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Report on the Mid Term Review - (MTR) of the Binational Project

**Integrated Water Resources Management in
Titicaca-Desaguadero-Poopó-Salar de Coipasa
TDPS System**

Consultant: Eduardo Durand

**August 2019
Lima, Peru**

i. MTR DATA

Project:

Integrated Water Resources Management in the System
Titicaca-Desaguadero-Poopó-Salar de Coipasa – (IWRM-TDPS)

MTR Execution Term:

June 25th, 2019 – August 30th, 2019

Region - Countries:

LAC – Bolivia, Peru

Focal Area/GEF Strategic Program:

Focal Area: 5. International Waters - GEF *Strategic Program*: IW-3

Implementation Agency:

UNDP

Implementation Partners:

- Ministry of Foreign Affairs of the Plurinational State of Bolivia – MRE-B
- Ministry of the Environment of Perú - MINAM

Consultant in charge of MTR:

- Eduardo Durand

Front page picture: Chacas Lagoon, Juliaca, Perú – Pilot project site in TDPS (E. Durand)

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The content of this report, notwithstanding, does not necessarily reflect their personal opinions nor the ones of the United Nations for Development Program, its Executive Board or the members of United Nations programs. The report contains and reflects only the views and proposals of the consultant.

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- J.** Approval of Final Report form.

iii. Acronyms and Abbreviations

AAAT	Titicaca Water Administration Authority (<i>Autoridad Administrativa del Agua</i>)
ALT	Binational Autonomous Authority (<i>Autoridad Binacional Autónoma del Sistema Hídrico Titicaca-Desaguadero-Poopó-Salar de Coipasa</i>).
ANA	Peru National Water Authority (<i>Autoridad Nacional del Agua, Perú</i>)
ATLAS	Institutional resource planning system of UNDP
AWP	Annual Work Plan
BOL	<i>Estado Plurinacional de Bolivia</i> (Abbreviation according Norm ISO 3166-1)
BPCU	Binational Project Coordination Unit
BRIDGE	<i>“Proyecto Construyendo Diálogos y Buena Gobernanza el Agua en los Ríos”</i> .
BPC	Binational Project Coordinator.
BSC	Binational Steering Committee
BTC	Binational Technical Committee
CPAP	Country Program Action Plan, PNUD.
CPD	Country Program Document, PNUD.
DNP	National Direction of Project (<i>Dirección Nacional del Proyecto</i> , MINAM, Peru)
GBMP	Global Binational Master Plan (for TDPS)
GEF	Global Environmental Facility.
IRD	Institute de Recherche pour le Development – France.
IW	International Waters – GEF
IWC	International Waters Conference
IW-LEARN	International Waters Platform of Exchange of Learning and Resources - GEF.
IWRM	Integrated Water Resources Management
LAC	Latin America and Caribbean Region
MINAGRI	Ministry of Agriculture and Irrigation - Perú.
MINAM	Ministry of the Environment - Peru
MMAyA	Ministry of Environment and Water - Bolivia
MRE-B	Ministry of Foreign Affairs - Bolivia
MRE-P	Ministry of Foreign Affairs - Perú
msnm	Meters above sea level, in Spanish abbreviation..
MTR	Mid Term Review.
SDG	Sustainable Development Goals (ODS in Spanish)
NGO	Non-Governmental Organization (ONG in Spanish)
GBMP	Global Binational Master Plan for TDPS.
GNP	Gross National Product (PBI in Spanish).
PIR	Project Implementation Report.
UNDP/PNUD	United Nations Development Program / <i>Programa de las Naciones Unidas para el Desarrollo</i> .
UNDP-CO	UNDP Country Office.
PRODOC	Project Document
SAP	Strategic Action Program
TDA	Transboundary Diagnostic Analysis
TDPS	Titicaca-Desaguadero-Poopó-Salar de Coipasa System.
ToR	Terms of Reference
UMSA	Universidad Mayor de San Andres, La Paz, Bolivia
UNDAF	United Nations Development Assistance Framework
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States of America Dollars.

1. 1. Executive Summary

2.

1.1 Project Information

Project Name	Integrated Water Resources Management in the System Titicaca-Desaguadero-Poopó-Salar de Coipasa (IWRM-TPDS)		
UNDP Project ID (PIMS#):	4383	PIF Approval date	May 27th 2014
GEF Project ID (PMIS#):	5748	CEO Authorization date	Feb 10th 2016
ATLAS Unit Dossier Project Nr- ID, (Award # Project. ID)	00094352	Date of signature of the Project Document - PRODOC (starting date of Project)	Nov 22th 2016
Country/Countries	Bolivia/Perú	Date of recruitment of the Project Coordinator:	Oct 2nd 2017
Region:	LAC	Date of Inception Workshop:	Nov 22th 2017
Focal Area	5. International Waters	Date for completion of the Mid Term Review (MTR):	Sept 11th 2019
Strategic objectives of the Focal Area	Objetivo N°IW3 Outcomes 3.1,3.2 y 3.3	Expected date for completion	Jul 31th 2020
Fiduciary Fund [indicate GEF TF, LDCF, SCCF, NPIF]:	GEF	In case of revision, new date proposed for completion	
Executing / Implementing Partners	Ministerio de RR.EE del Estado Plurinacional de Bolivia Ministerio del Ambiente del Perú		
Project funding	At the time of CEO Authorization (USD)	At the time of MTR (USD)	
[1] GEF: Perú y Binacional	5,133,750	5,133,750	
[2] GEF Bolivia	1,430,000	1,430,000	
Total GEF	6,563,750	6,563,750	
[3] Contribution PNUD Perú	50,000	50,000	
[4] Contribution PNUD Bolivia	50,000	50,000	
[5] Government of Bolivia	14,800,000	14,722,715	
[6] Government of Perú	8,795,622	9,255,465	
[7] Total co-financing [3+4+5+6]:	23,695,622	23,978,170	
TOTAL COST OF PROJECT [1+2+7]	30,259,372	30,541,920	

