2019

Project Implementation Review (PIR)

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SCCF ASADAS

Basic Data 2
Overall Ratings 3
Development Progress 4
Implementation Progress 38
Critical Risk Management 40
Adjustments 41
Ratings and Overall Assessments 42
Gender 50
Social and Environmental Standards 52
Communicating Impact 54
Partnerships 61
Annex - Ratings Definitions 65

A. Basic Data

Project Information	
UNDP PIMS ID	5140
GEF ID	6945
Title	Strengthening Capacities of Rural Aqueduct Associations' (ASADAS) to address climate change risks in water stressed communities of Northern Costa Rica
Country(ies)	Costa Rica, Costa Rica
UNDP-GEF Technical Team	Climate Change Adaptation
Project Implementing Partner	CRI10 (Costa Rica)
Joint Agencies	*(not set or not applicable)*
Project Type	Full Size

Project Description
(not set or not applicable)

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B. Overall Ratings

Overall DO Rating	Satisfactory
Overall IP Rating	Satisfactory
Overall Risk Rating	Low

C. Development Progress

Description					
Objective **Improve water supply and promote sustainable water practices of end users and productive sectors by advancing community- and ecosystem-based measures in rural ASADAS to address projected climate-related hydrological vulnerability in northern Costa Rica**					
Description of Indicator	**Baseline Level**	**Midterm target level**	**End of project target level**	**Level at 30 June 2018**	**Cumulative progress since project start**
Proportion of ASADAS with continued water availability for different time periods	a. 12 months 78,4% b. 9-11 months at 4,0% c. 6-8 months at 4,8% d. 3-5 months at 4,8%	*(not set or not applicable)*	The continued water availability for all the ASADAS is at least 5 months	The target of Continued water availability for all the ASADAS is at least 5 months is on track. According to the baseline updated as of June 30, 2017, 4.8% of the ASADAS of both regions had water availability between 3-5 months. For the present report, only 0.5% of ASADAS remain in that category, which means a percentage improvement of 4.3%. There are also increases in the higher categories, as can be seen in the following figures: Water availability (months) / proportion of ASADAS: a. 12 months / 89,7% b. 9-11 months/ 8,8% c. 6-8 months / 1,0% d. 3-5 months / 0,5% These changes in water availability have been made	The target for this indicator is on track. For purposes of measuring this and all other indicators, it is important to clarify that the universe of ASADAS included in the project has decreased. In 2017 the universe was 225 ASADAS, in 2018 it was 211, and the current reporting period must be measured on the basis of 206 ASADAS. This is due to the implementation of AYA's policy supported by the project to reduce the number of small and unprofitable ASADAS by integrating and merging them to bigger and more organized ASADAS, with a vision of economies of scale and cost effectiveness. The cumulative progress to date for both Chorotega and Norte-Norte Region in Water availability (months) / proportion of ASADAS is: a. 12 months / 88,9%

				possible by the following: 1. Investments in infrastructure improvement have been done: through a process of proposal selection driven by the project with its own funds (using the SGP-GEF funding mechanism), 29 aqueducts infrastructure improvement and operation projects have been approved, resulting in the expansion or change of 37.6 km of pipes to improve services to 36,000 people of 22 ASADAS, and the increase in the capacity of storage in 132m3 in 5 ASADAS. This represents a contribution for USD $300.000 that complement additional investments made by strategic partners, the AyA, and the ASADAS themselves. 2. Climatic variability: the end of the ENSO cycle (2014-2016) in Chorotega region that implies a return to "normal conditions" on rainy season precipitation, which allows recharging of aquifers and impact directly on the increase of water availability.	b. 9-11 months/ 9% c. 6-8 months / 1,0% d. 3-5 months / 0,5% e. less than 3 months, 0,5% Proportion of ASADAS with water availability for both Chorotega and Norte-Norte Region remained stable throughout this period with a very slight drop with no statistical significance despite having experienced an intense dry season due to ENSO 2018-2019. Part of the reason for this has to do with cumulative investments for reduction of unaccounted water, which improves efficiency in catchment and distribution, as well as the increase in storage capacity reported in outcome 1.1. These investments (as reported in the previous year's report) include infrastructure and operation in 29 aqueducts resulting in the expansion or change of 37.6 km of pipes to ameliorate services to 36,000 people of 22 ASADAS, and the increase in the capacity of storage in 132m3 in 5 ASADAS. As noted above, there are 5% of ASADAS with less than 3 months water availability. This is because ASADA El Torito (Nicoya-Guanacaste) must ration water all year long due to the depletion in their water source production.

					However, with support of the project, by the end of 2019, this ASADA will have a new fully operational water catchment.
Water availability per capita (water intake [volume at source]/number of people served by ASADA)	a. 201-500: 5,7% b. 501-1,500: 29.5% c. 1,501-5,000: 11.5% d. 5,001-10,000: 3.1% e. >10,000: 3.5% f. No data: 44.9%	*(not set or not applicable)*	Water availability per capita is maintained or improved	The target to maintain or improve volume of water availability per capita is on track. In 2017, baseline information was updated. The indicator of water availability considers the growth of the number of users and the variation recorded by each ASADA related to the production (liters/day) of their water sources. The information for ranges a., c, d. remains without significant differences. The range b. increased by 9.6% due mainly to procedures and tools developed together by the project and AyA to capture and record information on ASADAS water sources flow rates. This allowed to reduce the percentage of ASADAS without information by 8.2%. There is still 36% of ASADAS without information so the promotion and training on the use of the tools and procedures will be expanded to include more ASADAS in the practices of systematic measurement of the	The target for this indicator is on track. Cumulative progress for both Chorotega and Norte-Norte regions: a. 201-500 L / 14.6% b. 501-1,500 L / 36,1% c. 1,501-5,000 L / 11,2% d. 5,001-10,000 L / 2,9% e. >10,000 L / 1% f. No data / 30,7% To date, the number of ASADAS without information has been reduced by 14,2 in relation to the baseline in both project regions. A Hydric Balance Calculator was developed, which allows to: 1. Calculate the quantity of water required to provide current and future community water needs. 2. Determine if the sources' flow is enough to satisfy the demand 3. Calculate current and future water storing capacity according to national Technical Norm for Design and Construction of Aqueducts

				production of their sources. Features for this reporting period in ASADAS spread across both Chorotega and Norte-Norte Region, are: Water availability per capita (Liters/person/day) / proportion of ASADAS a. b. 201-500 L / 16,2% c. 501-1,500 L / 29,5% d. 1,501-5,000 L / 11,4% e. 5,001-10,000 L / 2,4% f. >10,000 L / 1,9% g. No data / 36,7%	Systems (2017). The Calculator User's Guide was also developed for ease of use.
The progress of the objective can be described as:		**On track**			
Outcome 1 **Infrastructure and technical capacity of ASADAs strengthened to cope with climate change impacts to aquifers in the target area.**					
Description of Indicator	**Baseline Level**	**Midterm target level**	**End of project target level**	**Level at 30 June 2018**	**Cumulative progress since project start**
Installed water storage capacity (days) to supply water (storage capacity/total average consumption per day)	Storage Hours / ASADAS percentage a. 0 hours /4,8% b. 0-2 hours / 4,4%	*(not set or not applicable)*	ASADAS need to comply with AyA regulation of minimum storage to consider peak consumption fluctuations and main line interventions to be 8 hours of maximum	Target to comply with a minimum storage capacity of 8 hours is on track. As previously reported, the original baseline and target were updated during the first year of	Target to comply with a minimum storage capacity of 8 hours is on track. The cumulative number of ASADAS without information has been reduced to 7,3% for both

	c. 2-4 hours / 1,0% d. 4-8 hours / 24,2% e. 8-14 hours / 16,7% f. >14 hours / 23,3% g. No data 15,4%		daily consumption.	execution, because accordingly with national regulation, the measurement is hours of storage, not days of storage. Note: 15% of the ASADAS were not considered since the information was not available. During this reporting period, significant progress was observed for the range of 8-14 hours of water storage, which reached 29,5% compared to 16.3% recorded in the first year, which represents an increase of 13.2%. Furthermore, ASADAS without water storage capacity decreased by 1.5 %, while organizations with no data decreased by 6.4% in both project regions. These achievements are due to investments in water storage capacity infrastructure done by the project, through the installation of new tanks, by AYA, strategic partners, and the ASADAS themselves, such as the installation of storage water tanks. Features for this reporting period in ASADAS spread across both Chorotega and Norte-Norte Region, are:	project Regions. Current cumulative figures for both Chorotega and Norte-Norte Region are: Storage hours / Proportion of ASADAS a. 0 hours / 3,4% b. 0-2 hours / 6,8% c. 2-4 hours / 4,4% d. 4-8 hours / 18,0% e. 8-14 hours / 34,6% f. > 14 hours / 25,4% The target is for all ASADAS to have water storage capacity for at least 8 hours. Cumulatively, to date 60% of ASADS meet this condition (adding up categories e. and f.). This represents a progress of 6.2% compared to 2018 report. The increasing on water capacity storage is also related to activities reported in indicator 1 “Proportion of ASADAS with continued water availability for different time periods”. In addition, the project has initiated the implementation of the Aqueduct Systems Optimization Plan (POSA for Spanish) intended to achieve

				Storage hours / Proportion of ASADAS a. 0 hours / 3,3% b. 0-2 hours / 6,7% c. 2-4 hours / 7,1% d. 4-8 hours / 20,0% e. 8-14 hours / 29,5% f. > 14 hours / 24,3% 9,0% of the ASADAS do not have information on storage capacity, because there are ASADAS that do not even know the capacity of their own systems. For that, the project offers tools, such as the Improvement and Efficiency Plan (PME), that helps the ASADAS to carry out diagnostics that allow them better knowledge and understand their systems and operation	better performance by increasing the storage capacity in ASADAS with deficit according to AyA's national regulations. The actions related to POSA are: • Provision of storage tanks to priority ASADAS in common agreement with the respective ORACs. For this, 50 High Density Polyethylene (HDP) tanks of 22m3 were acquired and delivered to 29 ASADAS: 16 in the Chorotega region and 13 in the North-North Territory (TNN). To receive the tanks, as a counterpart ASADAS are committed to bring labor, pipes and fittings for connection and other supplies necessary for the installation of tanks. • Pressure measurement in the system networks, to detect and correct system malfunctions. 300 manometers were acquired and distributed with the respective training on their installation and operation. • Increase in the control of the water quality and registration of ASADAS in the “Seal of Health Quality” Program of the National Water Laboratory (LNA) through which the aqueduct operators are promoted and advised to fully improve the conditions of the structures and infrastructure of the

					system to supply the population they serve with the best quality water. • Technical support for the selection and design of the installation tank sites for ASADAS that require it. The project team in coordination with ORAC professionals established a technical support program and has developed a guide to provide guidance on the best practices on selection sites and installation of HDP tanks. • Training 210 representatives of 133 ASADAS on tank installation, installation and use of pressure gauges to measure the pressure in networks, and the “Health Quality Seal” program in both regions. • A pilot was conducted in ASADA Corralillo de Nicoya to validate the methodology, times and materials required for the installation of HDPE tanks, once the ideal sites for their placement have been defined. Through this process, 30 of the 50 distributed tanks have been installed. The proportion of ASADAS without information on storage capacity

					has been reduced to 7,3%. 65 ASADAS (31.7%) are below the target; 51 of these require storage of 100 m3 or more, which would require high-cost infrastructure solutions that are beyond the scope and resources of the project. These are solutions related to development planning and some of them are in the medium-term plans of the AYA. Additionally, the project is supporting ASADAS that require large-scale solutions, so that they can submit technically-sound project proposals to donor agencies and banks.
Condition of the water supply system (evaluation index for system components)	*Poor: 50% (index score: 60%) *Needs improvement: 40% (index score: 61% - 84% score) *Good: 10% (index score: 85%)	*(not set or not applicable)*	*Poor: 0% (index score: 60%) *Needs improvement: 50% (index score: 61% - 84% score) *Good: 50% (index score 85%)	Project is on track to meet the target of reducing the range of water supply system in lower conditions, with progress towards the indicators as follows: a. Poor: 39% b. Needs improvement: 48% c. Good: 13% In both project regions, the percentage of ASADAS in poor category has been reduced by 14%; ASADAS in Needs	Project is on track to meet the target of reducing the range of water supply system in lower conditions, with progress towards the indicators, for both Chorotega and Norte-Norte Region as: a. Poor: 24,1% b. Needs improvement: 39,4% c. Good: 36,5% There is an increase of 23,5% in ASADAS upgraded to “Good condition” category; 15,10% ASADAS have upgraded from the

