groups, especially in the one carried out with young people and adolescents. The bulk of the programme's activities are the 844 farms that are being served by the programme. The mission concludes that in these farms there are <b>real changes in terms of productivity</b> and diversification and therefore a greater resilience to climate change phenomena can already be observed. At the same time, the mission considers that it will not be possible to commercialise the production of the different crops if there is not also support for the organisation of the protagonists, the implementation of a broader policy of alliances and greater integration into value chains that effectively help them to better link with markets and better manage their risks. The mission expresses its concern about the fact that there is not at the moment a decided strategy of the Programme regarding the inclusion of the large producers of the basin who are important for the amount of land in the basin that they control. (External Evaluation Río Dipilto, 2018) _Info)</li> <li>On the other hand, the time reserved for the first phase of the programme is considered too short to achieve efficiency and sustainability of the processes. (External Evaluation Río Dipilto, 2018)</li> <li>While the intervention to establish a River Basin Committee still has precarious and incipient results, the programme has carried out a large number of training events and the number of farms served is also considered high.</li> </ul> <p><b>Cuenca Goascorán</b></p> <ul style="list-style-type: none"> <li>The programme has <b>gained credibility in the communities</b> with attentive technical support to producer families, and technical, organisational and financial support to water boards and rural funds. It has also succeeded in organising and/or strengthening 13 micro-watershed councils with the participation of water boards, rural funds and other local organisations. It has made progress in coordinating its inputs at the household, community and micro-watershed levels in the three zones of the Basin, but a more complete articulation is lacking to ensure that support for changes in productive practices is consistent with the biophysical needs and action plans of the micro-watersheds. To address the critical problem of water availability and quality in the Basin, <b>inter-community, inter-institutional, inter-municipal, and inter-donor coordination</b> will be needed (External Evaluation Nuestra Cuenca Goascorán, 2018) )</li> <li>To date, more than 20,000 rural families in the Goascorán River Basin, together with 23 basin organisations, are promoting integrated water resources management and integrated management of the basin through the implementation of Water Action Plans. Of these, 6,000 producer families were involved in the implementation of Farm Plans, with access to microcredit managed through 113 Rural Savings and Credit Banks, as well as in the construction of community works for disaster risk reduction and climate change adaptation, as a key action to improve family and community resilience.</li> <li>9,291 less vulnerable families through the construction of 80 works aimed at CCA and DRR. In the case of works of benefit to the community, a municipal investment fund was set up, with counterpart contributions from local governments and community contributions. Also, local subsidies were promoted to strengthen enterprises with young people and women in the basin.</li> <li>2,965 people have been made aware of gender.</li> <li>3,540 people are members of the rural savings and credit cooperatives (46% women).</li> <li>104 reference farms disseminating learning. The reference farms were a vital space for collective community learning.</li> <li>130 enterprises supported for young people and women.</li> <li>1,719 people empowered in self-determination and Lenca indigenous culture.</li> </ul>



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		<p><b>Gobernanza Hídrica</b></p> <ul style="list-style-type: none"> <li>Positive effects are evident in the <b>empowerment of civil society, multi-sectoral</b> and generational coordination, as well as the very active and generational coordination, as well as the very active presence of women in CMOs, so that the HTMP is generating great expectation in the public and private sector. <b>(External Evaluation Gobernanza Hídrica Phase I, 2020).</b></li> <li>From the point of view of water governance, the social and organisational <b>components are very well articulated</b> and strengthened, but the investment interventions, although they respond to water-related issues, are dispersed territorially and are not articulated to an integrated river basin plan with water planning and management priorities. The investments of the Competitive Funds respond to a medium extent to the MIC or IWRM. <b>(External Evaluation Gobernanza Hídrica Phase I, 2020).</b></li> <li><b>Interview 31:</b> <i>In 2007, the work model in AGUASAN was modified, we started to work with a more local and participatory model (also valid for Nicaragua). Another challenge was the change of governments, because we had to work on feedback and raise awareness of the work with the new government officials (also valid for Nicaragua in terms of counterparts).</i></li> <li><b>Interview 30:</b> <i>Although the management was results-oriented, there was no effective dissemination of the results, nor political influence at the highest level. The results were not made visible for effective knowledge management of learning and experiences.</i></li> <li><b>Interview 1:</b> <i>A key element was the synergy established between bilateral and multilateral cooperation for the water and sanitation sector, through the donor roundtable.</i></li> </ul>