1.2 Project Description¹.

The final objective of the Project is to contribute to the processes of integrated planning and management of water resources that ensure the sustainable conservation of the water system called 'Titicaca-Desaguadero-Poopó-Salar de Coipasa (TDPS)', through a binational effort. Bolivia and Peru share this extensive endorrheic basin covering 144,000 km² and housing a population of 3.6 million citizens of both countries.

The basin, and sub-basins of these national territories are suffering from increasing environmental and resource degradation, despite frequent government agreements and binational actions – such as the Binational Autonomous Authority of the System – and national conservation efforts, as well as local management of the water and biological resources on which the population depend in both countries.

The Project aims to take a promoting and catalyst action of planning and integrated management of water resources (IWRM) that promotes and orders a binational process of sustainable development of the TDPS System. The main task of the Project is to introduce and achieve a new approach to integrated and institutionalized management at the binational level, covering both the management of water resources, as well as their relationship and effect on other natural resources, biodiversity, environment in general, and the economic and social activities linked to the System.

For this purpose, the Project will directly invest, over four years, USD 6,563,750 contributed by the GEF, which will be supplemented by national investments amounting to approximately USD 24 million. The Project will be overseen by a binational steering committee (BSC), and will be implemented through UNDP with the direct and coordinated participation of the respective ministries of foreign affairs and environment in both countries, with MINAM-Peru acting as the national Project Directorate (DNP, in Spanish) since Peru is the hosting country.

The structure of the Project focuses on the conduction of a cross-border diagnosis (TDA) up-dated with 22 studies and new available information; and, consequently, on the elaboration of an strategic action program (SAP) that should be implemented later by a renewed binational autonomous authority, based on the current ALT. In parallel, 11 pilot projects will be carried out in emblematic topics or critical areas of TDPS in Bolivia and Peru, for learning, exchange of knowledge, and replication of successful experiences. In addition, funding will be applied to institutional and capacity building of government officials and local actors, as well as in monitoring, communication and ongoing information systems, to ensure the informed participation of government officials and local actors including the inclusion of gender and intercultural approaches.

The Project is aligned with the global programs and strategies of the GEF (International Waters) and UNDP, within the framework of the Bolivian and Peru Country Programs. It also contributes directly to U.N Sustainable Development Objectives (SDG) 6 (Clean Water and Sanitation), 11 (Sustainable Cities and Communities), 12 (Responsible Production and Consumption), 13 (Climate Action), and 15 (Life on Land); in addition to indirectly contributing to SDG 1 (No Poverty) and 17 (Partnerships for the Goals).

¹ All reference to the **Project** ahead will carry capital "P" to avoid confusion with other references to projects in general or to the so called 'pilot projects'.

1.3 Summary of Project progress.

The Project's progress towards its objective is considered as **moderately unsatisfactory**; and, on average, current achievements in Outcomes and products actions do not go beyond **moderately satisfactory**. The most obvious reason is the backlog of the implementation targets and provisions of the PRODOC, which stems not so much in its implementation pace, as in the delay in initiating the actions. This has been caused by unforeseen circumstances in the institutional and regulatory procedures for implementing the Project, especially in Bolivia, which required the preparation, approval and signature of a document of national scope, complementary to the binational PRODOC that was signed by Peru.

Even considering the start of the Project in the second year, additional delays have arisen in technical discussions for terms of reference and working methodologies, as well as extensive red tape and procurement procedures due to the uniqueness of some of the products to be developed, different national administrative protocols, and recruitment of key positions for the binational coordination unit (BPCU).

This stage of initial difficulties is being overcome, and now 50% of the complementary studies for the TDA are about to start or have started implementation, and 50% of the pilot projects are expected to accelerate execution. It is also anticipated, however, that the initial time lost will have to be recovered through **an extension of at least one year in the Project's implementation schedule**; and compensated with even greater proactivity in its actors and implementers to solve current barriers and difficulties, with an urgent adaptive approach.

Overall, the Project has reached a **budget implementation of 9% of GEF funding** as of the date of this MTR. Although progress is likely to be greater, in terms of physical implementation and in consolidation of enforcement and governance mechanisms, the biggest problem now is the lack of the Coordinator at the BPCU, and the consequent present difficulties in coordinating and implementing the BSC and BTC decisions.

Despite the difficulties identified, the current political support expressed by both national governments, and the urgent need to address the environmental degradation in the TDPS - now with high pressures of use and risks, loss of ecosystem quality and resources for the population and economy of both countries - underscore the great importance of the Project implementation. On the other hand, the results of the Project will be crucial for articulating and integrating national investments which are already underway in the sectoral and regional national entities, and that are convergent and concomitant to the development objectives of both countries.

Below is the summary table of achievements and valuations prepared for this MTR, which is also included in more detail in the body of this report (section **4.3**), and with wider comments and extension, as required by the MTR ToR, in the **Annex A**.