				Improvement Category increased by 11%; ASADAS in Good Category increased by 3%. To determine the condition ranges of supply systems (good, poor, needs improvement), the project defined criteria based on the analysis of six critical factors that determine the conditions of an ASADA to supply water in quality, quantity and continuity: 1. Storage capacity 2. Pipes in good condition (no leakage) 3. Measurement of household consumption (micro measurement) 4. Measurement of water delivered by the network (macro measurement) 5. Water disinfection 6. Pressure measurement in the network Once selected these criteria, the project has directed its own actions, and encouraged other partners and ASADAS to do the	"Poor condition" category. This responds to investments done by the project in micro and macro measurement, disinfection systems, water storing capacities, designing of technical guides and training to improve skills on these issues as reported in 2018. Cumulative progress in investments related to this indicator is: 1. Installation of 100% of the 10,200 micro meters and 60 macro meters among 118 ASADAS. 2. Implementing the Plan of Aqueducts Optimization that includes: installation of water storage tanks and pressure measurements systems, as well training on tanks installation, pressure measurement and water quality to 30 ASADAS. This increase the capacity of storage in 1125 m3, related to the 2018 report 3. A total of 120 ASADAS members have been trained on water disinfection and construction of handcrafted chlorinators. A tutorial video has been prepared for broader diffusion of the chlorinator's construction process. 4. All technical studies have been finished and approved for 16 ASADAS. These studies will lead to mobilization of financial

				same, through activities such as: 1. Installation of micro and macro water meters: 94% of the 10,200 micro meters and 60 macro meters have been distributed among 118 ASADAS according to a set of prioritization criteria defined by the Project 2. Elaboration of technical tools and training ASADAS on Unaccounted-For Water reduction: more than 139 ASADAS have been trained on water measurement, the essentials of unaccounted-for water and hydrometers use and maintenance, which is crucial knowledge to reinforce the rational use and reduction of waste of water. 3. Installation of water storage tanks: water storage tanks have been installed increasing the capacity of storage in 123 m3 in 5 prioritized ASADAS 4. Renewal of pipes network (change and diameter increase): expansion or change	resources from the INDER (Rural Development Institute of Costa Rica), benefitting more than 20,000 people.

				of 37.6 km of pipes, including the use of horizontal directional drilling to install High Density Polyethylene (HDPE) pipes, to improve services to 36,000 people of 22 ASADAS 5. Elaboration of technical tools and training ASADAS on water disinfection: members of more than 66 ASADAS in both regions has been trained on improving water quality through chlorination and have learnt how to build homemade chlorinators. Because the teaching methodology, these trainees can train others. 6. Technical studies have been carried out in 16 ASADAS aiming to guide the construction, expansion and improvement on infrastructure and operations in order to expand services to new communities, increasing efficiency, quality, quantity and continuity of water, with a of 20 years perspective. Many of these studies will lead to mobilization of financial support from the INDER to develop the works identified by the technical study.	

				Distribution of manometers and training of ASADAS on network pressure measurement is foreseen for the short term to complement the functioning improvements.	
The progress of the objective can be described as:		**On track**			
Outcome 2 **The capacity of ASADAS' end users to mainstream climate change adaptation into their livelihoods systems is strengthened.**					
Description of Indicator	**Baseline Level**	**Midterm target level**	**End of project target level**	**Level at 30 June 2018**	**Cumulative progress since project start**
Number of household members and producers (differentiated by gender) trained to mainstream climate change adaptation into their livelihoods (AMAT: CCA-2)	*(not set or not applicable)*	*(not set or not applicable)*	1,500 (men 50%; women 50%)	The project target was reached during the reporting period. A total of 1,629 community members in both target regions, including household members, ASADAS's administrators and plumbers, producers, students, and fishermen were trained in climate change, water resource management, water quality, sanitation, reforestation and/or administrative management. Many of these activities aim to train trainers. Out of these 1,629 community members, 423 were children and 1,206 adults (60% men and 40% women). The training focused on understanding climate change impacts on the water supply and resources and the application of	As previously reported, this target in regards number of people trained has been achieved, although the gender disaggregation shows more men trained than women. During the reporting period, it was exceeded. Cumulative progress for both Chorotega and Norte-Norte Regions include: 2777 actors (54% men; 46% women) including administrators, farmers, students and ASADAS's staff and board members, plumber, fishers, housekeeper, teachers, public workers and 906 children have attended trainings in climate change, ecosystem and community-based adaptation, disaster risk management, water

				good practices to reduce the negative impact of their daily activities on the quantity and quality of water sources. Furthermore, the project supports and disseminates the methodology "Guardian of nature" developed by local actors, based on a children's story that accompanies school children in the adoption of a series of commitments and actions for the environment in their school and communities. New educational tools are in development to support the AYA National Plan for Continuous Training of ASADAS. The results towards the target of increasing the use of hydrometeorological information by ASADAS in planning processes will be shown in the next execution period. So far, related actions are in progress and tools are being developed to advance towards the target: 1. Ten meteorological stations and 5 hydrological stations have been installed in strategic places (across both	resource management, water quality, sanitation, as well as reforestation journeys since the beginning of the project. Most of these activities are now being organized by local actors, especially in Norte-Norte region, led by the municipalities of Upala, Los Chiles and Guatuso under the ASADAS's leadership, supported by many local organizations that contribute work and resources to the successful development of climate change adaptation activities. The project continues to promote the "Guardian of nature" approach through environmental education programs of ASADAS and schools in project communities, with the aim that these organizations continue it on their own. More importantly, the team has facilitated community-based and ecosystem-based adaptation initiatives in areas that are vulnerable but also of critical importance in regards water resource. The activities are coordinated by the ASADAS themselves along with research centers and environmental officers in the municipalities. These activities consist mainly of small-scale reforestation and restoration of vegetation cover, in 3 cantons of

				regions) to transmit real-time data to the national network of hydrometeorological monitoring. Currently, the meteorological information is available in the National Meteorological Institute (IMN) automatic stations website. The hydrological stations are under AyA supervision. 2. 16 high resolution drought and flood risk maps have been developed for all regions of the Project and will be available for local decision-makers supported for a guide to incorporated it in the ASADAS's planning tools. 3. An Improvement and Efficiency methodology (PME) for ASADAS has been developed, validated and diffused. So far, 12 ASADAS have implemented their plans using this methodology. These plans include considerations on water resource protection and climate change risks. 4. In accordance with AYA and National University (UNA), 6 additional ASADAS develop climate change adaptation plans in Chorotega Region, as a pilot	Norte- Norte. During the reporting period, 2,081 trees were planted, of 16 different species, including native and fruit species. EbA measures will continue to be analyzed, prioritized and implemented in the upcoming reporting period. As related to technical and decision-making tools, the following have been developed under the National Plan for Continuous Training of ASADAS: 1. Improvement and Efficiency Plan (PME) for ASADAS 2. Guide for the control of Uncounted Water (ANC) 3. Guide for the installation of ASADA micrometers 4. Guide for disinfection system and construction of artisanal chlorinators 5. Guide for the Installation of High-Density Polyethylene Tanks (HDPE Tanks) 6. Guide for the measurement and monitoring of pressure in distribution networks of rural aqueducts 7. Interpretation guide for drinking water quality analysis 8. Information sheet on

				experience to test a suitable model for other ASADAS in both working regions, even beyond. 5. Hydrogeological studies are being carried 39 water sources belonging to 25 ASADAS. These studies allow to identify the water capture zones to orient the specific areas to be priority protected, as well as the definition of protection measures for these areas.	horizontal directional drilling to install polyethylene pipes high density (HDPE) 9. Water balance calculator 10. Tariff calculator according to national technical specifications 11. Climate risk maps with a gender perspective and social inclusion for the 10 cantons of the project and 6 other neighboring territories 12. Cartographic tool to analyze water resources in relation to natural and anthropogenic threats 13. Tool for Integral Risk Management in ASADAS (GIRA) 14. Protocol to conduct integration or merge of ASADAS 15. Adaptation Measures based on Ecosystems (AbE), Communities (AbC) and Risk Management to face of climate change in communities with water stress in Northern Costa Rica 16. Thematic tutorial videos • Participation of women in community water management. • Integration of communal aqueducts • Associativity in communal

					aqueducts • Pressure measurement in communal aqueducts • Reduction of water not accounted for in communal aqueducts • Construction of artisanal chlorinators for communal aqueducts • Gauging sources in communal aqueducts As reported last year, UNDP had planned a collaboration with the University to develop 6 pilot adaptation plans in Chorotega. However, the existing plans did not really incorporate climate risks or adaptation planning, for which it was decided to discontinue this idea. Hydrogeological studies were carried out on 40 watersheds (26 ASADAS) in Norte-Norte Territory. This information serves as the basis to develop water resource protection plans, starting by a pilot plan to prioritize purchase of land to ensure the protection in 5 ASADAS' water sources, scalable to 40 sources. This process is led by the Mayor of Guatuso. The studies are also useful to determine the potential of water contamination from agricultural

					activities. Therefore, the information has been fed into the System of Prevention, Monitoring and Response to Incidents with Agrochemicals, developed by the project (see outcome 3).
Proportion use of hydrometeorological information by ASADAS in planning processes (by type of plan)	*Strategic plan: 52% *Annual/monthly operation plan: 8% *Maintenance plan: 25% *Seasonal contingency plan: 4% *Emergency/disasters plan: 2% *CC adaptation plan: 3% *Local communities communication/information plan: 6%	*(not set or not applicable)*	*Strategic plan: At least 50% *Annual/monthly operation plan: At least 50% *Maintenance plan: At least 50% *Seasonal contingency plan: At least 50% *Emergency/disasters plan: At least 50% *Climate change adaptation plan: At least 50% *Local communities communication/information plan: At least 50%	The results towards the target of increasing the use of hydrometeorological information by ASADAS in planning processes will be shown in the next execution period. So far, related actions are in progress and tools are being developed to advance towards the target: 1. Ten meteorological stations and 5 hydrological stations have been installed in strategic places (across both regions) to transmit real-time data to the national network of hydrometeorological monitoring. Currently, the meteorological information is available in the National Meteorological Institute (IMN) automatic stations website. The hydrological stations are under AyA supervision. 2. 16 high resolution drought and flood risk maps have been developed for all regions of the Project and will be	Cumulative progress towards the end of project target for both Chorotega and Norte-Norte regions is on track, as follows: * Strategic plan: 60% * Annual/monthly operation plan: 13% * Maintenance plan: 31% * Seasonal contingency plan: 6% * Emergency/disasters plan: 6% * CC adaptation plan: 8% * Local communities communication/information plan: 13% The above-mentioned technical tools developed by the project allow the use of hydrometeorological information by ASADAS for their different planning needs: • Integrated Risk Management in ASADAS (GIRA for its acronym in Spanish) is a vulnerability analysis, identification, assessment, administration and

				available for local decision-makers supported for a guide to incorporated it in the ASADAS's planning tools. 3. An Improvement and Efficiency methodology (PME) for ASADAS has been developed, validated and diffused. So far, 12 ASADAS have implemented their plans using this methodology. These plans include considerations on water resource protection and climate change risks. 4. In accordance with AYA and National University (UNA), 6 additional ASADAS develop climate change adaptation plans in Chorotega Region, as a pilot experience to test a suitable model for other ASADAS in both working regions, even beyond. 5. Hydrogeological studies are being carried 39 water sources belonging to 25 ASADAS. These studies allow to identify the water capture zones to orient the specific areas to be priority protected, as well as the definition of protection measures for these areas.	communication tool about the risks that may affect the provision of services provided by the ASADA (see outcome 2.1) GIRA contribute to Strategic plan, Seasonal contingency plan, Emergency/disasters plan, CC adaptation plan and Local communities communication/information plan The Improvement and Efficiency Plan for ASADAS (PME for Spanish) helps the ASADAS to carry out diagnostics of their operational capacities. These plans include considerations on water resource protection and climate change risks. The PME contributes to the Annual/monthly operational plan. The Early Warning System for Hydrometeorological Threats in Upala (SAT) includes participation of ASADAS as providers of public water services. Through the GIRA tool, concerned ASADAS develop procedures for monitoring hazards, warning and emergency response. This contributes to Seasonal contingency plan, Emergency/disasters plan and Local communities communication/information plan. The Aqueduct Monitoring System (SIMA for Spanish) has been developed by CATIE and there is

					coordination with the project for its implementation. It is a mobile app for communication between community and ASADAS about state of the systems, breakdowns, emergency situations, complaints, maintenance needs. Other hydrometeorological information tools developed to improve planning processes in ASADAS, are: • 16 high-resolution drought and flood risk maps have been disseminated among the municipalities and ASADAS concerned, but next year there will be a more systematic information process that includes recommendations for use and a technical guide to facilitate their use in municipal planning and local risk management plans. ASADAS can use it already through the GIRA tool. • Ten meteorological stations and 5 hydrological stations have been installed in strategic places (across both regions) to transmit real-time data to the national network of hydrometeorological monitoring. Currently, the meteorological information is available in the National Meteorological Institute (IMN) automatic stations website.