<p>3.2 Which development <b>approaches and instruments</b> have SDC and its partners successfully used over the decades to contribute to improving the W&amp;S sector in country in Nicaragua and Honduras, and which did not achieve their intended outcomes?</p>	<p>3.1.1 Intended project outputs and outcomes were (not) achieved by means of selected approaches and methodologies.</p>	<p><b>AGUASAN HON</b></p> <ul style="list-style-type: none"> <li>SDC supported the sector from different fronts: <b>investment, capacity building under a multisectoral</b> (public, private and communities) and multilevel approach (macro, meso and micro). AGUASAN supported a <b>decentralization process</b> and articulated with another SDC programmes to foster community participation, local authorities' empowerment and political leverage to improve local governance for the sector. The programme also promoted accountability between government levels and sectors which contributed to a proper coordination, information and knowledge management and sharing. Journalists were trained in WASH issues to get broader impact in sector issues. <b>(External Evaluation SDCs Engagement in the Water Sector)</b></li> </ul> <p><b>AGUASAN REG</b></p> <ul style="list-style-type: none"> <li>The most relevant issue where the Regional programme <b>will not achieve</b> the expected result is with regard to the joint AGUASAN - Governance intervention strategy. It is re-commended to pass the responsibility for the coordination or rapprochement processes between these programmes directly to the level of the programmes in Nicaragua and Honduras, as the assistance by the Regional programme turned out not to be the adequate mechanism. <b>(Mid-Term Evaluation AGUASAN Regional, 2014)</b></li> </ul> <p><b>Río Dipilto</b></p> <ul style="list-style-type: none"> <li>The mission applauds the application of the concept of <b>inter-institutional coordination</b> around a programme with a community management approach in a given watershed in the country. The fact that the institutions reached an understanding prior to the start of the programme in the Inter-institutional Commission (MARENA, INETER, ENACAL, FISE and ANA) is considered positive, as well as the fact that ANA and Nuevo FISE have a permanent presence in the technical team. <b>(External Evaluation Río Dipilto, 2018)</b></li> </ul> <p><b>Cuenca Goascorán</b></p> <ul style="list-style-type: none"> <li>Implementation of the territorial management model that included local capacity building processes, water governance and the integration of farms as a unit of intervention. A key element of this model was the articulation and access to financial mechanisms that ensure the implementation of technologies and measures for climate change adaptation (CCA) and disaster risk reduction (DRR) linked to the management and management of micro-watersheds.</li> </ul>

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		<p><b>Gobernanza Hídrica</b></p> <ul style="list-style-type: none"> <li>Positive effects are evident in the empowerment of civil society, multisectoral and generational coordination, in addition to the very active presence of women in the OGCs, so the PGHT is generating great expectations in the public and private sector. <b>(External Evaluation Gobernanza Hídrica Phase I, 2020).</b></li> <li><i><b>Interview 1:</b> The empowerment and ownership of the communities by having implemented their projects with the modality: Community Guided Projects (PGC). The implementation of the co-financing modality in the interventions of the AGUASAN Programme is highlighted; this probably motivated more the participation and/or collaboration of the direct beneficiaries of the projects. Managing interventions through community participation has been a success of SDC cooperation.</i></li> <li><i><b>Interview 31:</b> At the beginning there was a dispersion of interventions, with projects in the north, Atlantic coast, east and west of the country. This forced us to be more involved with the different projects or sub-projects, and therefore demanded a greater amount of resources (valid for Nicaragua as well). Addressing the issue of sanitation was a challenge, because the main demand of the population was water. An awareness-raising campaign had to be carried out with the population that water and sanitation should be addressed together.</i></li> <li><i><b>Interview 35:</b> the HRWS approach was very transformative – it basically changed everything (similar expressions in Interviews 1,2,16,21)</i></li> </ul>
3.3 Which <b>stakeholders</b> were reached and how - and which were excluded and why? Which <b>capacities</b> were changed and how?	<i>descriptive/illustrative</i>	<p><b>AGUASAN NIC</b></p> <ul style="list-style-type: none"> <li>-With FISE, under a new intervention model, private companies were contracted and did not achieve the expected results, indicating very little knowledge of the project cycle on their part. It is necessary to strengthen the private sector, especially at the local level in alliances with universities and to establish an accreditation system <b>(Final Report AGUASAN Nicaragua Phase 08 - 13).</b></li> </ul> <p><b>Río Dipilto</b></p> <ul style="list-style-type: none"> <li>The mission expresses its concern about the fact that there is not at the moment a decided strategy of the Programme regarding the inclusion of the <b>large producers</b> of the basin who are important for the amount of land in the basin that they control. <b>(External Evaluation Río Dipilto, 2018)</b></li> <li>The Project promoted the continued application of a <b>gender equity</b> approach in all analysis, planning and decision-making processes. As a result, a broad and general participation of women in community structures (CoC, CoMC, CAPS, Promotores/as, field school graduates, youth group and multi-threat brigades of Dipilto and Ocotol) in decision-making positions and mainly in the work of implementing the Environmental Restoration Systems (ERS) was achieved <b>(End of Phase Report, GOPA).</b></li> </ul> <p><b>Gobernanza Hídrica</b></p> <ul style="list-style-type: none"> <li>The <b>participation of the private sector</b> is one of the successes of the programme, gaining their trust and commitment to assume co-financing of investments and their participation in the CCs has been highly valued, public and private rivalries have been deposed. However, the private sector demands greater articulation and participation in decision making, which may allow a greater leverage of financial resources such as technical complementation of investments through public-private water partnership. <b>(External Evaluation Gobernanza Hídrica Phase I, 2020).</b></li> </ul> <p><b>General documents:</b></p> <ul style="list-style-type: none"> <li>The implementation of Development Cooperation via non-state actors was simply a <b>no-go</b> in Nicaragua <b>(Final Report Thomas Jenatsch – Managua, 2020)</b></li> </ul>

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		<ul style="list-style-type: none"> <li><b>Interview 1, 6, 21:</b> NGOs contributed significantly to AGUASAN, as they helped to establish innovative ideas. However they have become non-existent in the past few years.</li> <li><b>Interview 31:</b> The regional strategy focused on the most vulnerable groups, but did not focus on large landowners, who influence land use.</li> </ul>