1.4 Summary of Outcomes and Achievements of the Project at the MTR

Parameter	Valuation ²	Description of the Achievements
Project Strategy	N/A	
Progress toward achievements	<p>Project Objective</p> <p>MU</p> <p><i>'To promote the conservation and sustainable use of water resources in the Titicaca - Desaguadero – Poopó - Salar de Coipasa (TDPS) transboundary system, through the updating the Global Binational Master Plan'</i></p>	<p>There is no report of substantial progress - at this time - in Project objective indicators towards its ultimate goals, beyond the reiteration and the strengthening of political commitments, and the alignment of progress in complementary studies and pilot projects reported in PIR 2018.</p> <p>There is now a perceived acceleration course with recent decisions in the Steering and Technical Committees, because of the solution of technical impasses in complementary studies, the work with platforms for watershed management, and the concomitant public investment plans in both countries. All of this is crucial to the TDA and SAP.</p> <p>However, the backlog is still considerable in the current time frame and requires urgent adaptive action to obtain the Outcomes.</p>
	<p>Outcome 1</p> <p>MU</p> <p><i>'Transboundary Diagnostic Analysis (TDA) and the Strategic Action Program (SAP) for the TDPS have been formulated and adopted'</i></p>	<p>Progress with courses on methodology, core group training, and ongoing consulting engagement, is relevant. But the remaining time would be insufficient to meet the expected targets to complete the TDA and approve the SAP. Although the agreements, after the arduous definition of the 22 complementary studies, are an important achievement, only 2 have started (5.6% of the budgeted amount for the item), 8 are about to start (44.6%), 5 in the process of agreements (23.8%), and the remaining 7 (26.2%) are in the TdR approval process.</p> <p>The time remaining to achieve them and achieve convergence will be insufficient to have an organic impact on both the TDA and the SAP. Delay in initiating activities requires urgent decisions to accelerate decisions and adapt existing mechanisms for coordination and institutional articulation.</p>

² The Table of Valuation of achievement has the following scale: Highly Satisfactory **HS**; Satisfactory **S**; Moderately Satisfactory **MS**; Moderately Unsatisfactory **MU**; and Unsatisfactory **U**. In the case of sustainability risks: Likely **L**; Moderately Likely **ML**; and Unlikely **U**.

	<p>Outcome 2 MU</p> <p><i>'Improved institutional capacity to implement IWRM in the TDPS system in both countries'</i></p>	<p>Progress in the ToR process and the hiring of the firm that will carry out the training, including the thematic definition and structure of the courses, makes it possible – in the face of the simultaneous delay of the other components – the fulfillment of end-of-project goals at years 3 and 4, as long as there is no further delay.</p> <p>Quantitative targets are achievable, but when assessing the medium-term impact of this activity, the high turnover of officials in subnational and local governments in both countries should be considered.</p> <p>The progress is by now considered moderately unsatisfactory, unless there is an extension of the implementation period that would enable the expected outcome to be achieved</p>
	<p>Outcome 3 MS</p> <p><i>'Practical learning generated in pilot experiences contribute to the development of the SAP and for decision making'</i></p>	<p>The delay in starting the pilot projects makes it impossible to determine, in this instance, whether the practical learnings generated in the pilot experiences will contribute to the formulation of appropriate policies for the SAP. However, the positive results that are being obtained in the projects already started and visited – project 10-P-05 with the communities around the Laguna de Chacas, Peru, and project 05-B-05, with the IRD and UMSA in Bolivia - generate expectation to meet the goals. Two other studies, planned for a duration of 36 months, have not yet started, which calls into question their timely completion.</p> <p>The MTR valuation assigned assumes that an extension of the execution times will be applicable as a result of the parallel progress in the other indicators, mainly those of Outcome 1 that are conditioning the execution of the rest.</p>
	<p>Outcome 4 MU</p> <p><i>'Updated, accurate, and relevant information on TDPS management is available and accessible to allow implementation of the SAP with an adaptively approach, including attention to social and gender variables'</i></p>	<p>Apart from the proposal of the BPCU, pending approval, to form the Binational Monitoring Coordination Group; and the binational workshop on analysis and prioritization of monitoring indicators; no further progress has been made on this outcome indicator.</p> <p>The backed-up work at the BPCU, due to the pending designation of the Coordinator, has limited progress. Some level of dissatisfaction has been expressed, at the level of subnational and local officials, about their limited involvement and participation in Project decisions affecting their duties or jurisdictions.</p> <p>Satisfaction goals and indicators require clear identification of actors to be surveyed, and appropriate samples and questionnaires. Surveys cannot be conducted without a monitoring plan. The barriers that have prevented this progress should be removed, and the implementation of previous activities and the necessary enabling conditions should be accelerated.</p>