					The hydrological stations are under AyA supervision. • Cartographic tool to analyze water resources in relation to natural and anthropogenic threats
Measures undertaken to reduce risks to climate change	*Increase micro-metering: 8% *Protection of water sources: 14% *Protection of pipes and other system components: 2% *Increase efficiency of maintenance: 10% *Promote water-saving measures among users: 11% *None: 39% *Other: 17%]	*(not set or not applicable)*	*Increase micro-metering: 100% *Protection of water sources: At least 25% *Protection of pipes and other system components: At least 40% *Increase efficiency of maintenance: At least 40% *Promote water-saving measures among users: At least 40% *None: 0% *Other: 17%	The targets of promoting ASADAS to take measures to reduce risks to climate change are on track and have reached the following progress across both regions of Chorotega and Norte-Norte: a. Increased micro-metering: 9.519 micrometers have been installed in 118 ASADAS, increasing to 93% the percentage of ASADAS in both regions that measures their water consumption. This helps to minimize unaccounted-for water as well as to reduce water profligacy, leading to a better use of the resource and to decrease hydric stress. b. Protection of water sources: 29%. Hydrogeological studies have now been completed for 39 water sources belonging to 25 ASADAS in the Norte-Norte region that allow them to clearly identify their capture areas and define recovery and protection measures for these sources.	The targets for the support to ASADAS to take measures to reduce risks to climate change are on track, and have reached the following progress across both regions of Chorotega and Norte-Norte: * Increase micro-metering: after completing the installation of all the meters acquired by the project, 95% of the ASADAS have micro-metering * Protection of water sources: 34% of the ASADAS implement water protection activities * Protection of pipes and other system components: 25% of the ASADAS implement infrastructure protection activities * Increase efficiency of maintenance: 73% have increased their capacities by training 125 new ASADAS in plumbing, installation and operation of hydrants and reduction of unaccounted water * Promote water-saving measures among users: 48% ASADAS do

				Reforestation programs are being implemented by 3 ASADAS, which have planted 2,605 trees in 2.6 Ha., with the objective to protect water sources with community participation and extend the benefits of forest coverture, such as erosion reduction, ecosystem connectivity water infiltration, increase biodiversity richness, reduction of pesticide drift, among other. c. Protection of pipes and other system components: 21%. 44 ASADAS have interventions developed or prompted by the project to improve infrastructure aimed at achieving more efficient use of water, as well as reduction of vulnerability of the systems to extreme events. d. Increase efficiency of maintenance: 80%. 162 ASADAS improved their skills in maintenance and efficiency through training in plumbing, unaccounted-for water and disinfection methods. This makes it possible to improve the quality of drinking water services and helps to extend the life of the infrastructure. e. Promote water-saving measurers among users: 35%. Improved water metering on 56	promotion mainly through WhatsApp instructions and pamphlets. Some have targeted education programs in schools or other training centers. * None: 5%: the number of ASADAS that does not develop any activity in this area, has been reduced to 5% from the 39% at baseline.

				ASADAS directly results in water saving from leak reduction and water wasting. This is related to the installation of domiciliary hydrometers, training ASADAS on unaccounted-for water reduction and ASADAS sensitization users on the need of measuring. f. None (No measures taken to reduce risks to climate change): 7% g. g. "Other" measures taken to reduce risks to climate change (not mentioned in A-D): 19% The fusion of 21 small ASADAS into 8 new larger administrations and development of 4 new second tier organizations (Federation, League, Union – FLUs) which group ASADAS from the same region are aimed at strengthening the management, operation, and efficiency of systems and organizations	
The progress of the objective can be described as:		**On track**			
Outcome 3 **Ecosystem-based climate change adaptation measures are integrated into public and private sector policies, strategies and investments related to rural community water-sourcing infrastructure and services**					
Description of Indicator	**Baseline Level**	**Midterm target**	**End of project target**	**Level at 30 June 2018**	**Cumulative progress since**

		level	**level**		**project start**
Number of RMPPWS that incorporate ecosystem-based climate change adaptation, including gender considerations (AMAT: CCA-3)	*(not set or not applicable)*	*(not set or not applicable)*	At least 40 RMPPWS developed with gender considerations integrated	The Risk Management Plan for Potable Water and Sanitation (RMPPWS) methodology and format is on the way to being developed by a technical committee composed by AyA, National Emergency Commission (CNE), Regulator Authority for Public Services (ARESEP), Fundecooperacion for Sustainable Development, University of Costa Rica (UCR) and the National University of Costa Rica (UNA). In the meantime, several related actions that contribute to risk management at the ASADAS level have been developed, as reported in previous reports: 1. Six ASADAS participated in 2 strategic plans to implement EbA for the protection of the Biological Corridor "Ruta de los Malecu" with active participation of Union of ASADAS of Norte-Norte. EbA measures include: • Promoting connectivity through reforestation and riparian ecosystems using PES funding • Review protected areas management plans	The target of having 40 RMPPWS developed is on track. The plans will be developed using an innovative risk management tool developed by the project, as described below: An Integrated Risk Management Tool for ASADAS (GIRA for Spanish) was developed under this project. Using the tool helps identify risks and vulnerability in ASADAS's operations and provision of services. GIRA also helps identify prevention, mitigation, response and recovery mechanisms for these risks. The GIRA is driven by the 16 high resolution drought and flood risk maps that incorporate gender and social dimensions, as well as the risk-weighting for all micro-watersheds in the project area. The following outputs of this project fed into the design of the tool: plans to implement EbA on the Biological Corridor "Ruta de los Malecu; Water Security Plans in ASADAS; local management and adaptation plans, including fire management to protect water resources in Caño Negro, among others. It has been agreed with ASADAS that the GIRA tool will be the official instrument for the design of the RMPPWS, since it incorporates

				• Promotion of best practices in agroforestry systems 2. Four ASADAS have developed Water Security Plans, three of those ASADAS acquired forest land (75.8 ha of protected areas which include 5 water sources) and developed a community reforestation campaign for protection of water resources which have been identified as vulnerable to climate change. 3. Seven ASADAS participated in the developing of the local management and adaptation plans, including fire management to protect water resources with the private sector in Caño Negro wildlife and as part of the coordination with GEF-UNDP Wetland project. 4. Nine ASADAS participated in an Early Warning Early Action Protocol. The protocol alerts water sources' agrochemical contamination in intensive agricultural threatened regions. This protocol may be replicated in all ASADAS in the country.	all other planning tools (as requested by the AyA and other institutions) such as maintenance, emergency and continuity of service, water quality, water safety, adaptation plan, among others. The tool will also help identify climate risks which can be addressed through EbA measures. The GIRA has already been applied by 5 ASADAS of the project area. The project team feels confident that 35 more ASADAS will be able to apply this tool for the development of the RMPPWS during the project's lifetime. An "Early Warning/ Early Action Protocol" is in process to improve the System of Prevention, Monitoring and Response to the Presence of Agrochemicals in water sources of ASADAS led by the National Water Laboratory (LNA) in coordination with the Ministry of Health, Ministry of Agriculture and Livestock and ASADAS. This System seeks to reduce the risks of contamination of water sources as a result of agricultural activities by promoting best production practices, monitoring for detection and early warning, and the adequate response in case of incidents with agrochemicals. The System uses the information provided by the 40 hydrogeological studies developed

				5. Early Warning Early Action Protocol is evolving into a monitoring system for the presence of agrochemicals in water sources with the participation of 22 ASADAS of the North-North territory located in areas threatened by intensive pineapple production. The monitoring system is intended to early detect any agrochemical contamination and links the alert to the ASADAS emergency plan to face the incidents. 6. Development of geospatial tool based on google earth to analyze hydric resources hazards related to climate change, agricultural production and physical vulnerabilities (such as floods and earthquakes). So far is available for Norte-Norte Territory but can expand nationwide. 7. Development of high resolution drought and flood risk maps for 16 cantons that will be available for local decision-makers supported for a guide to facilitate it use.	in 26 ASADAS and the satellite images tool Monitoring Land Use Change Within Production Landscapes (MOCCUP for Spanish), developed for UNDP Costa Rica and supported by the project. To promote this System, the project is reinforcing the capacity of the LNA by providing laboratory staff, equipment, chemical reagents and standards to identify additional agrochemical actives substances. This support will last for one year while the LNA manages to give sustainability to these kinds of services.
Number of AyA and CNE investments for the prioritized	AyA and CNE investments lack integration of climate	*(not set or not*	*AyA: at least three (one	The final target of investments of stakeholders which take into	The project has reached the final target for investments of

project area that integrate climate change risks (AMAT: CCA-3)	change risks in the project area	*applicable)*	per target SEMU) *CNE: at least three (one per target SEMU)	account climate change risks has been achieved. These investments include the following: a. Under AyA: 1. Construction of community aqueduct that will supply water to 14 ASADAS members of the Commission for the Sustainable Management of the Nimboyores Aquifer and Coastal Aquifers (CONIMBOCO) as a response to droughts of their main water source: Huacas -Tamarindo aquifer. 2. Six hydro-geological and water availability studies ($105,000 USD of Governmental investment) in 2017 to support communities affected by drought. 3. Thirteen wells were drilled in 2016 in communities to alleviate drought-related stress in Guanacaste by AyA and Costarican Institute of Electricity (ICE). 4. Ten wells were drilled in 2016 in water stressed communities in Guanacaste by	stakeholders as reported in the last reporting period and there is no new investment to report in 2018-19. The investments that have helped the project reach this target include the following: a. Under AyA: 1. Construction of community aqueduct that will supply water to 14 ASADAS members of the Commission for the Sustainable Management of the Nimboyores Aquifer and Coastal Aquifers (CONIMBOCO) as a response to droughts of their main water source: Huacas -Tamarindo aquifer. 2. Six hydro-geological and water availability studies ($105,000 USD of Governmental investment) in 2017 to support communities affected by drought. 3. Thirteen wells were drilled in 2016 in communities to alleviate drought-related stress in Guanacaste by AyA and Costarican Institute of Electricity (ICE). 4. Ten wells were drilled in 2016 in water stressed communities in Guanacaste by AyA-ICE. 5. Three wells were drilled in 2016 in water stressed

				AyA-ICE. 5. Three wells were drilled in 2016 in water stressed communities in Guanacaste by AyA. b. Under CNE: 1. Thirty-two hydro-geological studies were conducted to determine potential new water sources for drought affected ASADAS with CNE funding for $67,500 USD c. Under ASADAS GEF Project 1. Eighteen ASADAS supported with key investments to rehabilitate and climate-proof infrastructure damaged by Hurricane Otto in Norte-Norte and Chorotega region. 2. Ten ASADAS in Chorotega region received materials and support to rehabilitate and climate-proof infrastructure damaged by	communities in Guanacaste by AyA. b. Under CNE: 1. Thirty-two hydro-geological studies were conducted to determine potential new water sources for drought affected ASADAS with CNE funding for $67,500 USD c. Under ASADAS GEF project 1. Eighteen ASADAS supported with key investments to rehabilitate and climate-proof infrastructure damaged by Hurricane Otto in Norte-Norte and Chorotega region. 2. Ten ASADAS in Chorotega region received materials and support to rehabilitate and climate-proof infrastructure damaged by Tropical Storm Nate. It is recognized that these interventions , although urgently needed at the time of project start to decrease the vulnerability of the targeted communities, still need to account for future and projected climate risks. This analysis will be taken up by the project in the next reporting period, along with additional sensitization on climate change risks and adaptation for the AyA.