<b>4) Impact</b>		
<p>4.1 How, and to what extent, did project X <b>contribute to poverty reduction</b> and/or the <b>reduction of inequalities</b> in Nicaragua and Honduras?</p>	<p>4.1.1 SDC's projects contributed to reducing poverty in relevant dimensions like health, education, basis services and security.</p> <p>4.1.2 SDC's projects contributed to effectively strengthening partner institutions and increasing resilience of the target group.</p>	<p><b>AGUASAN NIC</b></p> <ul style="list-style-type: none"> <li>In the area of <b>infrastructure and basic services</b> the results were good. Around 100,000 people gained access to safe drinking water and two thirds of the beneficiaries are applying various hygiene measures (disinfecting drinking water, washing hands and using latrines) which contributes to improving the quality of life, particularly for women and children. Positive results were also achieved with the focus on access, quality and sustainability of water tariffs, community management and poverty reduction. Sustainability of investments in sanitation and hydropower remains a challenge. Disaster Risk Reduction (DRR) was incorporated into local planning and national capacities for DRR were strengthened. <b>(SDC Memoria, 1970-2018)</b></li> </ul> <p><b>AGUASAN HON</b></p> <ul style="list-style-type: none"> <li>AGUASAN had a strong impact on national institutions in the definition of policies, regulations and the participation of civil society institutions leading on water issues, in order to strengthen citizen participation and governance.</li> <li>At the micro level, support was specifically provided to the Water and Sanitation Administrative Boards (JAAPS). Through JAAPS, <b>capacity was generated</b> to manage and maintain the WSS systems, with the participation of all communities.</li> <li>Two issues in which significant progress has been made, and in which a process of expansion has begun, are that of <b>Local Regulation and Control</b>; and in the formulation and application of municipal policies for the W&amp;S Sector. This is strengthened by the Programme's participation in dialogue and coordination spaces, which has enabled alliances to be made with donors and key actors in the W&amp;S Sector to emphasise discussion topics, influence national policies and reach agreements on the implementation of actions. However, it is perceived that among cooperation agencies, Swiss cooperation is more willing to align and harmonise in the sector <b>(Final Report AGUASAN Honduras 2008 - 2013)</b>.</li> <li>SDC projects developed considerable <b>capacity at individual and institutional level</b> but were not as successful in changing the wider enabling environment, which was still dependent on <b>weak national institutions</b>. SDC interventions developed considerable capacity at project level through training, learning on the job, providing manuals and materials of high quality, in WASH, IWRM and wider governance (e.g. IWRM, DRR, data collection, monitoring, participatory and regulation methodologies, analysis, GIS mapping, reporting). Nevertheless, in most countries there was an absence of ongoing research, knowledge and academic institutions for WASH and IWRM that could sustain the capacity developed in the long-term. In Honduras, it became necessary to train staff abroad, meaning that the capacity advances created by the SDC projects were vulnerable. Many countries had insufficient critical mass to guarantee an active participation in national reforms, international networks or global programmes. (Evaluation SDCs Engagement in the Water Sector, S. 46)</li> <li><b>Living conditions</b>, especially for women and girls involved in water fetching (water fetching time was reduced, girls' and boys' school attendance was increased) (e.g. in a project in Honduras the improved access to WASH services influenced positively school attendance of children, specially of girls during the days of their menstrual period, and increased their safety not having to carry water from a source far away from home. Often before the SDC intervention, they were exposed to rapes and harassments); (Case study Honduras, HN 21 PROGRAMA AGUASAN HONDURAS <b>(Evaluation SDCs Engagement in the Water Sector, 2020)</b></li> </ul>

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		<p><b>Cosecha de Agua</b></p> <ul style="list-style-type: none"> <li>• <b>ECONOMIC IMPACT: Overall profitability</b> was observed during the field visit of the evaluation mission: The farms and families consulted and the focus group participants who had water harvesting systems installed confirmed higher production volumes and in some cases the production of new products for local sale; irrigation contributed to an increase in harvests, an increase in the planting area of perennial and annual crops, diversification of production and in some cases in the reduction of time spent giving water to animals, the use of the water harvesting system to wash and pulp coffee and an <b>increase in overall farm value. (External Evaluation CdA, 2022)</b></li> <li>• <b>SOCIAL IMPACT:</b> "Being the master of your life as you don't replicate inherited production systems" was a comment from a young woman farmer during a focus group discussion. The option of intelligent and diverse water management and use opens the way to a <b>self-determined future</b>. This is how the coordinator of the National Network of Watershed Organisations (RENOC) platform reported a testimony during a producer exchange visit: "Wow, this takes my mind off the idea of leaving". Water harvesting opens up new options and motivates people to look for alternatives that can reduce the need to migrate.</li> <li>• The conflict around water is <b>not insignificant</b>, especially with increasing pressure on the dwindling resource in the driest and most populated areas. Awareness-raising, collaboration and coordination of different actors and stakeholders, and the project's training of producers, local technicians and private providers strengthen knowledge about the issue, the problems and the options for their solution. Conflict mitigation also depends on technical information, and the model of selection of practices and sites helps to cushion tensions. <b>(External Evaluation CdA, 2022)</b></li> <li>• <b>INSTITUTIONAL IMPACT:</b> The interest on the part of various institutions at different levels to learn about the results of the project in their different fields points to a <b>great potential for collaboration and exchange</b>. Local institutions, public (municipalities and universities) and private (NGOs, service providers) are observed to identify opportunities for collaboration, training or shared actions. The data and the methodology for determining suitable systems for each location and farm developed by the project could improve the technical recommendations of other institutions: INTA, FAO and the Ministry of Finance and Public Credit mentioned these project products.