	<p>Outcome 5 MU</p> <p><i>'Key stakeholders know the core issues of the TDPS, become empowered and act in the context of IWRM to advance workable solutions.'</i></p>	<p>Progress here is conditioned by slow progress in Outcome 2. Key public officials and social and productive leaders cannot be surveyed without an empowerment process, without updating and knowledge of the issues they face, and the solutions they can implement.</p> <p>In this condition, the advances made until the PIR 2018, with the web portal, blogs and social networks, do not yet reach the necessary impact, so they are relatively isolated from their key audience.</p> <p>In this context of relative progress and reliance on other delayed previous outcomes, this product indicator is rated as moderately unsatisfactory.</p>
	<p>Outcome 6 MS</p> <p><i>'Key stakeholders actively participate in a coordinated manner to address the core problems in the TDPS system.'</i></p>	<p>This Outcome is conditioned by the delay in activities for the previous Outcomes. Such full participation will not be possible without informed involvement of the actors in - and on - the progress of the Project.</p> <p>The reported progress indicates efforts by the Project team to identify key players and to participate in events related to water resource management in both countries, but the status and sustainability of the platforms under training, and of those already established, must be consolidated.</p> <p>Up to six platforms that are significant for the goal are operational due to government efforts parallel to the Project in both countries; and there are more in the process of activation and development in the interest of the respective governments; therefore, the goal of eight platforms to be able for involvement in the activities promoted by the Project is achievable.</p>
<p>Project execution and adaptive management</p>	<p>MU</p>	<p>The implementation of the Project requires an adaptive reordering with redefinition and consolidation of roles, and a budget structure consistent with changes in financing and amounts of outcomes and products.</p> <p>It is urgent to strengthen the BPCU and support the work of the new Coordinator on all fronts so that it can fully assume its articulating role and conduct BSC and BTC decisions to implementation</p> <p>The budget implementation to June 2019 amounts to only 9% of the total Project, as a result of delays in the initiation of activities, without any investments during the first year (2017).</p>
<p>Sustainability</p>	<p>ML</p>	<p>The sustainability of the Project, assuming an extension of the execution period, and a more effective operation of the management and technical coordination levels, should not vary from the analysis carried out in the PRODOC. However, close monitoring of the evolution of political and economic issues in both countries is required; as well as preparatory work for the agreements that will be necessary for the implementation and consolidation of the SAP, such as the negotiated design of the new binational authority in charge.</p>

1.5 Summary of conclusions

➤ *On the nature and importance of the Project*

- The importance of the Project and its relevance of its implementation and conclusion to address the TDPS's problems and long-term actions for sustainability, are widely recognized by all stakeholders.
- There is also an increased political concern of the need for action towards TDPS, that is expressed in agreements and coordination at the highest level of government in both countries; but there are some barriers to assuming them on binational terms.
- The Project, in general terms, is well formulated from a conceptual and structural logic point of view. However, the weight of political, institutional and government culture differences in the design may have been underestimated; so, to overcome them, an adaptive process of incorporating these conditions and strategies will be needed.
- In terms of organization and roles for management, there are some gaps that need to be addressed and concerted, based on the experience gained; this is the case of the roles and interactions between the National Project Directorate (MINAM), and the Binational Coordination, with respect to the Binational Technical Committee.
- There is scant internalization, in the parties and actors, of the intrinsic binational nature of the objectives of the Project, which conveys the risk of overlapping or doubling isolated efforts, or biased views on the implementation of solutions and the role of the binational entities.

➤ *Structural issues that call for attention*

- IWRM is an innovative approach that requires intensive work of reconciling methodologies and multidisciplinary cooperation. Sectoral divisions undermine the holistic vision; and the frequent rotation of officials, along with their overburdened work that limits their participation in decisions, undermines the smooth implementation of the Project.
- There is a tendency to miss the view of the Project as the main current contributor towards a new SAP and its long-term Implementation. Complementary components and technical products should not be seen, discussed and worked in isolation or with a *per se* scientific look (pilot projects and studies), nor should be the strengthening, training, monitoring, information and knowledge management activities.
- The ultimate objective of the Project requires continued attention to the convergence and combination of actions by national sectors in both countries, and to the concerted design of an ATL that must overcome its current limitations.
- Neither the current ALT nor the former Master Plan have been evaluated with a view to taking on the new legacy of the Project and the implementation of the SAP. The Project design assumes that the antecedent plan (GBMP) requires a sound update and

enhancement; but - judging from the perception of several specialists involved - a sound evaluation has not been carried out for a more refined design of the Project.

- The Project promotes, catalyzes and lays the foundations for a new action plan and binational agreement. However, it is not intended to include or evaluate the needs and characteristics of such a new binational regime and the ways of harmonizing it with the respective national norms and institutions; this task would be part of a further process to be developed by the Chancelleries, but it is essential to articulate it from now on with the development of the Project.

➤ *Conjunctural problems that require attention and adaptive action.*

- There is a general recognition of the backlog of execution (9% expenditure). There is consensus among the parties and actors that it would not be possible to complete the Project as planned, without at least one additional year.
- Some problems in coordination and implementation of BSC decisions are recurrent. The need to accelerate binational management and coordination processes adaptively, and to work on a political and diplomatic strategy to remove mutual mistrust and bias, are also notorious.
- There are difficulties in convening timing and priorities of decision-makers to attend sessions, as well as in their sustained attention to critical issues. There is also a need for greater specificity and precision in decisions and agreements, as well as more effective articulation with the Binational Technical Committee, in order to avoid redundancy and repetition in information, and to achieve greater accuracy and specificity in the decisions made.
- In terms of management, the current lack of the Coordinator and administrative assistance for the UBCP, is causing further delays in action and loss of its managerial intermediation and technical support capacity delegated from the CBD and the Technical. The UCBP's deal-based relocation arrangements and balancing of functions between the two parties, appear to be not satisfactory for either of them.
- In terms of management, the current absence of a Binational Coordinator is causing further delays in action and loss of a hardly needed managerial intermediation and of the technical support and capacities delegated from the BSC and technical committees. The location of the BPCU and the balance-system arrangements of its functions between the two parties appear as not being satisfactory for either one.
- Baselines have not been set for all the indicators to measure progress towards the Outcomes. On the other hand, there is a lack of consistency or coherence between the long-term objective indicators, and the product indicators leading to the objective, as in the case of public policy instruments to be achieved through pilot projects, or the relationship with the watershed councils, created and created, in terms of the activities raise