				Tropical Storm Nate.	
Number of adaptation-related voluntary fee systems (expanded PES) implemented	Voluntary Watershed Payment: 0	*(not set or not applicable)*	Voluntary Watershed Payment: at least 5	Target has not yet been achieved. Voluntary Watershed Payments as such have not been developed because according to discussions among project partners, there is a certainty that instead of creating new VWS mechanisms that can take a long time, even years for their eventual negotiation, approval and start-up, it would be more convenient to reorient the access to existing mechanisms in the country, such as the canon of water use and the canon of discharges, which are currently underutilized. In accordance with this debate, the project will develop next year a mapping and characterization of potentiality of different mechanisms already available to determine rather a strategy of access to these financial sources. In the meantime, the project has explored one experience and promoted the development of potential mechanisms:	Progress towards the target is delayed. As previously reported, the project team aims to use existing voluntary watershed payment mechanisms instead of creating new ones, which could take years for approval and start-up. That said, UNDP and AYA promoted the specific application of the Water Resource Protection Tariff (TPRH) by ASADAS. The following actions took place in the reporting period for this purpose: 1. A feasibility study and proposal were completed for the creation of a National Fund for ASADAS to purchase water recharge lands to protect their sources. This initiative will be in standby until the mapping and characterization of financing mechanisms is done, to be approached in a same strategy. 2. Design of a Water Resources Protection Tariff (TPRH) which accounts for climate change risks that was approved by AYA and the Regulatory authority (ARESEP) and can be applied by ASADAS nation-wide. 3. A working group was established with Banco Popular for a “community development model” which proposes revising the

				1. A feasibility study and proposal were completed for the creation of a National Fund for ASADAS to purchase water recharge lands to protect their sources. This initiative will be in standby until the mapping and characterization of financing mechanisms is done, to be approached in a same strategy. 2. Supporting the design of a tool for ASADAS to finance hydric resource protection activities by means of a tariff, as a model to implement a voluntary watershed payment for adaptation in rural aqueducts. Sixteen ASADAS of Norte-Norte Territory has been supported to formulate this Water Resources Protection Tariff (TPRH) taking into account climate change risks. The methodology to elaborate the TPRH has been approved by AYA and the Regulatory authority (ARESEP) and is passing through a public consultation process before its approval, which will be solved in august 2018. This initiative is developed in junction with CEDARENA, ARESEP, AyA, GIZ and Fundecooperacion and has the potential to be applied to all 1500 ASADAS nationwide.	financial offer available for ASADAS, including to finance Ecosystem Based Adaptation (EBA) activities, educational programs and projects for the protection of water resources that can be financed through the Water Resources Protection Tariff (TPRH). This financing would be through reimbursable funds with loans under advantageous conditions, or through non-reimbursable funds from the Bank's social portfolio. Issues to consider in the next steps for the achievement of this target are: - The reduction in the prices of export products such as pineapple, roots and tubers which are key economic drivers of the project's target region, has caused a change in the producers' mindset about the use of resources obtained through prizes in the Fairtrade scheme: they will now use them to compensate for losses due to lower prices and no longer as voluntary payment mechanisms for the conservation of the water resource in key sites. - Issues on alternatives for Voluntary Watershed Payments will be also addressed by technical assistance mentioned in Outcome #2.2 (point 5).

					A PES specialist is being procured to steer activities under outcomes 2.1. and 2. 2. including the follow-up of the proposal for the creation of a National Fund for ASADAS to purchase water recharge lands (see outcome 2.2, point 5).
The progress of the objective can be described as:		**On track**			
Outcome 4 **The purchasing and credit policies of at least 20 agricultural and livestock trading companies and five financial institutions operating in the target region promote adoption of productive practices that help maintain ecosystem resilience to climate change.**					
Description of Indicator	**Baseline Level**	**Midterm target level**	**End of project target level**	**Level at 30 June 2018**	**Cumulative progress since project start**
The purchasing and credit policies of at least 20 agricultural and livestock trading companies and five financial institutions operating in the target region promote adoption of productive practices that help maintain ecosystem resilience to climate change.	*(not set or not applicable)*	*(not set or not applicable)*	At least 20 agricultural and livestock trading companies and five financial institutions operating in the target region promote adoption of productive practices that help maintain ecosystem resilience to climate change.	Progress towards the target is on track. Preparatory meetings and stakeholder engagement with agricultural and livestock sector, tourism sector, and other private and civil organizations is helping to advance the target of at least 20 agricultural and livestock trading companies and five financial institutions adopting productive practices that help maintain ecosystem resilience to climate change. These efforts include: 1. The Project fostered a process of dialogue with TESCO, CAPA and FYFES that	Progress towards the target is delayed due to the following: 1. As previously reported, UNDP held consultative dialogues with TESCO, CAPA and FYFES, as global producer and marketing companies with active commercial exchange in Norte-Norte territory. The aim was to develop purchasing policies to promote the adoption of good productive practices for ecosystem resilience to climate change. However, during 2019 it became evident that the potential purchase volume has decreased to a level that is no longer attractive

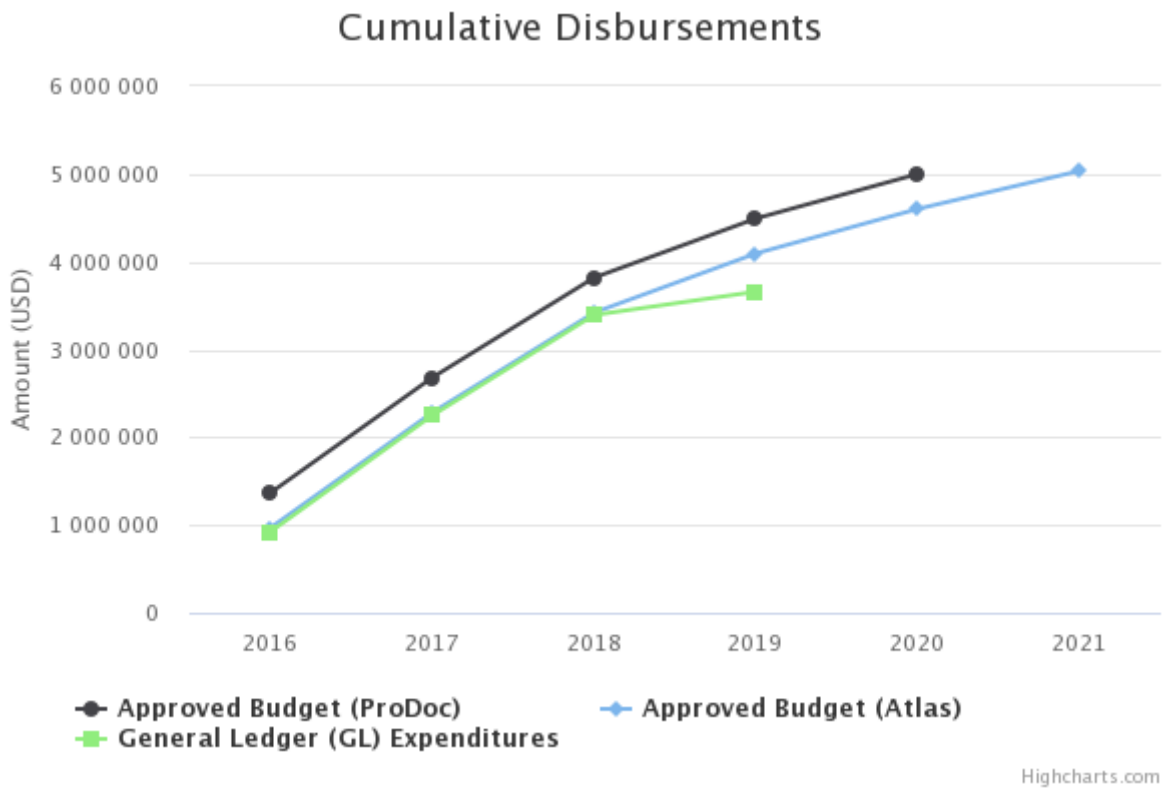
				are global producer and marketing companies that have an active commercial exchange in Norte-Norte territory: The aim is to develop purchasing policies that promote the adoption of productive practices for ecosystem resilience to climate change. One of these policies, agreed with TESCO, consists of using the Monitoring of land use change within production landscapes linked with land tenure -MOCUPP-(that allows the verification of deforestation free production units associated to specific owners), as a decision making tool to choose or refuse providers related to their compliance of land change regulations. The project and TESCO are developing the policy details that would help to promote the commitment of others international buyers to adhere this policy. 2. Initial talks with the Business Association for Development (AED) to explore participation of financial actors	for these large buyers. 2. Scoping consultations with the Business Association for Development (AED) to explore participation of financial actors and the existence of available credit tools applicable to water conservation, did not yield results because their proposal has beneficiaries and products different to the project's needs and interests. 3. In the other hand, the reduction in the prices of export products such as pineapple, roots and tubers which are key economic drivers of the project's target region, has caused a change in the producers' mindset about the use of resources obtained through prizes in the Fairtrade scheme: they will now use them to compensate for losses due to lower prices and no longer as voluntary payment mechanisms for the conservation of the water resource in key sites. Ongoing efforts to deliver this target include: In coordination with Fundecooperación, the team has approached the agricultural and livestock sector, and tourism sector to develop a preferential purchasing mechanism directed to local producers that apply

				and the existence of available credit tools applicable to hydric resources conservation. 3. Development of initial contacts with regional Tourism Chambers to stablish a strategy for supporting hydric resources conservation through Social Responsibility Programs, Certificate of Tourism Sustainability, Ecologic Blue Flag Program. 4. Development of the scheme of use for the fair-trade prize to support campaigns for regeneration of vegetation cover in areas of hydric importance (sources of ASADAS) and construction and maintenance of transit nurseries	sustainable practices. In this scheme, tourism services such as hotels and restaurants, will privilege procuring from producers who implement sustainable production practices and/or conservation or adaptation measures. Fundecooperacion will provide technical assistance and financing to producers who decide to use the preferential purchase scheme through a purchase and credit framework for protection and reduction of impacts on aquifers. The team and Fundecooperación are implementing a survey to identify the offer of agricultural products and producers, their distribution channels and the demand for these products by the tourism sector in Norte-Norte Territory. In Chorotega region, hotels in Nosara River basin have developed a market study at the lower basin of Nosara River Biological Corridor to update the offer of sustainable agricultural products to strengthen distribution channels and mechanisms to maintain constant supply, and promote good productive practices to help protecting the Biological Corridor as a source of biodiversity and important tourist attraction. This effort will complement and extend the Fundecooperacion

					project. In partnership with the Biodiversity and Finance Project (UNDP Costa Rica - BIOFIN) the project team is working on a strategy to incorporate integral adaptation into policies and investments of public and private sector in the project's target sites. This strategy seeks to a) Develop an inter-sectoral and inter-institutional voluntary payment scheme aimed at the protection and management of key areas; b) Develop "Green procurement" pilots aimed at companies and institutions operating in the project areas, and c) Develop a matrix with key information on lines of credit, incentives and non-reimbursable funds, existing and directed to ASADAS, agricultural, livestock and tourism producers. This will be fully related and complementary to activities mentioned in above point. Banco Popular de Costa Rica is also keen in partnering with the SCCF project to deliver innovative and flexible credit access mechanisms for ASADAS to implement EbA measures. The operational model for this partnership is in the process of being developed.
Number of climate change-	*(not set or not applicable)*	*(not set or not*	At least 10 (one per target	Progress towards the target has	Not specific progress has been

related initiatives making use revised purchasing and credit policies of agricultural and livestock trading companies and financial institutions		*applicable)*	municipality)	not been achieved, but implementation relies on the completion of the previously described activities. Thus, activities contributing to this target will be done once purchasing and credit policies have been agreed upon. May start to happen by second Q3 2019 .	made on this activity. The implementation relies on the completion of the previously described activities under preceding indicators. Activities under this indicator may begin by 2020.
The progress of the objective can be described as:		**On track**			