</li> <li>• There is a pronounced interest in international academia to work and publish in partnership, but the studies and research need to be finalised and made visible to find their way to the wider scientific community. Conclusion: both positive and negative impacts cannot be known with certainty, as implementation time and specific studies are lacking. <b>(External Evaluation CdA, 2022)</b></li> </ul> <p><b>Río Dipilto</b></p> <ul style="list-style-type: none"> <li>• There are positive indications, for example in terms of the <b>diversification of producers' farms</b>, which is already observable and measurable at the moment, and which contribute to greater resilience to climate change. There is also a high level of environmental awareness among protagonists and young people who will undoubtedly be of fundamental importance in the future of the basin.</li> <li>• Another indicator is the support for the renewal and <b>diversification of production systems on farms</b>. Small coffee producers are recovering from the rust crisis through renovation and resistant species. It is necessary to continue supporting this effort with innovation, organisation and marketing, as a higher economic level of the inhabitants of the basin definitely increases the possibilities of responding to natural events (resilience), including those caused by climate change.</li> <li>• In the medium term, the effects of climate change on coffee production in the basin are likely to manifest themselves in a rise in temperature, affecting coffee cultivation in the lower part of the basin. In other parts of Latin America, these coffee crops are being replaced by <b>cocoa and other productive alternatives</b>. It is important that the Programme collects scientific information on this and prepares these producers, preferably through the Basin Committee, Mayors' offices and coffee growers' organisations. <b>(External Evaluation Río Dipilto, 2018)</b></li> </ul>

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		<p><b>Cuenca Goascorán</b></p> <ul style="list-style-type: none"> <li>The major impacts of this intervention are: 1. Community development; 2. Capacity building of those involved; 3. Participation of women; 4. Implementation of water governance with the participation of a diversity of actors (community, producers, municipal governments, national institutions, private companies); 5. Replication and scaling up of the model of integrated watershed management.</li> <li>Through the dialogue initiated with the Mesa Lenca, a way is being sought to make visible and support the indigenous people in the articulation of their own culture, identity, values and cosmovision, with particularities in the way they conceive their relations with the environment and nature (<b>External Evaluation Nuestra Cuenca Goascorán, 2018</b>).</li> <li>In the different areas of the basin we found elements that show that there is an important participation of women in some community spaces and dynamics</li> <li>The integration of the educational community (teachers, students and parents) and religious groups would be of great importance in terms of awareness raising, which would allow access to a space for education and awareness raising with a view to the adoption of new practices, habits and behaviours related to the use, care and protection of water resources. (<b>External Evaluation Nuestra Cuenca Goascorán, 2018</b>)</li> <li>In the past eight years of the Project, in addition to Switzerland's previous contributions to drinking water and sanitation and the strengthening of local governance in municipalities in the Goascorán Basin, significant changes have occurred in the living conditions of the population and rural communities (<b>External Evaluation Nuestra Cuenca Goascorán, 2018</b>).</li> <li><b>Interview 1:</b> Another important aspect of sustainability is that the CAPS Law establishes a reduced energy consumption tariff (subsidy) in favour of users to contribute to the sustainability of the W&amp;S systems. At the local level, the CAPS generally apply environmental measures to counteract soil degradation, pollution of water sources and deforestation, especially in water recharge areas. Changes in individuals, families and communities in hygiene habits through the FECSA methodology. Strengthened the governance approach through SDC support for the approval of national/sectoral laws, regulations and technical instruments</li> <li><b>Interview 31:</b> That with AGUASAN, SDC made an important contribution at the Central American level, particularly because of the interrelationships established at the country level (Nicaragua, Honduras and El Salvador).</li> <li><b>Interview 31:</b> At present, AGUASAN continues to work on the development of municipal policies through the National Water and Sanitation Council (CONASA) and the Regulatory Body for Drinking Water and Sanitation Services (ERSAPS) in Honduras.</li> <li><b>Interview 22:</b> In the second phase, one modality of work was the Fondos Concursables was implemented. These were highly appreciated by the community and have had a significant impact</li> <li><b>Interview 25:</b> There has been important learning on the issue of watershed management, but that does not guarantee to replicate and scale up the model at the regional level, because each country has its own dynamics. Enabling conditions have to exist in each country for a specific model to be replicated (public policies, sectoral policies, political commitment, secured funds, etc.).</li> </ul>
4.2 What other longer-term key changes has SDC's bilateral cooperation in sector X in country X through project X contributed over the past 20 years (intended or un-intended)?	<p>4.2.1 SDC projects effectively contributed to changes in norms/systems (e.g. on gender and social inclusion).</p> <p>4.2.2 SDC projects contributed to aggravating/improving conflicts.</p> <p>4.2.3 SDC projects contributed to other significant</p>	<p><b>AGUASAN NIC &amp; HON</b></p> <ul style="list-style-type: none"> <li>Water governance at all levels was an important contribution of AGUASAN.</li> </ul> <p><b>Gobernanza Hídrica</b></p> <ul style="list-style-type: none"> <li>Honduras has at least six laws and three related policies with major relevance for the water sector (see Annex 2 for a comprehensive list). In order of relevance, the first is the General Water Law (LGA), Decree 181-2009, which is the most important legal instrument for the regulation and standardisation of water resources in the country. Despite the fact that almost eleven years have passed since its</li> </ul>