- Desirable convergence between the definition and implementation of complementary studies and those of the pilot projects requires an analysis for their better integration, articulation and interrelationship of findings for TDA and SAP.
- While long-term forecasts for financing future actions, and proposals for results transfer mechanisms and functions at the end of the Project will be seen in the elaboration of the SAP, it is important to advance provisions, as part of the pilot projects project and diagnostic of current conditions and potential.
- There is no coincidence of the academic approach and research, with administrative and fund management times. There are some problems in terms of opportunity for bidding and acquisitions, and in the expected times or season for academic research, troubleshooting equipment procurement, pricing and technical specifications.
- Master plans for sub-basins are being advanced, but there is no clear foresight of how synergies and their articulation will be raised with the new global master plan (SAP).
- Some actors perceive that the DNP in Peru exceeds its role of technical, administrative and monitoring support, intervening in matters that fall within Bolivia's remit. This may be due to inaccuracy in this regard in the PRODOC and the envisaged governance scheme, particularly in the differentiation of the roles of the DNP and the UBCP, aggravated now by the temporary absence of a Project Coordinator.
- The representation of the GEF and the Focal Point (MINAM, OCAI), which report that they were not formally involved in the initial management of the Project, have already been invited to the CBD sessions, as bodies of international cooperation, to comply with the donor requirements, and those of official registration of the Project with the national agency of Peru (APCI). This linkage must be maintained throughout the implementation of the Project.
- Mentions on gender and interculturality issues elicit reactions referred them as tacit in n working with the population and in the activities that are carried out; as well as cultural homogeneity within the scope of the Project. The topic, which is specifically addressed in only two of the pilot projects, is assumed to be considered or implied in the studies and activities, so it is not mentioned as a priority.
- Close relationship and synergies for binational cooperation between other akin governmental sectors within both countries has taken more time than expected. This situation did not allow to incorporate the full potential exchange of experiences in areas of binational cooperation and in information, dissemination, and citizen education in which there are comparative advantages in both countries that could be of mutual benefit.
- In terms of risks and sustainability, except as already stated in the above conclusions, no relevant variation is seen regarding the assumptions in the original PRODOC.

1.6 Summary Recommendations Table

Rec. #	Recommendations	Responsible Entities
A.	Objectives, design, and implementation strategy	
A.1	Promote coordination of BSC with the Chancelleries, in order to agree on a shared strategy for overcoming differences in the binational approach, exchanging experiences with other countries, and discussing options for mechanisms ad-hoc institutions.	MRE-B MRE-P BSC MINAM MMAyA
A.2	Anticipate and work from the BSC an assessment of the current state of the ALT, and the needs for design, faculties and scope of the new ALT, with international support, arbitration and application of the experience of similar cases (Rin, Peru-Ecuador, and others. Consider whether the current ALT should participate as an observer or adviser to the CBD, in addition to participating in the CTB.	BSC BTC
A.3	Monitor the commission to the UBCP of a review of the consistency and relevance of the selected complementary studies in relation to their binational implementation potential, goals and remaining implementation times. At the same time, establish intermediate and specific goals and milestones, consistent with the overall objectives, and with the advancement, and potential of pilot projects for policy design.	BSC BPCU
A.4	Review indicators, especially those whose baseline has not yet been established, and make decisions, either to establish the indicator or to redefine them in the most appropriate way for the relevant outcome.	BPCU UNDP / GEF
B.	Adaptive management	
B.1	Drive on the incorporation of the new Regional Coordinator and review its functions in the framework of strengthening its articulating role between BSC decisions and technical committees, for the smooth implementation of decisions. . Under its management, boost the hiring of the remaining administrative staff, and evaluate the Unit's performance to date to take steps to correct and optimize its functions.	BSC BTC UNDP
B.2	Prepare a document to support the need and conditions for extension of at least one year in the Project's implementation term. Include a long-term vision and subsequent phases, and a roadmap incorporating the measures and times envisaged to ensure compliance in time. Review the 2019 AWP and make the necessary adjustments. To this effect, ensure the official support of both countries to submit the application for extension to the GEF.	BSC BPCU

Rec. #	Recommendations	Responsible Entities
B.3	Continue and facilitate regular participation of the focal point of the GEF and national technical and financial cooperation entities – including consultations with the respective economy and finance sectors as appropriate – for better compliance of the guidelines on public investment and on projects that involve governmental counterpart or co-financing.	BSC MRE-B MRE-P MINAM-OCAI
B.4	Promote parallel cooperation of other governmental sectors in both countries with experience in the issues of citizen participation, private sector involvement, knowledge management and environmental education, through multisectoral working groups for the exchange of experiences and the formulation of mutual technical assistance schemes. Seek additional funding from cooperation entities, or concomitant projects, if current sectoral budgets are limited.	BSC MRE-B MRE-P
B.5	Strengthening the implementation process of the Project monitoring and evaluation system, as outlined in the PRODOC; and of the formation of the working groups for the ADT and the SAP, in line with the start of actions in capacity-building courses.	BSC BPCU
B.6	Conduct review and evaluation sessions of the parties' and UNDP procedures (Peru and Bolivia), to harmonize criteria, remove barriers and delays, shorten deadlines, and agree on solutions that optimize procurement processes, contracts; and pave differences in technical and administrative approaches.	BSC UNDP Perú UNDP Bolivia
B.7	Urge ministerial and decision-makers to participate with greater live or virtual presence in sessions requiring critical decisions, in order to avoid the need for further consultations and delays by alternate representatives, and the risk of additional delays in execution.	BSC
B.8	Seek, through BPCU and under the auspices of the BSC, direct approach to the relevant subnational and local government bodies, involve them in consultations, visits, dissemination and appropriateness of the Project. Regardless of its high turnover, institutional bond building is key to the future of the actions initiated and the SAP implementation.	BSC PBCU
C.	Capacity building, knowledge management and communication	
C.1	Indicators of institutional strengthening need to be refined in terms of training, since attendance at courses and training actions may not reflect the effectiveness of actions. With chronic turnover of officials and managers, and the scant innovation in the field, more accurate and effective methods are required to measure the long-term impact of these actions, for which a monitoring system can be designed in addition to requiring consultants to incorporate these insights into their course design.	BTC BPCU