D. Implementation Progress



Cumulative GL delivery against total approved amount (in prodoc):	73.17%
Cumulative GL delivery against expected delivery as of this year:	81.44%
Cumulative disbursement as of 30 June (note: amount to be updated in late August):	3,658,614

Key Financing Amounts	
PPG Amount	150,000
GEF Grant Amount	5,000,000
Co-financing	26,850,000

Key Project Dates	
PIF Approval Date	Oct 15, 2014
CEO Endorsement Date	Jan 14, 2016
Project Document Signature Date (project start date):	Feb 1, 2016
Date of Inception Workshop	Aug 8, 2016
Expected Date of Mid-term Review	Sep 2, 2018

Actual Date of Mid-term Review	Oct 4, 2018
Expected Date of Terminal Evaluation	Feb 2, 2021
Original Planned Closing Date	Mar 31, 2021
Revised Planned Closing Date	*(not set or not applicable)*

Dates of Project Steering Committee/Board Meetings during reporting period (30 June 2018 to 1 July 2019)
2018-11-20

E. Critical Risk Management

Current Types of Critical Risks	Critical risk management measures undertaken this reporting period
N/A	No critical risks

F. Adjustments

Comments on delays in key project milestones

Project Manager: please provide comments on delays this reporting period in achieving any of the following key project milestones: inception workshop, mid-term review, terminal evaluation and/or project closure. If there are no delays please indicate not applicable.
Not applicable
Country Office: please provide comments on delays this reporting period in achieving any of the following key project milestones: inception workshop, mid-term review, terminal evaluation and/or project closure. If there are no delays please indicate not applicable.
Not applicable
UNDP-GEF Technical Adviser: please provide comments on delays this reporting period in achieving any of the following key project milestones: inception workshop, mid-term review, terminal evaluation and/or project closure. If there are no delays please indicate not applicable.
not applicable

G. Ratings and Overall Assessments

Role	2019 Development Objective Progress Rating	2019 Implementation Progress Rating
Project Manager/Coordinator	Satisfactory	*- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -*
Overall Assessment	Once more, the project achieved 100% of budget execution for 2018 period, delivering high quality activities that approach the satisfactory fulfillment of the great majority of the indicators and developing complementary actions that enrich the impact of the project. For this period, the improvement of the of aqueducts, strengthening technical and organizational capacities of the ASADAS, and the access of their members and communities to knowledge activities and tools have been consolidated. Interventions with ecosystem-based adaptation and disaster risk management approach have also increased, as well as the quantity and quality of community participation, aligned with the National Adaptation to Climate Change Policy vision. The project continues to consolidate the stakeholders network strategy and attract new actors; such is the case of the Fifth Meeting of Associativity and the First Encounter of community water management allies with the participation of more than 270 people coming from ASADAS, public institutions, NGOs, private sector, academia, second level organizations of ASADAS and actors of civil society, which reinforce the support base for the protection of hydric resources and community water management model. The continued co-finance strategy will allow access of many ASADAS to non-reimbursable funds and bank loans to develop more and better infrastructure projects, promoting sustainability through the impulse of associativity and ASADAS integration mechanisms aimed to generate economies of scale and more efficient units. In addition to the figures shown in the analysis of the indicators, it is also important to highlight other aspects of the project that are not visible or not presented strong enough in the DO progress table. The Outcome #1: Infrastructure and technical capacity of ASADAs strengthened to cope with climate change impacts to aquifers in the target area, is clearly the one that presents the greatest and most evident progress, since it is the central theme of the concerns for ASADAS; they have been historically oriented to the management of aqueduct systems and the needs for improvement are so many that a good intervention generates many advances. An interesting indicator of impact is that despite the intense dry season exacerbated by the influence of the El Niño phenomenon, no significant water shortages were reported in the communities this summer, due to an increase in storage capacity and a substantial improvement in the infrastructure of the systems. Concerning Outcome # 2: The capacity of ASADAS' end users to mainstream climate change adaptation into their livelihoods systems is strengthened, there has been a promising increase in the interest and participation of actors as well as in the appropriation of responsibilities and contribution of local resources for different activities around Ecosystem-based Adaptation, environmental education for conservation and protection of water resources in the Norte-Norte project communities. Such is the case of the Cantonal Water Tables that are currently led by the municipalities of Upala, Los Chiles and Guatuso, and made up of many local organizations, including associations of agricultural producers and chambers of commerce and tourism, with a renewed leadership by ASADAS. These organizations have taken on the preparation, realization and financing of the Days for Water, Territorial Environmental Fairs, local	

	mobilizations for water, planting trees in prioritized sites and promotion of basic sanitation services through the construction of bio-gardeners, among others. The project is also providing several useful tools that brings hydrometeorological information for planning processes in ASADAS. Such is the case of theEarly Warning System for Hydrometeorological Threats that includes the integration and training of Community Emergency Committees in five communities highly exposed to floods and avalanches, according to the compilation of risk history and what happened during Hurricane Otto in Upala. These organizations include participation of ASADAS as providers of public water services and have developed procedures for monitoring hazards, warning and evacuation for hydrometeorological threats. They are supported by local government and related public institutions and have access to the warnings and alerts issued by the National Meteorological Institute (IMN), whose monitoring capacity has been reinforced with the stations acquired by the project. A simulation has been carried out to identify the pertinence of developed procedures and identify the improvements needed; this was organized and facilitated in coordination with National Emergency Commission and Upala Municipality in order to ensure the follow up and appropriation of the SAT by the corresponding entities. It is also the case of the sixteen high-resolution drought and flood risk maps with gender and social inclusion that are already available for municipalities and ASADAS, and also has been incorporated as information input for GIRA tool. The information of the hydrometeorological stations installed through the project, are in use and bringing a crucial service to the monitoring network, including the provision of data for the Early Warning System for Hydrometeorological Threats in Upala. The project has been building an important " Cartographic tool to analyze water resources in relation to natural and anthropogenic threats" which already contains 222 files in shape, kmz and dwg formats, classified into five categories: (1) Administrative, (2) Risk management, (3) Infrastructure, (4) Landscape and (5) Water resource. This information will be made available to AyA to be incorporated into a geospatial viewer of ASADAS that is under construction and that will be vital to support the work of decision makers at all levels, for national use. In regard to Outcome #3: Ecosystem-based climate change adaptation measures are integrated into public and private sector policies, strategies and investments related to rural community water-sourcing infrastructure and services, many technical tools for the use of ASADAS has been developed and they have proven to be so useful that they are already part of the official tools used by AyA for ASADAS throughout the country. Such is the case of the Improvement and Efficiency Methodology (PME) and the tool for the Integral Management of Risks in ASADAS (GIRA). The System of Prevention, Monitoring and Response to the Presence of Agrochemicals in water sources of ASADAS which includes the participation of the the National Water Laboratory (LNA) as a determining actor to reinforce aspects of water quality monitoring for Norte-Norte ASADAS vulnerable to contamination by agrochemicals. For the indicator about adaptation-related voluntary fee systems, although several situations have delayed its progress, there are already leading actions as explained in the DO section.

For Outcome #4.: The purchasing and credit policies of at least 20 agricultural and livestock trading companies and five financial institutions operating in the target region promote adoption of productive practices that help maintain ecosystem resilience to climate change, new decisions have been taken to accelerate the compliance with this outcome as explained in the corresponding section of the OD and expectations are great and optimistic for its achievement. Other relevant activities are the realization in Costa Rica of the Fifth Latin American Sanitation Conference (LATINOSAN), an international event where political actors, private sector and civil society converge with the aim of promoting access to sustainable and quality sanitation services in Latin American countries. The project had an outstanding participation, both in the support for preparations and in the event itself, supporting the mobilization of members of ASADAS and international specialists, presenting a paper on the importance of ecosystem services for water security and organizing a forum on the "Contribution to the improvement of the design, construction and operation of UASB reactors applied to the treatment of urban wastewater" for state universities, Ministry of Health, AYA and other service operators such as the ESPH and municipalities that administer drinking water services and sanitation. A Spanish version of a homonymous document has been produced for the magazine of the Water and Sanitation Department of the Basic Sanitation Company of the State of Sao Paulo (SABESP), Brazil, which will be widely disseminated, including publication by the Inter-American Bank. of Development (BID).

The creation of the "Guide for the Development of Aqueduct Infrastructure Projects administered by ASADAS" will mark a milestone in the country as it standardizes the formulation of projects so that technical studies contracted by ASADAS contain the final requirements for execution of work and search for financing, and may be included in the Public Investment Projects Bank (BPIP) of the Ministry of Planning. Likewise.

Many innovative technical tools and didactic materials generated by the project are now available to all ASADASA in the country, such is the case of guides for construction of chlorinators, installation of water meters, pressure measurement, installation of polyethylene tanks, use of directed horizontal drilling as a resilient infrastructure technique, as well as a series of tutorial videos on technical issues for relevant the daily operation of ASADAS.

The public campaign "Act for the water" has been successfully launched with very good reception by a wide audience that transcends the public of the project. The campaign invites to take specific actions in the communities through the testimony and life stories of people who work daily in the provision of aqueduct services and water protection. It includes a song donated by Malpaís, which is a group well known for its commitment to environmental causes in Costa Rica

Based on its experience and case knowledge, the project has provided support to the construction of a Green Fund proposal that would be developed in the same region, expanding coverage and scaling up processes towards a more focus on aquifer management that involves water for all uses, and not just for drinking water.

In addition, due to the results achieved in terms of gender, the project has been

	selected by the inter-agency gender group (GIG) to appear in a case study publication on the gender dimension of GCF / GEF vertical fund projects in America Latin and the Caribbean (LAC). For this, we are working with UNDP, UN Women and UN Environment in the identification of good practices, lessons learned and tools developed for this purpose that serve as examples in the integration of the gender perspective throughout the life cycle (design, implementation and M&E), complying with the gender mandates of the Green Climate Fund (GCF) and the Global Environment Facility (GEF) for similar projects. Following the recommendations of the Regional Technical Adviser and the MTR, the Direction of Climate Change is now part of the Project Steering committee. Because the advance in most outcomes and the decisions taken to accelerate those that have slower fulfillment, such as outcome 4, the progress of the project can be considered satisfactory and is well on track to achieve the objectives and indicators in time and quality.	
Role	**2019 Development Objective Progress Rating**	**2019 Implementation Progress Rating**
UNDP Country Office Programme Officer	Satisfactory	Satisfactory
Overall Assessment	This year the project has made significant progress in terms of improving the adaptive capacity of rural aqueducts to address Climate Change impacts. Not only has the PMU managed a successful budgetary execution, but it has surpassed many of the end of project targets. For this reason, the CO is happy to provide a Satisfactory rating. The consulted representatives from the institutional counterparts of the project (such as the AyA, Ministry of Environment's Water and Climate Change Directorates, as well as the national and regional networks of ASADAS) all agree that the project is making significant impact and has progressed, even further than originally anticipated. The most significant impact, considering the situation that led to the formulation of the project, is the achievement of project target of ensuring continued water availability for all the ASADAS in the North of Costa Rica to be of at least 5 months. This project was formulated as a direct response to the drought emergency declared in 2014 because of a lack of water availability for communities in 11 cantons from the Northern Region. The project has managed to deliver investments (from both the project budget, but more importantly, from public sectors institutions that promised significant co-finance to the project). This has resulted in improved access to new sources of water for ASADAS, and in the enhanced infrastructure that allows for continuous water supply. It is important to note that the achievement of this target was also affected by the reduction in the number of ASADAS operating in the region, as the project was also successful in integrating small ineffective ASADAS into single structures, with better economies of scale, to improve efficiency and service provision for a larger number of households. This was made evident this year when despite a very intense dry season (El Niño phenomenon hitting hard the North of Costa Rica this year), no water shortages were reported by beneficiary ASADAS, thanks to the project and counterpart investments in infrastructure. This has the double merit of ensuring continued water availability for the reported year, but it will also reduce the risk for "integrated ASADAS" to run out of water in the	