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How and to what extent did the interventions of project X cause <b>higher-level effects</b> (such as changes in norms or systems)? How will the interventions contribute to <b>changing society</b> in Nicaragua and Honduras for the better?	(positive/negative) changes in the lives of the intended beneficiaries.	<p>creation, this Law still does not have an approved regulation, which has limited its application. Currently, there is a draft regulation, which was socialised during the last quarter of 2019. The LGA establishes that sectoral responsibility corresponds to the Ministry of the Environment, especially the Water Authority, which is given the role of facilitating the creation of Basin Councils (<b>Gobernanza Hidrica, Prodoc Phase II</b>).</p> <ul style="list-style-type: none"> <li><b>Interview 1:</b> The approval of the General Law on National Waters (Law 620) and the Special CAPS Law (Law 722) stands out because it provided legal security to users and other parties involved in the administration, operation and maintenance of WSS systems. The determination by the CAPS of real tariffs that imply an adequate and reasonable cost-benefit ratio to guarantee the sustainability of the services is still pending. <ul style="list-style-type: none"> <li>The acceptance and widespread use of micro-meters by water system users.</li> <li>The issue of water treatment and quality remains a challenge to overcome.</li> <li>The possible migration for various reasons of community members in general, and some CAPS members in particular.</li> <li>It is still a challenge to achieve gender parity (50% women and 50% men) in the participation, decision-making and leadership of women in community organisations.</li> <li>How to guarantee the voice of the CAPS in the inter-institutional spaces of the water sector, because they do not have a legal representative as an organisation.</li> </ul> </li> <li><b>Interview 31:</b> Based on the framework law of the drinking water and sanitation sector, it was established that the JAAPS would be formed in each community, with the participation of boards of trustees, micro-watershed committees and civil society.</li> <li>SDC's cooperation contributed to sectoral or institutional policies, which are still in force today. It had an impact on the regulatory environment and on the formulation of national or sectoral policies.</li> <li>One of SDC's greatest achievements is that this institutional framework is still in place with the other municipalities that did not benefit from AGUASAN.</li> <li>At the meso level, the contribution was at the level of commonwealths and municipalities. Capacities were generated on issues related to regulation and local policies. At the micro level, direct support was given to the JAAPS. Capacities were generated in technical and administrative-accounting issues, and all this knowledge and learning continues to be applied today.</li> <li>Having built W&amp;S systems in the communities allowed the community members to free up the time they used to dedicate to collecting and transporting water and use it for other productive and personal activities. Likewise, it also allowed women to free up time to devote more to household chores, and to take care of their families, likewise, it allowed children to go to school instead of going to collect water in remote places.</li> </ul>
<b>5) Sustainability</b>		
5.1 To what extent are the benefits of project X <b>likely to continue</b> after SDC funding ceases ( <i>for closed projects: did the benefits actually continue?</i> )?	6.1.1 Exit strategies were defined and implemented (e.g. discontinuation or reduction of measures when targets were reached or transfer of responsibility to national structures). 6.1.2 Projects concepts generally consider national capacities necessary in order to build on project achievements.	<b>AGUASAN NIC</b> <ul style="list-style-type: none"> <li><b>Interview 1:</b> A key aspect of sustainability is that the approaches and models of AGUASAN's intervention continue to be implemented and have adapted (resilience) with the population growth of communities and small towns. Due to changes in government and officials, a strategy to keep the SIASAR up to date could not be achieved. Community participation is a key element to ensure the sustainability of rural water and sanitation systems.</li> </ul>



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What were/are the <b>successes and hindering factors</b> ?	6.1.3 National (governmental and non-governmental actors) were closely involved in project implementation as partners/beneficiaries with a high level of ownership.	<p><b>AGUASAN HON</b></p> <ul style="list-style-type: none"> <li><b>Interview 21:</b> Through a recent mission I was able to see that the water systems were kept functioning well, likewise, it was the case with the actions carried out for the management and protection of the micro-watersheds, because the advance of the agricultural frontier continues to be a latent threat. The communities have carried out activities to raise funds to enable them to buy the land where the water sources are located and carry out reforestation work to protect them. They have taken steps with the Forest Conservation Institute (ICF) to declare the areas where the water sources and micro-watersheds are located as conservation zones or protected areas.