Rec. #	Recommendations	Responsible Entities
C.2	Incorporate on the website links to pilot projects and to convergent and parallel actions of other sectors and institutions working in the TDPS area on environmental and water resources issues.	BPCU
D.	Gender and intercultural issues	
D.1	It is necessary to make explicit the approaches, if they have been raised, on gender consideration, both in pilot projects as in studies and trainings whose implementation may be conditioned by these approaches. The relative cultural homogeneity of the TDPS area may well facilitate the adequacy of gender aspects, but it cannot be assumed that the issue is implicit in all activities. In the case of interculturality, the homogeneity may be present in the rural area, but cultural differences in the technical, academic and urban-rural relationship of the executors in relation to users, must not be overlooked.	General

1.7 On lessons learned

In addition to lessons indirectly learned from the conclusions and recommendations expressed above, suggestions from interviewees and the consultant on their experiences in the Project and the like are added for analogue future project designs or their replicas:

- Binational projects pose difficulties not always perceived by actors and decision makers. Before designing the Project, cultural and governance differences that are not likely to change in the short term of a project, should be foreseen; and the appearance and difficulty of work should be also foreseen and addressed as part of the project as an organic part of the issues to solve, and not as an obstacle, risk or barrier.
- The inception or start-up workshops, and even the design of a project should be preceded by an induction workshop, especially in the case of binational projects of similar complexity. In this way participation in the ensuing inception workshop would be enriched with prior knowledge of the scopes, difficulties and barriers to be faced.
- The formulation of a binational project often overlooks details of institutional issues and regulations that vary from of one country to another. Typical cases are the international cooperation rules, loans and donations for investments that involve government warrant or co-funding, and budget management regulations. Early participation in the design and formulation of these projects of officials from the ministries or economics, finance and budgetary bodies, in addition to diplomatic channels, can anticipate problems and propose solutions.

2. Introduction

2.1 MTR Purpose and Objectives

The central purpose of the Project MTR – in accordance with the respective ToR – is to assess progress in achieving the objectives and Outcomes, as set out in the Project Document (PRODOC) and in the complementary instruments, such as the Project logic and the adjustments to the strategic outcomes framework. For this purpose, early or anticipated indications of achievement or difficulties and barriers to achieving the established goals are analyzed. A fundamental aim is to identify the changes that need to be incorporated into adaptive management and achieve the desired outcomes.

The MTR also evaluates the overall functioning of the Project based on the baseline elements established and reviews the implementation strategy and risks to its sustainability. In this sense, it acts as a factor of change and plays a fundamental role in supporting accountability. The main objectives of the MTR contribute in the following aspects:

- a. Strengthening the oversight and management functions of the Project
- b. Ensure accountability for the achievement of the objectives of the Project and UNDP/GEF; and encourage responsibility for the use of resources.
- c. Improve organizational learning by documenting, feeding and disseminating lessons learned.
- d. Allow for informed decision-making.

The MTR also identifies progress towards the achievement of the Country Programs of Peru and Bolivia respectively, and the contribution to the UNDP Strategic Plan.

2.2 Scope and methodology: principles of design and execution of MTR.

The methodology for the MTR is established both in the ToR of the assignment, as well as in the UNDP and GEF documents governing the procedures; as well as in the scope and purposes of the evaluation. The consultant has followed the suggestions and demands of the content and form of the ToR. (**Annex B**).

In addition of these parameters, attention has been paid to other aspects that in the consultant's experience are considered relevant and useful for the objectives of the evaluation, taking into account the binational nature of the Project, its background and convergent initiatives in both countries; and the international context linked to integrated water resource management (IWRM), climate change developments, and the state of the art in these crucial issues.

In the consultant's view, it is important to maintain this broad vision to assess the Project's orientation and partial achievements as determinants of its final impact in terms of effectiveness, not just implementation efficiency. In the considerations to apply for the evaluation, the consultant raised, in the following quoting, his vision of the importance of the Project and its relationship to

the binational and national context for both countries, in addition to the physical-environmental and social aspects specific to its scope of influence:

"... it is a binational project that seeks to promote the conservation and sustainable use of water resources in the TDPS cross-border system, through the updating of the Binational Global Master Plan; and to catalyze the integration of IWRM into the government of the system at the binational, subnational, and local levels; and in the actions concurrent to alleviating pressures on ecosystems and their biodiversity.