	future as the updated structures are better equipped to deal with projected climate change scenarios of reduced precipitation. During this reporting period, the project has managed to make its presence felt beyond the realm of water providers in the selected landscapes where it operates. The project has contributed significantly to mainstreaming risk management and gender equality concerns and targets into the work of water service providers but also of agricultural producers, local governments and the tourism sector. An impressive record of reforestation activities has been led by the project making sure the participation of community stakeholders in project implementation now is truly inter-generational and inter-sectoral. Many university students, and secondary school students have taken part in these restoration and water catchment area conservation activities. Activities such as the “Fifth Meeting of Associativity” and the “First Encounter of community water management allies” mobilized over 270 people to improve their knowledge, skills, and commitment to adapt water service provision to project climate change scenarios. The expansion of project activities beyond the traditional realm of ASADAS has made a significant contribution to the advancement of outcome 2 of the project related to the capacity of ASADAS’ end users to mainstream climate change adaptation into their livelihoods systems is strengthened. The project has managed to position the role of ASADAS widely in Costa Rica society and this is crucial for ASADAS to get more attention by institutions but also by other partners of development. One important example of this effort is the establishment of multisectoral dialogue and coordination processes called Cantonal Water Roundtables in three target cantons, which take advantage of the leadership of ASADAS and wider participation of other stakeholders to help organize events for awareness raising of climate change issues and challenges. These multisectoral processes have been crucial help for the project to organize “Water conservation awareness days” as well as “Environmental Fairs”. It is highly motivating to see that the project has managed to organize these awareness raising activities with the entities that will continue thematic coordination in the target territories long after the project ends. In these times of Climate crisis, when the world reaches 415 ppm of carbon in the atmosphere it is very satisfactory to see that the project has also solidified the multisectoral actions for restoration and tree planting and that these seem to be growing out of the interest of local stakeholders, and that these are not tied to the budget of the project. Meaning we can expect to see more restoration campaigns after the project ends. Also related to this outcome, the project has completed training on actions related to an Early Warning System for Hydrometeorological Threats. This is particularly important considering that Hurricane Otto generated significant impacts in the north of the country, and, at the time of completing this PIR, a new tropical storm is affecting the project site. Nevertheless, we are happy to see that ASADAS can address flood risks and restore water provision within hours after strong storms and floods. This country office is convinced this is partly the result of the project’s interventions. An important highlight and milestone of the reported period has been the development of a System of Prevention, Monitoring and Response to the Presence of Agrochemicals in water sources of ASADAS is coordinated with the National Water Laboratory (LNA), the Ministry of Health and the Ministry of Agriculture and Livestock. This system is linked to MOCUPP, a system for monitoring land use change within production landscapes which was also funded by GEF and is an innovation of this UNDP Country Office. The project has managed to combine and sequence funding to improve a system which was already innovative (because it made available information of properties that

	have eliminated forest cover in breach of the forestry law at low cost). The project involvement now allows for the data derived from MOCUPP (commodity surface area and forest cover loss or gain from production landscapes) to be linked to systems to identify the presence of agrochemicals in water for domestic use. This allows ASADA staff to monitor the water quality of those aqueducts that may be vulnerable to affectation by unsustainable agricultural production practices, and to find connection alternatives, whenever the presence of agrochemicals is confirmed for community water sources. Although agrochemical affectations are not the result of climate change, but of inadequate land use planning, the improved leadership of ASADAS in this area reverts back to their preparedness of climate change impacts in the future, as more stakeholders trust the capabilities of ASADAS to use GIS information for land use decision making. This ties nicely with the advances made by the project on establishing "Geographic information databases", which include 222 files in shape, kmz and dwg formats, classified into five categories: (1) Administrative, (2) Risk management, (3) Infrastructure, (4) Landscape and (5) Water resource. GIS data is key for future preparedness for climate change impacts. This information will be used by government technicians involved in supporting the water provision entities. This may include SINAC (National Conservation Area System) staff; rural Development Institute Staff, and also Ministry of Agriculture staff. The information will be used to help support water cachement restoration plans with public sector funding. Overall, most of the project outcomes and outputs have been achieved so far with very specific exceptions. For example, the outputs with less advancement relate to the identification of purchasing and credit policies of at least 20 agricultural and livestock trading companies and five financial institutions operating in the target region to promote adoption of productive practices that help maintain ecosystem resilience to climate change. The project has made important private sector connections and linkages, (the participation in LATINSOAN was a great opportunity in this regard) but there seems to be difficulty in convincing companies and financial institutions to make concrete commitments that can help the project achieve the projected target. The reason why this is so is that we are currently experiencing a climate of mistrust of government projects and plans. Costa Rica has become a very polarized society, and after the fiscal reform that was passed this year there is a lot of hesitancy to get involved in government-led projects and foster PPPs. A new internal partnership with the UNDP BIOFIN team that was established during the reporting period will be a good way to ensure the next year allows the project to materialize the intended target for this the only outcome that has not be reached fully so far. Finally the project has exceeded in advancing gender mainstreaming not only with a significant number of hours dedicated to gender training by the team staff to project beneficiaries, but also with tangible results in terms of new institutional gender strategies being developed which are unexpected outputs that the project team has managed to deliver. Overall the project is on track to achieving all the expected targets and deliverables and we are close to call this project a best practice for its impact, impeccable delivery and achievement of targets in a timely manner.

Role	**2019 Development Objective Progress Rating**	**2019 Implementation Progress Rating**
GEF Operational Focal point	*(not set or not applicable)*	*- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -*

Overall Assessment	*(not set or not applicable)*	
Role	**2019 Development Objective Progress Rating**	**2019 Implementation Progress Rating**
Project Implementing Partner	*(not set or not applicable)*	*- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -*
Overall Assessment	*(not set or not applicable)*	
Role	**2019 Development Objective Progress Rating**	**2019 Implementation Progress Rating**
Other Partners	*(not set or not applicable)*	*- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -*
Overall Assessment	*(not set or not applicable)*	
Role	**2019 Development Objective Progress Rating**	**2019 Implementation Progress Rating**
UNDP-GEF Technical Adviser	Satisfactory	Satisfactory
Overall Assessment	The project has a high execution (delivery) rate and a full- time dedicated team of experts in different and complementary disciplines, who steer the activities on the ground, actively engage the community stakeholders, and produce high-quality communication products. Cumulatively speaking, the project has achieved most expected outputs and, as the progress on the above-mentioned objectives show, most targets are met, some even exceeded. This speaks to efficient team work in the UNDP management unit and Country Office and the value in actively engaging the communities as the change-makers and drivers of the interventions. It also speaks to the commitment of the ASADAS, the AyA, and the municipalities. However, two key aspects of the project still need attention in order to ensure that the communities in the target sites are in fact resilient to future climate shocks and their overall vulnerability is reduced, long-term. These are: 1) appropriate integration of EbA into ASADAS development plans and livelihoods; and 2) innovative financial schemes to ensure financial sustainability of the adaptation measures. The project is now at a critical time to ensure both issues are addressed; the team is fully aware and working towards these outcomes. For example, the team took into consideration the RTA's recommendation last year of undertaking a more in-depth analysis of potential EbA measures (that truly bring about adaptation benefits and not just biodiversity conservation, using climate information as basis). Upon this recommendation the team has engaged with CATIE and other renown research centers in CR to map out reforestation strategies and identify best- suited species which may withstand the project impacts of climate change, based on existing modeling tools. In the next reporting period, it is expected that a suite of EbA measures will be available and ready for testing in different sites, based on scientific analysis and adaptation impact potential. The team is also actively approaching national banks and the private tourism sector to structure implementation arrangements and financial schemes to facilitate access to credits, capital, or funds for ASADAS to implement adaptation action. This will certainly support an exit strategy for the project's important achievements. The project's approach to adaptation has been fairly incremental: the most	

	urgent issues in regards water availability, utilization efficiency, organizational barriers and sensitization of basic climate change and variability impacts were addressed first, as a response to quickly decrease the evident vulnerability to climate change impacts. The line of action which followed – and has proved very successful- is to empower the ASADAS, community members, particularly women and youth, and the communal decision-makers as change-makers: they co-create risk management tools (like GIRA), are trained to utilize maps, studies and decision-making tools, are trained to install small- scale infrastructure and maintain it, are trained on risk response measures, EbA, and water saving techniques, etc. It is evident from the monitoring missions and in-situ interviews that communities are proud and empowered to steer ASADAS and be in a position to improve the lives of fellow community members. That said, it is timely that the focus of the project is now shifting efforts towards long-term resilience and more transformational adaptation, including EbA pilots, integration of climate risks into existing investments and evaluation of additional climate-proofing alternatives, and financial sustainability through engagement of local banks and tourism and/or commodities sectors. One area of opportunity is the active involvement of the institutional government actors, such as MINAE and AyA. Although the project's scope is certainly a priority at the Ministry's level, communication could be more mainstreamed and MINAE could certainly provide more frequent direction and technical advice. Including the Climate Change Division of the MINAE in the project Steering Committee helps to officially keep the MINAE informed of the project's progress and give it a platform to provide this strategic advice. In the case of AyA, the interest is evident, however capacity is limited in the central and regional offices, to be fully involved in every activity.

H. Gender

Progress in Advancing Gender Equality and Women's Empowerment

This information is used in the UNDP-GEF Annual Performance Report, UNDP-GEF Annual Gender Report, reporting to the UNDP Gender Steering and Implementation Committee and for other internal and external communications and learning. The Project Manager and/or Project Gender Officer should complete this section with support from the UNDP Country Office.

Gender Analysis and Action Plan: *not available*
Please review the project's Gender Analysis and Action Plan. If the document is not attached or an updated Gender Analysis and/or Gender Action Plan is available please upload the document below or send to the Regional Programme Associate to upload in PIMS+. Please note that all projects approved since 1 July 2014 are required to carry out a gender analysis and all projects approved since 1 July 2018 are required to have a gender analysis and action plan.
Diagnostico ASADAS, Resultados CAP.pdf Diagnostico género ASADAS, Entrevistas.pdf Estrategia para la incorporación de perspectiva de Género.pdf Hoja de Ruta Genero ASADAS-GEF ENE2019.pdf
Please indicate in which results areas the project is contributing to gender equality (you may select more than one results area, or select not applicable):
Contributing to closing gender gaps in access to and control over resources: Yes
Improving the participation and decision-making of women in natural resource governance: Yes
Targeting socio-economic benefits and services for women: No
Not applicable: No
Please describe any experiences or linkages (direct or indirect) between project activities and gender-based violence (GBV). This information is for UNDP use only and will not be shared with GEF Secretariat.
In the AyA Gender Equality Policy 2018-2033 and its Action Plan 2018-2022, pillar #4 is directly related to eradication of sexual harassment. It is expected that a greater dissemination of the Policy in the following months will contribute to reducing cases of GBV.
Please specify results achieved this reporting period that focus on increasing gender equality and the empowerment of women. **Please explain how the results reported addressed the different needs of men or women, changed norms, values, and power structures, and/or contributed to transforming or challenging gender inequalities and discrimination.**
Beyond the Prodoc references, a strategy for the effective integration of gender perspective in the project has been defined using Gender GEF Policy. Following the strategy of the Gender Action

Plan, women are specifically invited to trainings and workshops. Specific activities have been developed for women such as trainings on plumbing and the nexus between gender and climate change impacts. This is important because women are improving access to knowledge opportunities, which in turn increase their chances of exercising greater leadership in the communities and organizations in which they participate. Men, on the other hand are also more accepting of the increase in women participation in the experience exchanges and decision-making Boards of the ASADAS. Also, the implementation of the AyA Gender Equality Policy 2018-2033 and its Action Plan 2018-2022, which were formulated with the support of this project is having impacts not only at ASADAS level but also at AyA institutional level, with the aim of promoting the mainstreaming of the gender approach in all operations.