</li> </ul> <p><b>AGUASAN REG</b></p> <ul style="list-style-type: none"> <li>Coordination with the WSP-WB, the actions of FOCARD-APS, the need for <b>information systems</b> in the countries and at the regional level, as well as the participation of the countries in all activities related to sanitation monitoring, incorporating the gender perspective, ensure the elements of efficiency and sustainability of these actions. (<b>Midterm Evaluation AGUASAN Regional, 2014</b>)</li> </ul> <p><b>PGL APIM</b></p> <ul style="list-style-type: none"> <li>In the case of the APIM, the methodology of <b>municipal budget support</b> and comprehensive technical support for services is an advantage that can complement efforts to make AGUASAN's water and sanitation investments more sustainable. (<b>Internal Autoevaluation PGL APIM 2014</b>)</li> </ul> <p><b>Cosecha de Agua</b></p> <ul style="list-style-type: none"> <li>It was observed in the beneficiary families that the <b>first income generated is being capitalised</b>: in the purchase of livestock, in small businesses and in investments in new options for capturing water (pumping, catchment in streams, etc.), increasing and diversifying the production area and improving housing, signs of not wanting to migrate. Road and media connectivity open up opportunities to find solutions to marketing and technical problems (consultation with suppliers) but still need to be strengthened. From these signs of capitalisation, it could be deduced that the beneficiary families will look for ways to maintain or even increase their investments. On the other hand, the consultant team had no information on examples of replicating or seeking to install water harvesting systems promoted by CATIE/COSUDE in other ways: private investments, municipality projects, state programmes.</li> <li>An important factor contributing to the sustainability of family production systems is the <b>knowledge generated and the continuous improvement</b> of their livelihoods: soils, water, water recharge zones, increased livestock capital, etc. Therefore, they have better conditions/options to face risks such as drought.</li> <li>Migration and occasional off-farm employment remains an important strategy to achieve cash income for poor families who are the most vulnerable. The options offered by water harvesting and the increasing difficulties encountered by migrants in Central America in general may favour the search for local alternatives. Conclusion: Impact and sustainability depend to a large extent on the profitability results of the different models of water systems and productive systems which are not fully known at the moment. (<b>External Evaluation CdA, 2022</b>)</li> </ul> <p><b>Río Dipilto</b></p> <ul style="list-style-type: none"> <li>At the level of the farms and actors as well as at the level of the community organisations (CAPS, social promoters), good levels of participation are observed. The technologies introduced on the farms are generally adequate and the producers' economies can sustain them without major problems. However, the mission concludes that, given the <b>insecurity of the institutional presence</b> in the sub-basin, the sustainability of the Programme's results (and a true community management of the basin) depends on <b>higher levels</b> of involvement of the basin's stakeholders. In particular, the Basin Committee must represent all sectors in order to have prospects for sustainability. In reality, its great weakness and threat to its future existence is that it does not have the capacity to represent all sectors in</li> </ul>

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		<p>order to have prospects of sustainability. There is no concrete progress in the establishment of compensation mechanisms for ecosystem services that would give a budget and economic independence to the committee (External Evaluation Río Dipilto, 2018)</p> <ul style="list-style-type: none"> <li>• The constitution and consolidation of a Basin Committee in charge of the <b>integrated management of the basin</b> and the implementation of mechanisms for rewarding ecosystem services are the two elements that could guarantee the sustainability of the Programme's results. Unfortunately, little progress has been made in these two areas, a year and a half after closing the first phase of the Programme (External Evaluation Río Dipilto, 2018)</li> <li>• Strengthening the <b>integrated capacities of the CdC</b> is key to improving its performance in terms of community management of the Dipilto river basin. It is therefore essential to support them in the design and implementation of a system of contributions from stakeholders in the basin that can make its functioning sustainable. This last point will be given in the active participation in the elaboration of the basin's master plan (in process) and, therefore, its appropriation (ownership). In addition to being participatory, it will have an emphasis on water resource management and will be the integrating <b>instrument</b> to facilitate dialogue, planning and monitoring of the different stakeholders where the other existing plans are integrated and articulated.</li> <li>• The CAPS; FISE advises and supervises that the social infrastructure required for community water management is designed and strengthened in accordance with Law 722 and has rehabilitated 20 CAPS (53% men and 47% women) for the maintenance of their community water systems. Like the basin committees, <b>there is a lack of integration of other social actors</b> working in the basin and demanding water resources. Generally, the challenge for the CAPS is to elaborate investment budgets, propose solutions and update water demand in terms of quantity and quality according to population growth. In the Focus Group session with the CAPS-Dipilto, it was noted that the current tariffs are not adequate for operational and sustainability purposes. In the case of CAPS-Las Manos, they managed to establish three differentiated tariffs according to use and ability to pay. In the lowest tariff, users committed to work on the protection and conservation of recharge and catchment areas. This is a key mechanism of self-sustainability and compensation that will make the existence of the CAPS sustainable in the basin and its consolidation depends a lot on the degree of organisation and appropriation of Law 722. (External Evaluation Río Dipilto, 2018)</li> </ul> <p><b>Cuenca Goascorán</b></p> <ul style="list-style-type: none"> <li>• Ways to assure sustainability:             <ul style="list-style-type: none"> <li>- <b>First</b>, so far there has been a gradual advance of municipal support for the priority projects identified by the councils and financed mainly by the Programme funds. In one case, the local government of Santa Ana has included a line item in the municipal budget to ensure the availability of counterpart funding for such projects. Although the amounts of this support are small, they are important as a hallmark of the collaboration between the councils and the municipal governments.</li> <li>- <b>The second</b> is payment for environmental services. It is possible that the population in municipalities in the middle and lower zones of the Basin will eventually come to buy water from the upper zone and pay the source protectors. For this to happen, however, a much more advanced level of organisation and coordination in basin management needs to be achieved, as well as a new willingness of the population to pay for the volume of water supplied. This is not a realistic option in the short term.</li> <li>- <b>The third option</b> is the support of international cooperation. At the moment, this is provided by SDC, and it is possible that other donors will join the support once the basin councils have legal personality and proven management capacity. However, it would only be after a second phase of the programme in which SDC support is provided directly to the councils and effectiveness in resource management is demonstrated that this option becomes a realistic possibility.</li> </ul> </li> </ul>