In this line of conception and approach to the MTR, a first finding is the complexity of the environmental problem of the TDPS endorheic basin and its specific characteristics in Peru and Bolivia. While there is a wide availability of background and technical, social, cultural, and economic information about the area, and on the implications of its environmental degradation by various sources and actors, a range of problems and collateral situations can be perceived that require treatment and actions, and that have been exacerbated with greater acceleration than the current initiatives, proposals and efforts to deal with them in both countries.

The different intervention strategies proposed by the Project are relevant to the most urgent problems in each country; and there is no doubt about the importance, on both sides, of the participation of a culturally rich and unique population, with a tradition of resource management, especially water. Therefore, specific modalities and designs of action are required that must be monitored and evaluated as such. The growing impact of climate change conditions the landscape as for the well-known conventional solutions, and requires disruptive approaches, which must be designed on an economic, political and cultural basis, for the sustainable use of resources such as water, water, soils and landscape.

On the other hand, the difficulties presented by border or binational projects in terms of administrative management and governmental and technical coordination are well known. Political impact on government management, high turnover of officials and technicians, the need to synchronize actions on both sides, and persistent bureaucracy in decision-making are factors that require attention when assessing causes of delay, or sociocultural conflicts that may affect technical solutions.

Evaluation, within these parameters, requires a broad and multidisciplinary vision that clearly identifies the barriers and possible causes of success and failure of a project, beyond the relevance of technical statements, in order to have timely corrections that are feasible and efficient in the remainder of the Project's implementation. Such a broad and general vision should, however, be concrete and lead to specific policy and technically feasible recommendations in the respective environments of action of the Project."

2.2.1 Design and execution of MTR

The design of the MTR is part of the current policies and procedures of the GEF and UNDP, in the 2017-2021 Evaluation Plan of the UNDP Peru Office, to identify progress towards achieving the expected Outcomes under the Country Programs of UNDP Peru and Bolivia.

The implementation of the MTR should take place within two years of starting a project. However, in this case, for reasons of delay at the beginning of the Project, it had to be postponed being carried out in August 2019, having already concluded and sent the second PIR to June 2019. The expected duration of the MTR is 65 calendar days, with 41 days of full dedication of the consultant.

2.2.2 Approach, methods for gathering information, limitations of the Project MTR

In addressing the approach and methods set out in the evaluation matrix (**Annex C**), the short evaluation time has forced the focus on the following activities, carried out with a

collaborative and participatory manner, in constant communication with the technical teams of the Project team, parties, and UNDP as appropriate.

- (i) Obtaining, reviewing and consultation of background studies and measures and initiatives, and their relationship to the resulting documents and proposals based on the objectives and expected Outcomes;
- (ii) review of reported and documented physical and financial progress, on their consistency with meeting goals and achievements, compared to baseline indicators, annual PIR progress, and status to date MTR (see document list **Annex D**);
- (iii) structured interviews with specific guidance questionnaires based on the location and roles of the interviewees the Project (**Annex E**): binational and national leaders, steering and technical committees, binational technical teams, technical and administrative coordination of the Project; public servants directly linked to the Project as users of the information or the implementation of the results; communities of users or beneficiaries; and other civil society actors, academia, scientists and researchers (**Annex F**);
- (iv) information meetings and progress reporting in coordination with the Project team and UNDP based on the needs and conveniences that arise;
- (v) recording of lessons learned in the processes of analysis, diagnostics, studies, and in the preparation of proposals, pilot projects, and recommendations for discussion and institutionalization;
- (vi) vision of the social, economic and political context of the Project area, in order to make useful recommendations on the Project progress and its forward-looking prospects, in terms of the expected effectiveness of the measures; and,
- (vii) simultaneous registration and structuring of findings and recommendations, in order to facilitate the process of preparing the draft and final report prescribed in the ToR.

The main constraints in the MTR process are the time allocated to complete the MTR, as well as that available by the main actors in both countries, despite the goodwill expressed to support the MTR and attend interviews.

2.3 MTR Report Structure

The final structure of the MTR report contains an executive summary that culminates in a set of conclusions and recommendations, and a general body that follows the requirements in the ToR, with further detailed comments, as well as a set of annexed documents required. Both the general body of the report and the executive summary have been composed in Spanish and English and maintain as much as possible the extent provided in the ToR (between 40 and 50 pages), so additional elements are included in the Annexes. **Annex A** is the matrix of outcomes and achievements (corresponding to Table 1 of the ToR), which by its extension is summarized in the body of the report and annexed in an integral manner.

3. Project description and context

3.1 Development context: factors relevant to the objectives and scopes of the Project

3.1.1 Environmental, biological, sociocultural and economic factors

The complex TDPS system is a large endorheic basin located in the Andean highlands, and shared historically and culturally by Peru and Bolivia, and part of northern Chile (less than 5% of the area). It consists of four elements: the basins of Lake Titicaca, the Desaguadero River, Lake Poopó, and the Salar de Coipasa, covering a total of 143,900 km².

The environment and climate are extreme, with an average altitude of 3,800 meters above sea level, aridity, high solar radiation, low temperatures with frost, frequent colds, and salinity of the water that increases from north to south with extremes in the ‘Salar de Coipasa’. The presence of water bodies, due to its high evaporation rate, tempers the climate in its surroundings.

The biotas present are particular, given the specific conditions of both high-Andean and aquatic ecosystems; but in addition to their natural, scientific, and increasingly touristic value, they have high economic and biological value for the life and livelihood of the population settled within the System.

These values, however, are at serious risk of degrading and even disappear if the present pace of environmental pollution, resource predation, urban expansion, and inefficient or non-existent control of untreated solid waste and wastewater that are poured into the bodies of the System' waters, continues without control..