Please describe how work to advance gender equality and women's empowerment enhanced the project's environmental and/or resilience outcomes.

The participation of women in project activities, including training, has increased by 6% in relation to the previous reporting period, due to the implementation of the Gender Action Plan. As explained above, empowering women in the decision-making processes directly impacts an increase in reslience of the entire community, given that women and other vulnerable groups' specific barriers are addressed and they too see an improvement in their quality of life, access to drinking water, and improved equipment towards future climate- related shocks.

I. Social and Environmental Standards

Social and Environmental Standards (Safeguards)

The Project Manager and/or the project's Safeguards Officer should complete this section of the PIR with support from the UNDP Country Office. The UNDP-GEF RTA should review to ensure it is complete and accurate.

1) Have any new social and/or environmental risks been identified during project implementation?
No
If any new social and/or environmental risks have been identified during project implementation please describe the new risk(s) and the response to it.
N/A
2) Have any existing social and/or environmental risks been escalated during the reporting period? For example, when a low risk increased to moderate, or a moderate risk increased to high.
No
If any existing social and/or environmental risks have been escalated during implementation please describe the change(s) and the response to it.
N/A
SESP: Revised SESP PIMS 5140_ASADAS Costa Rica_Feb_2017.docx **Environmental and Social Management Plan/Framework:** *not available*
For reference, please find below the project's safeguards screening (Social and Environmental Screening Procedure (SESP) or the old ESSP tool); management plans (if any); and its SESP categorization above. Please note that the SESP categorization might have been corrected during a centralized review.
(not set or not applicable)
3) Have any required social and environmental assessments and/or management plans been prepared in the reporting period? For example, an updated Stakeholder Engagement Plan, Environmental and Social Impact Assessment (ESIA) or Indigenous Peoples Plan.
Not Applicable
If yes, please upload the document(s) above. If no, please explain when the required documents will be prepared.
N/A
4) Has the project received complaints related to social and/or environmental impacts (actual or potential)?
No
If yes, please describe the complaint(s) or grievance(s) in detail including the status,

significance, who was involved and what action was taken.
N/A

J. Communicating Impact

Tell us the story of the project focusing on how the project has helped to improve people's lives.

(This text will be used for UNDP corporate communications, the UNDP-GEF website, and/or other internal and external knowledge and learning efforts.)

The project team has produced a significant amount of videos, photo-stories and communication campaings, Below is a copy of the text used as a script to a Photo- Story called "Water that gives life to Equality". The story focuses on the human aspect of the project's up-to-date benefits. Adaptation, being climate-resilient development is a vehicle that allows for the improvement in the quality of life of those most vulnerable communities. In this sense, the story below focuses on stories from community members who have seen this improvement in their lives.

To see the Photo-Story, click on:
https://pnudcr.exposure.co/0e4041bc8563089885d9d56004dbe2b0?edit

WATER THAT GIVES LIFE TO EQUALITY

Actions to face the drought

“We suffered a lot due to water. I had some cattle but they died of thirst. A few years ago, the river was full, but now it's different. Now everything is dry”.

María Chavarría Muñoz, neighbor of the community El Rincón.

María Chavarría Muñoz, one of the older adults who lives in El Rincón de San Vicente de Nicoya, a community located more than 200 kilometers from the Costa Rican capital, remembers how the climate has changed during the last years, and the difficulties that occurred due to the lack of water resources.

NOBODY LEFT BEHIND

92.4% of the population in Costa Rica have access to drinking water [1], positioning it as one of the highest percentages in the region. However, this is an achievement that not all people can access equally. Such is the case of Doña María and Mateo Castro Guzmán, neighbor of Javilla de Cañas who is not yet 5 years old. Despite the generational difference and the great distance between their homes, they both face significant shortages of water due to climate variability.

WATER, DIGNITY AND CLIMATE

Poverty is not measured only by level of income. Access to drinking water, food or education are also variables that are used to measure poverty [2]. On a global scale 3 out of 10 people lack access to safe drinking water [3]. Climate change puts at risk the progress of these last 50 years in terms of development, health and poverty reduction, makes democracy fragile and threatens the future of human rights [4].

Wells had been affected by severe droughts, and often were contaminated by animal waste.

In Costa Rica, despite the high levels of coverage, there are still about 350,000 people with numerous challenges due to the lack of drinking water, especially now with a changing climate that brings extreme temperatures, longer droughts, storms and hurricanes that devastate everything in their path, including life and dignity.

For months this was the reality of El Rincón de San Vicente de Nicoya and Javilla de Cañas, among several other communities in the province of Guanacaste. From 2014 - 2016, the duration of the

drought was 2.4 times higher than in 2009 and 1.8 times higher than in 1997 [5]. The communities were supplied by water trucks for years. Sometimes people had to make six trips to the trucks to fill buckets and pots to cover the needs of their households.

TRANSFORM PROGRESS

In response to the negative impact of climate change, the Costa Rican Water and Sewerage Institute (AyA), the Global Environment Facility (GEF) and the United Nations Development Program (UNDP) launched the project Strengthening the capacity of the communal water supply in 2016.

For Yamileth Astorga, Executive President of AyA, the project has resulted in progress on a national level. "The strengthening of the ASADAS is one of the priorities of AyA, since they are a fundamental pillar in the successful model of public water service in Costa Rica. Thanks to this project we improved the conditions of 206 ASADAS in areas with environmental and water vulnerability like Guanacaste and the Norte-Norte Territory; benefiting public health and the sustainable development of communities" she said.

The objectives of this initiative, which will end in 2021, are to strengthen the infrastructure and technical capacities of communal aqueducts, as well as to promote adaptation based on disaster risk management and ecosystems with broad community participation. The investment of this effort is 5 million dollars.

Communities such as those of Mrs. María and Mateo have participated in actions like water source capturing, installing and building new tanks, expanding pipe networks, recovering and protecting water-rich areas, training to improve the functioning of communal aqueducts to protect the ecosystem that produces water and many more efforts to adapt to climate change with a resilient vision.

"For years I dreamt about water, but I was too embarrassed to talk about our problems because I did not have money. Now I am very happy. Water is everything, it gives us life. I used to say we had contaminated water, now it is drinkable and we have it at home." - María Chavarría Muñoz.

"During Mateo's pregnancy I went through an experience that was sad because my needs where not being met. The water of the creek was terrible, a neighbor had a big chicken farm. Sometimes we put chlorine in it, because we had to bathe and wash the dishes, but those days are over. Now we are happy, today we have water from the ASADA and we take care of it too." - Adriana Castro Corea, Mateo's mother.

COMMUNITY MANAGEMENT: DEVELOPMENT ENGINE

More than a million people in Costa Rica - about 30% - receive water thanks to the voluntary work of fifteen thousand community water managers and helpers that are responsible for the communal aqueducts throughout the national territory. They work together to ensure a good quality of life for all families and communities.

The communal aqueducts, known as ASADAS, play a fundamental role in the management of water resources and public water services, and are a model of democratic participation in the development of the country.

José Vicente Troya Rodríguez, Resident Representative of the UNDP in Costa Rica, recognizes the fundamental value of alliances. "Doña María and Mateo show us the determined commitment of hundreds of people to turn the integral vision of the Sustainable Development Goals into concrete actions, eradication of poverty is at the heart of everything we do."

Other Institutions such as the Ministry of Environment and Energy (MINAE), the Directorate of Climate Change (DCC), the National Employment Program (PRONAE) of the Ministry of Labor and Social Security (MTSS), the National Meteorological Institute (IMN), the National Emergency

Commission (CNE), the Subcommittee on Drinking Water and Sanitation of the National Council of Rectors (CAS-CONARE), Public Universities and, above all, the participation of communities and related persons with the ASADAS have joined efforts to ensure the achievements of these national project.

Knowledge Management, Project Links and Social Media

Please describe knowledge activities / products as outlined in knowledge management approved at CEO Endorsement /Approval.

Please also include: project's website, project page on the UNDP website, blogs, photos stories (e.g. Exposure), Facebook, Twitter, Flickr, YouTube, as well as hyperlinks to any media coverage of the project, for example, stories written by an outside source. Please upload any supporting files, including photos, videos, stories, and other documents using the 'file lirbary' button in the top right of the PIR.

2019 Report

1. The Project has convened an important group of partners, in order to develop a strategy for promoting and positioning community water management in the public eye, given the role this model plays in the country's sustainable development, and in the guarantee of the human right of access to clean water and sanitation. This strategy has sought to give greater visibility and create conditions to promote specific legislation for community management of water resources. Among the achievements of this effort was the inclusion of a greeting and recognition to community water managers in the speech on the Independence Day of the President of the Republic, on the occasion of of the national day of community water management on 14 September. Likewise, a television spot and graphic elements were shared by the strategic partners and counterparts, among other organizations, the AyA, the Center for Environmental Law and Natural Resources (CEDARENA), the National Technical University (UTN), the National University (UNA), the National Council of Rectors (CONARE), the Water Directorate (DA)), the Public Services Regulatory Authority (ARESEP), Confederation of Federations, Leagues and Unions of ASADAS (CONAFLU).Official sites .
https://presidencia.go.cr/comunicados/2019/03/saneamiento-seguro-y-cambio-climatico-son-los-retos-de-costa-rica-para-la-sostenibilidad-del-recurso-hidrico/

2. Articulation with Presidential House for the distribution of different efforts between institutions and UNDP. On World Water Day, a joint declaration with AyA was launched, stating that safe sanitation and climate change are the main challenges to the sustainability of the water resource in Costa Rica. Presidential House distributed through all its official channels.

https://presidencia.go.cr/comunicados/2019/03/saneamiento-seguro-y-cambio-climatico-son-los-retos-de-costa-rica-para-la-sostenibilidad-del-recurso-hidrico/

This material generated different replicas in national, for example El País and Diario Extra (the second most sold medium in Costa Rica and with a lot of positioning in rural communities).

https://www.elpais.cr/2019/03/22/saneamiento-seguro-y-cambio-climatico-son-los-retos-de-costa-rica-para-la-sostenibilidad-del-recurso-hidrico/

https://www.diarioextra.com/Noticia/detalle/385195/costa-rica-impulsa-inversiones-por-1000-millones-en-sector-agua

3. Support for the "Latin American Regional Sanitation Conference" (LATINOSAN 2019), including media dissemination and the development of different information materials. The infographics developed demonstrated the status of drinking water and sanitation in the region. This material was used by the Executive President of the Costa Rican Institute of Aqueducts and Sewers (AyA) during his official presentation at the opening of the event and was circulated among different media. These are available at:

https://www.dropbox.com/sh/5c4q84lxwvts03y/AAA3rnZzd2j5I9fosn99eTMHa?dl=0

4. A Spanish version of the technical article "Contribution to the improvement of the design, construction and operation of UASB reactors applied to the treatment of urban wastewater" has been produced for the magazine of the Water and Sanitation Department of the Basic Sanitation Company of the State of Sao Paulo (SABESP), Brazil, which will be widely disseminated, including publication by the Inter-American Bank. of Development (BID). Available at: http://www.cr.undp.org/content/costarica/es/home/library/revista-dae---reactores-uasb.html

5. The UNDP Biennial Report highlights this project as a best practice to improve national capacity for prevention and recovery for resilient societies. The report was launched at an event with over 150 participants, including representatives of the public sector, private sector, civil society, academia, development agencies, among others. Likewise, the document was posted in the publications section of the UNDP website and distributed among the databases of strategic partners, counterparts and media.

http://www.cr.undp.org/content/costarica/es/home/library/Informe-bianual-PNUD.html

6. Positioning of the importance of gender equality in communal aqueducts. AyA became the firts institution in the environmental sector to launch its commitment, through the Institutional Policy of Gender Equality 2018-2030. UNDP was part of the steering group, a joint press release and video were developed and presented during the official ceremony. The news were circulated by Government at the natioanal level, including the Presidential House, and by local and national media.

https://www.guanacastealaaltura.com/index.php/el-pais/item/2743-aya-lanza-su-compromiso-con-la-igualdad-de-genero

https://www.elmundo.cr/costa-rica/aya-primera-institucion-publica-ambiental-con-politica-de-igualdad-de-genero/