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		<ul style="list-style-type: none"> <li>- <b>The fourth option</b> is an increase in the contribution of the communities themselves, through their voluntary work, and their direct financial contributions. In fact, this is how water boards work, once they get the necessary external inputs for their capital investments. The great advantage of this fourth source is that its control and growth is already in the hands of the community actors leading the micro-watershed councils. Increasing the contribution from this source is possible for them, without depending on decisions made by governmental bodies that they do not control. In fact, the rural banks currently have a banking monopoly in the basin. At the same time, there has been a high level of collaboration of the local population in collective efforts of voluntary work. In addition, it is observed that many residents in the lower zone have a lot of capacity and spark for profitable, commercial and other activities (<b>External Evaluation Nuestra Cuenca Goascorán, 2018</b>).</li> </ul> <p><b>Gobernanza Hidrica</b></p> <ul style="list-style-type: none"> <li>• Sustainability is a challenge, which in one of its dimensions involves financing, both for investments and technical assistance; in this sense, the articulation with the public policy and institutional framework of the LGA is very relevant, in order to ensure the quality of the performance of the basin organisations with the stakeholders, especially municipal and sectoral public actors, in compliance with their competences with respect to the MIC and IWRM.</li> <li>• It is too early to give an opinion on sustainability, but the foundations are in place, <b>as strategic alliances</b> are being formed with territorial partners from the public and private sector, especially at the local level. However, it is necessary to broaden and strengthen alliances with strategic multi-sectoral partners, both public and private, regional, national and international cooperation, articulated by the objectives and results of the PGHT.</li> <li>• Emphasis on the sustainability of governance should be articulated in an intersectoral manner, calling for complementarity and coordination with other sectors (Energy, Mining, Irrigation, Forestry, Environment, Protected Areas, etc.), public and private programmes and projects in the region.</li> </ul> <p><b>General documents:</b></p> <ul style="list-style-type: none"> <li>• Nicaragua will therefore be dependent on external aid for many years to come. The international community should be patient (<b>Final Report Thomas Jenatsch – Managua, 2020</b>)</li> <li>• <i>Interview 22: Financial sustainability in the watershed (.g. fondo concursable) continues to be an important issue</i></li> </ul>
<p>5.2 Did SDC's intervention in project X lead to <b>scalable</b> or <b>replicable</b> results (for closed interventions: Were those actually up-scaled or replicated?)?</p>	<p>6.2.1 Project approaches were scaled-up in the priority regions. 6.2.2 Project approaches were replicated outside the priority regions.</p>	<p><b>CdA</b></p> <ul style="list-style-type: none"> <li>• Two key points influence the possible sustainability of the project results: the profitability of the water harvesting, irrigation and production systems (see above, profitability) and the financing options for the investments. For the immediate future, it seems difficult for the sector's institutions to scale up this proposal <b>without external financial support</b>. There is mention by the Ministry of Finance and Public Credit that CdA is "part of the national poverty reduction strategy" (meeting 24.01), but government institutions <b>have few resources</b>. It seems that the high investment in reservoir infrastructure and technical assistance could only be implemented under the current project modality with an international source of funds and specialised technical support as provided by CATIE. If the strategy of communicating the profitability of the productive works and systems has the desired effect on producer families, service providers and specialised banks, the risk of the high initial investment could be reduced. The support of expert institutions in promotion and technical assistance, as well as in the training of specialised personnel, could be another guarantee for the continuity of the initiative. (<b>External Evaluation CdA, 2022</b>)</li> </ul> <p><b>Río Dipilto</b></p> <ul style="list-style-type: none"> <li>• Es posible replicar esta experiencia en otras cuencas del país que tengan características similares. (eje; cuenca de Estelí).</li> </ul>

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		<p><b>Gobernanza Hídrica</b></p> <p>Scaling up. This phase represents the challenge of scaling up from micro to meso and macro, at the level of sub-basin and basin management in the two results, promoting the formation of the CMOs for the Sample, Nacaome and Choluteca Basins with their corresponding sub-basin CMOs if necessary; providing them with the corresponding tools for planning, management, monitoring, management of the investment project cycle, financing management, etc.</p> <ul style="list-style-type: none"> <li><b>Interview 1:</b> The Community Managed Project (CMP) model is very relevant as a community work experience that can be replicated at the institutional level, i.e. nationalising the model. The creation of the water company (EMAGUA) in the municipality of El Tuma-La Dalia could be another interesting experience that could be replicated at the national level.</li> </ul>
<b>6) Lessons Learned</b>		
6.1 What did <b>work well</b> and what are considered the <b>greatest failures</b> of SDC's bilateral cooperation in the W&S sector in Nicaragua and Honduras?	<i>descriptive/illustrative</i>	<p><b>What worked well:</b></p> <ul style="list-style-type: none"> <li>The majority of the interviews pointed to topics that were already mentioned: this is mainly the high flexibility of SDC's interventions and their capability to adapt to the given situation. The long duration of AGUASAN was also highlighted as a very positive experience. The integral approach that SDC has used over the years and its focus on the individual, the community was also seen by many as a positive factor.</li> </ul> <p><b>What did not work well:</b></p> <ul style="list-style-type: none"> <li>Few factors were named here, some of them included the modality of working with a consortium. Furthermore, in AGUASAN and PCE, working with subcontractors proved to be a model that did not work out</li> </ul>
6.2 What lessons can be learned from SDC's bilateral cooperation in W&S in Nicaragua and Honduras in order to <b>guide partner governments, other national and international partners</b> that may step in after SDC to continue projects and programmes?	<i>descriptive/illustrative, overall conclusions of study</i>	<p><b>AGUASAN Honduras &amp; Nicaragua</b></p> <ul style="list-style-type: none"> <li><b>Articulation at the horizontal and vertical level</b> and comprehensiveness (investment and institutional strengthening) promote significant changes that remain over time and become reference for new actions (Evaluation SDCs Engagement in the Water Sector, S. 119)</li> <li>The <b>political moment</b> in which support is granted is a key element for aid effectiveness, as well as its adaptation capacity to the local needs in the partner country. The applications of cross-cutting approaches require the allocation of specific financial resources, otherwise the training and advocacy that is done to incorporate them into the project cycle remains only in good intentions.</li> <li>When making decisions on what actions to carry out in a specific territory, it is important to analyse the local context beyond the mere fulfilment of indicators at a national or international level (MDG/SDG) or the introduction of a technology that may be suitable in other parts, but not everywhere.</li> <li>Support to the <b>sector governance</b> in means of capacity development, national, subnational policies' design and implementation, standards and regulations' implementation, and knowledge management, are legacies that remain over time and go beyond borders, beyond the investment that constitutes that if a gateway in the sector (<b>Evaluation SDCs Engagement in the Water Sector, 2020</b>)</li> </ul> <p><b>Cuenca Goascorán</b></p> <ul style="list-style-type: none"> <li>The micro-watershed councils are the ideal multi-stakeholder platforms for effective municipal integration and participation. In the lower zone, we highlight the case of the Costa de Amates micro-watershed council, where local government plays a strategic role. This municipal leadership may be driven by the size of this micro-watershed in which there is a high territorial coincidence between the municipality and the micro-watershed. (<b>External Evaluation Nuestra Cuenca Goascorán, 2018</b>)</li> <li>Governance was the common denominator in the process of management and administration of the basin, being the articulation and coordination with all levels, sectors and actors present in the territory that allowed the achievement of concrete, complementary and</li> </ul>

Guiding Questions	Assessment Criteria / Indicators	Results / Comments on the assessment
		<p>sustainable results. In territorial water governance processes, capacity building of stakeholders, access to information, transparency and accountability are paramount. This, in turn, contributes directly to legitimacy and sustainability in the application of institutional norms and policies</p> <ul style="list-style-type: none"> <li>• To the extent that local governments and central government institutions linked to natural resource management, with an emphasis on water resources, generate trust and credibility with community organisations, water governance processes in the territories will be strengthened.</li> <li>• The development of spaces for coordination and joint planning between the Programme's implementing institutions and organisations proved to be one of the most important institutional practices for the achievement of shared results and goals, with which the organisations can articulate and complement actions to accompany the processes developed with families and community organisations.</li> <li>• Materialising inter-programme articulation efforts requires a high level of commitment on the part of the actors involved, which implies being clear about work approaches, action horizons and a commitment to shared results. <b>(Nuestra Cuenca Goascorán, Memoria 2023).</b></li> </ul>
<p>6.3 What lessons can be learned for SDC <b>institutionally</b> and/or <b>sectorally</b> that may be relevant for SDC to improve development effectiveness in sector X elsewhere? What have been <b>enabling</b> and <b>hindering</b> factors?</p>	<p><i>descriptive/illustrative, overall conclusions of study</i></p>	<ul style="list-style-type: none"> <li>• Reinforce the links between GPW, country and regional actions. The global programme was strategic at the global level, reflected Swiss comparative advantages and provided a centre of gravity for water in SDC but links to the bilateral level were not always strong for a variety of reasons noted in this evaluation. Many SDC staff at the country level were not aware and not able to take advantage of highly relevant GPW initiatives. Where GPW staff were operating at regional level the interaction and two-way “elevator” effect was more pronounced which led to benefits for both the bilateral and global domains and indicates the potential that stronger links would have (linked to conclusions 6,8 and 9) <b>(Evaluation SDCs Engagement in the Water Sector, 2020)</b></li> <li>• Strengthen the project approach in water by linking with wider processes to obtain transformative and systemic change. SDC projects at community and sub-national level have been highly effective in reaching poor and marginalised populations. However, the approaches introduced by SDC have had a demonstration value that has not been fully exploited or brought to the level of prioritisation where it has a critical mass that can influence and effect transformative change (linked to conclusions 1,4 and 5). <b>(Evaluation SDCs Engagement in the Water Sector, 2020)</b></li> </ul>