7. Thematic videos have been developed, as well as tutorials to facilitate the transmission of specific information in an effort to knowledge management, such as:

• Video on the participation of women in community management

https://www.youtube.com/watch?v=0rLm8B4ydds

• Video on the importance of communal associations

https://www.youtube.com/watch?v=7WJ-Hw-bOOM&t=6s

• Video on the importance of integration

https://www.youtube.com/watch?v=D9jp0tt62ec&t=1s

• Video on the reduction of the Unaccounted Water

https://www.youtube.com/watch?v=yBfaI9BsK3w&t=1s

• Tutorial on the construction of artisanal chlorinators

https://www.youtube.com/watch?v=wsME23siy5U&t=71s

• Tutorial about water gauging of sources

https://www.youtube.com/watch?v=oEDuhCdOXG4

• Tutorial on the measurement of pressure on pipes in communal aqueducts

https://www.youtube.com/watch?v=NmJ9cIjnUI4

8. Development of quick-reference guides with instructions to conduct small infrastructure fixtures and/or administrative operations, in the communal aqueducts to improve management and performance through knowledge. These are available at:
https://www.dropbox.com/sh/mcgtchby4zzflq2/AAAVqYoiHIUZLNUXAD5QiSGsa?dl=0

9. Fact sheet of the Project as part of the informative kit of the UNDP Costa Rica projects delivered by the Resident Representative during their official meetings with national authorities, which highlights the impact on development through the project. This available at:

https://www.dropbox.com/sh/dekbr7u8wd1cp5x/AADBfAjVrkvqngchvyyoHKGha?dl=0

10. Action for Water campaign that includes four video stories and a photo story showing the impact of climate change on water resources and associated action, from the perspective of different community members. The campaign will be officially launched the fourth week of July with the leadership of AyA as a strategic partner. Two of these videos were selected to be presented during the Ecological Blue Flag Award, one of the most outstanding activities in the country's conservation and development. They were transmitted to 800 authorities, representatives of all sectors. For this campaign MalPaís, a popular national band recognized for its commitment to environmental causes, composed a song and video which will be used to support the campaign. Videos of the campaign are available at:

• Facing the flames to protect forest https://www.youtube.com/watch?v=-pj3O7YvX_Y

• Community, water and development https://www.youtube.com/watch?v=0tXxG5y6Fak

• Protect the environment and prevent disasters https://www.youtube.com/watch?v=WYiPyYOpA-s

• Water that gives life to equality https://www.youtube.com/watch?v=JF_Uqg9l8dA&t=59s

The song:
https://onedrive.live.com/?authkey=%21AE0Cfa33uOA5nPc&id=A42F942266272DD2%211735&cid=A42F942266272DD2

Other campaign material, such as messages for social networks, poster, canvas and campaign coloring sheet at:
https://www.dropbox.com/sh/72nexhtivzj9x2e/AAAVhfhxOrLXwhW7IF9P9ee_a?dl=0

2018 report

Facebook

https://www.facebook.com/fortalecimientodeasadas/?ref=br_rs

Web UNDP: “Proyecto Fortalecimiento de las capacidades de Asociaciones de Acueductos Rurales (ASADAS) para enfrentar riesgos del Cambio Climático en comunidades con estrés hídrico en el Norte de Costa Rica”

http://www.cr.undp.org/content/costarica/es/home/operations/projects/environment_and_energy/fortalecimiento-de-asadas-zona-norte.html

Web UN Title: “Proyecto Fortalecimiento de las capacidades de Asociaciones de Acueductos Rurales (ASADAS) para enfrentar riesgos del Cambio Climático en comunidades con estrés hídrico en el Norte de Costa Rica” http://www.nacionesunidas.or.cr/proyecto-fortalecimiento-de-las-capacidades-de-asociaciones-de-acueductos-rurales-asadas-para

Vimeo UNDP Costa Rica: “FORTALECIMIENTO DE LAS ASADAS EN LA ZONA NORTE DEL PAÍS”

https://vimeo.com/177232098

Vimeo UNDP Costa Rica: Historia de Vida. Victoria Lara - ASADA Cuajiniquil

https://vimeo.com/233860982

Vimeo UNDP Costa Rica: Catalino Carrillo, secretario ASADAS Huacas

https://vimeo.com/247809275

News

“Gobierno de Costa Rica $5.5 millones para 395 acueductos comunales en Guanacaste y Zona Norte”

https://presidencia.go.cr/comunicados/2016/03/5-5-millones-para-395-acueductos-comunales-en-guanacaste-y-zona-norte/

“Decenas de asadas afectadas por cambio climático podrán recibir fondos de Naciones Unidas. Voz de Guanacaste”

https://vozdeguanacaste.com/decenas-de-asadas-afectadas-por-cambio-climatico-podran-recibir-fondos-de-naciones-unidas/

“Usarán $5,5 millones para diagnóstico y obras en 395 Asadas”

http://www.crhoy.com/archivo/usaran-5-5-millones-para-diagnostico-y-obras-en-395-asadas/nacionales/

“Asadas, primera defensa contra el cambio climático”

https://ojoalclima.com/asadas-primera-defensa-cambio-climatico/

"Millonaria inversión de AyA para estos cantones"

https://www.laprensalibre.cr/Noticias/detalle/60240/millonaria-inversion-de-aya-para-estos cantones-

K. Partnerships

Partnerships & Stakeholder Engagment

Please select yes or no whether the project is working with any of the following partners. Please also provide an update on stakeholder engagement. This information is used by the GEF and UNDP for reporting and is therefore very important! All sections must be completed by the Project Manager and reviewed by the CO and RTA.

Does the project work with any Civil Society Organisations and/or NGOs?
Yes
Does the project work with any Indigenous Peoples?
Yes
Does the project work with the Private Sector?
Yes
Yes
Does the project work with the GEF Small Grants Programme?
Yes
Yes
Does the project work with UN Volunteers?
No
No
Did the project support South-South Cooperation and/or Triangular Cooperation efforts in the reporting year?
No
No
CEO Endorsement Request: GEF6 CEO Endorsement-PIMS 5140-ASADAS Costa Rica_04Oct2015.doc
Provide an update on progress, challenges and outcomes related to stakeholder engagement based on the description of the Stakeholder Engagement Plan as documented at CEO endorsement/approval (see document below). If any surveys have been conducted please upload all survey documents to the PIR file library.
Civil Society Organizations and/or NGOs • Biological corridor Ruta Los Malecu • Federation of Aqueducts Huetar Norte (UANN) • Union of Aqueducts Norte-Norte (UANN)

- Communal Water League (Guanacaste)
- ASADAS Federation Liberia-La Cruz
- ASADAS Federation Abangares, Cañas, Bagaces, Tilarán
- ASADAS Federation Carrillo-Santa Cruz
- National Federation of League Federations and Aqueduct Unions (CONAFLU)
- Center for Environmental and Natural Resources Law (CEDARENA)
- AVINA Foundation
- FUNDECOOPERACION Foundation
- World Vision
- Guardian of Nature Program
- Youth for Water Network
- Guanacasteca Association of Waters and Forests (AGAB)
- Latin American Confederation of Community Organizations of Water and Sanitation Services - CLOCSAS

Indigenous Peoples

- Community Malecu (Guatuso)
- Community Matambuguito (Chorotega)

Private sector

- Río Nosara Biological Corridor
- Costa Rican Chamber of Hotels
- National Union of Forest Agriculture (UNAFOR Chorotega)
- Harmony Hotel Nosara
- Touristic Project Papagayo Gulf
- Sugar factory El Viejo
- Nandamojo Asociacion
- Upala Agricola
- Guanacaste Community Fund
- BMI Media, Audiovisual artists and developers
- The Post Room, Audiovisual artists and developers
- Malpaís musical group

Public and governmental organizations

- Popular and Community Development Bank
- Presidential House
- Municipalities of 10 cantons of the Project
- National System of Protected Areas (SINAC)
- Ministry of Agriculture and Livestock (MAG)
- Ministry of Health
- Regulatory Authority of PUBLIC SERVICES (ARESEP)
- National Water Laboratory
- Technical and Professional High School (Guatuso/Upala)
- National Training Institute (INA)
- Costa Rican Tourism Institute (ICT)
- National Directorate of Community Development (DINADECO)
- Presidential House-Territorial Liaison Program North Zone
- National High Technology Center
- (CENAT)
- National Emergency Commission (CNE)
- Costa Rica Meteorological Institute (IMN)
- Regional Development Council (COREDES-Chorotega)
- Territorial Development Councils (INDER-Chorotega and Huetar Norte)
- Emergency Municipal Committees (Upala/Los Chiles)
- National Underground Water, Irrigation and Drainage Service (SENARA)
- Water Direction
- National Directorate of Climate Change
- Ministry of Environment

Private and public academy organizations

- Water and Sanitation Commission of the National Council of University Rectors (CAS-CONARE)
- Water Resources Center for Central America and the Caribbean (HIDROCEC-UNA)
- Mesoamerican Center for Sustainable Development of the Dry Tropics (CEMEDE) -UNA
- Interdisciplinary Water Research and Management Program of the National University - PRIGA, UNA
- Distance State University (UNED)

- Biosystem’s Engineering School (UCR)
- Geography school University of Costa Rica (UCR)
- Environmental Management Unit of the University of Costa Rica - UCR
- Research Program in Sustainable Urban Development (PRODUS-UCR)
- Tropical Agronomic Center for Research and Teaching (CATIE)
- Subprogram of Integrated Water Resource Management of the National Technical University (UTN)
- Véritas University
- Latin American University of Science and Technology - ULACIT

Other

- Costa Rican Red Cross
- International Organization for Migrations (IOM)
- UN environment
- UN Women

L. Annex - Ratings Definitions

Development Objective Progress Ratings Definitions

(HS) Highly Satisfactory: Project is on track to exceed its end-of-project targets, and is likely to achieve transformational change by project closure. The project can be presented as 'outstanding practice'.

(S) Satisfactory: Project is on track to fully achieve its end-of-project targets by project closure. The project can be presented as 'good practice'.

(MS) Moderately Satisfactory: Project is on track to achieve its end-of-project targets by project closure with minor shortcomings only.

(MU) Moderately Unsatisfactory: Project is off track and is expected to partially achieve its end-of-project targets by project closure with significant shortcomings. Project results might be fully achieved by project closure if adaptive management is undertaken immediately.

(U) Unsatisfactory: Project is off track and is not expected to achieve its end-of-project targets by project closure. Project results might be partially achieved by project closure if major adaptive management is undertaken immediately.

(HU) Highly Unsatisfactory: Project is off track and is not expected to achieve its end-of-project targets without major restructuring.

Implementation Progress Ratings Definitions

(HS) Highly Satisfactory: Implementation is exceeding expectations. Cumulative financial delivery, timing of key implementation milestones, and risk management are fully on track. The project is managed extremely efficiently and effectively. The implementation of the project can be presented as 'outstanding practice'.

(S) Satisfactory: Implementation is proceeding as planned. Cumulative financial delivery, timing of key implementation milestones, and risk management are on track. The project is managed efficiently and effectively. The implementation of the project can be presented as 'good practice'.

(MS) Moderately Satisfactory: Implementation is proceeding as planned with minor deviations. Cumulative financial delivery and management of risks are mostly on track, with minor delays. The project is managed well.

(MU) Moderately Unsatisfactory: Implementation is not proceeding as planned and faces significant implementation issues. Implementation progress could be improved if adaptive management is undertaken immediately. Cumulative financial delivery, timing of key implementation milestones, and/or management of critical risks are significantly off track. The project is not fully or well supported.

(U) Unsatisfactory: Implementation is not proceeding as planned and faces major implementation issues and restructuring may be necessary. Cumulative financial delivery, timing of key implementation milestones, and/or management of critical risks are off track with major issues and/or concerns. The project is not fully or well supported.

(HU) Highly Unsatisfactory: Implementation is seriously under performing and major restructuring is required. Cumulative financial delivery, timing of key implementation milestones (e.g. start of activities), and management of critical risks are severely off track with severe issues and/or concerns. The project is not effectively or efficiently supported.