In this context, the economic and socio-cultural relevance of the TDPS System is essential for both countries, and is explained by the coexistence of pre-Hispanic historical settlements of native and mestizo population, with ancestral relations in the two countries, which today reaches 3.7 million inhabitants occupying both the areas peripheral to the bodies of water, as well as cities of the importance of La Paz, El Alto and Oruro in Bolivia; and Puno and Juliaca in Peru.



³ Taken from: Juan Villalobos - OpenStreetMap.org, http://www.mirabolivia.com/mapa_muestra.php?id_mapa=134, CC BY-SA 4.0

The differences between the level of development, relative poverty and economic income, as well as in the access to basic services, make the averages obtained from TDPS in these respects unrevealing, as extreme poverty is much more frequent – in both countries - in rural areas, and with greater impact the greater the distance from urban areas better served.

This condition highlights the importance of the Project's objectives and the assumed approach to activities in terms of resource allocation and action design. Rural populations are less served and with fewer resources; but, on the other hand, they are actors more concerned with the conservation of the ecosystems in which they live. By contrast, urban majority populations are more likely to be less aware of the need to take on desirable practices to conserve remote ecosystems and to help improve the quality of nature's resources and services.

3.1.2 Political and institutional factors

For the above reasons, the national governments of both countries and the local government levels attach great political, economic, social and environmental importance to the conservation and protection measures of the TDPS System, and have been concerting since the 1950s various mechanisms of collaboration and binational actions on the System, in addition to establishing in both parts of its territories protected natural areas, some with international recognition (RAMSAR) , especially the wetlands of Lagos Titicaca, Poopó and Uro Uro.

Notwithstanding this political and technical interest, the evolution of the environmental conditions and the basis of natural resources, especially water, reveal processes of degradation and loss of natural quality, in parallel with a growing demand for uses by the population and by the productive actors, which is an expression of the relatively accelerated growth in both countries, and that is widening the economic gap in the area, still subsistent in terms of GDP, *per capita* income, services, and human development level rates.

The legitimate concerns in both governments about addressing the problems described, faces problems to develop investments, actions and scheduling agreements. Legal, normative, cultural, governmental and bureaucratic differences, and – to no small extent – political doctrine and internal confrontation at the subnational and local levels, often make it difficult to take action and arrive to commitments for investment and implementation of binational initiatives in the respective territories, despite the creation of *ad-hoc* mechanisms and institutions for the purpose.

An expression of such difficulties has been the delay in the approval of the PRODOC applied to Bolivia, which led to the decision to establish an analogous specific project document, (Bolivia National Project) to describe the problem, Outcomes, products and mechanisms of implementation of the pilot projects on the Bolivian side; as well as a specific budget to be managed through UNDP Bolivia, in close coordination with UNDP Peru headquarters, in charge of the binational budget and its internal implementation in Peru.

3.2 Problems addressed by the Project: threats and barriers.

The previous binational initiative on TDPS is the still-current 'Binational Global Master Plan (BGMP)', which synthesizes and encompasses the collaboration agreements and initiatives that have originated since 1957, with successive reiterations and additional agreements (2010, Ilo Port; 2015; Estevez Island; 2019, Ilo Binational Cabinet). The BGMP must be implemented by a

binational autonomous body, currently represented by the Binational Autonomous Authority of the TDPS Water System (ALT by its abbreviated acronym in Spanish).

The main tasks and problems that face the Project are diverse: the short period for the implementation of the necessary activities in the context of extensive binational negotiations and internal own national processes; ensuring the timely accompaniment of investments and co-financing by the parties; promote and support the functioning of binational management and technical committees, as well as efficient coordination mechanisms in action; complete the complementary studies for an integrated and expanded cross-border diagnostic analysis (TDA in the GEF methodology), and a strategic action program of IWRM (SAP in the GEF methodology); contribute to the strengthening of institutional capacities on both sides in the course of the actions, based on the experiences of replicable pilot projects; and support regulatory and legal conciliation processes for the binational implementation of actions in the TDPS System.

Both the present BGMP and the ALT have been largely overtaken - in their role and effort to modernize and update the scopes and modalities of intervention - by the dynamics of growth and socioeconomic evolution in the TDPS System. It is necessary to expand the scope of the current plan, primarily based on the water issues, to incorporate ecological, biological and environmental criteria, as well as economic ones, within the framework of IWRM. Consequently, the ALT should be restructured according to the new binational parameters and capacities of action, and its attributions in the pertinent fields in both territories.

The present Project is generated under these conditions to help agree to the design of a SAP (strategic action plan), based on the TDA (transboundary diagnosis analysis), to become the new, enriched and updated BGMP; and to prepare the political, technical, social, technological, institutional and communicational proper environment so that ALT, strengthened and relaunched, is able to conduct its implementation under sustainable conditions.

As said before, the barriers and threats faced by the Project in this central objective are varied and not always predictable. They are appropriately described as risks in the PRODOC, and are also political, technical, social, and economic, in that order of importance. In the political arena, changes are presumable in the near future of both countries, even if not in the spirit of collaboration that has been common to this day. Technically, the results of studies and research may alter assumptions to solve the problems envisaged in PRODOC and the complementary studies. Socially, the lack of commitment or involvement in this effort, by the population and productive stakeholders and users of the System, or its representative organizations; and, in the economics, decisions or adverse results in implementation that are not concurrent with the objectives of the Project or the financial sustainability of the actions.

3.3 Project description and strategy: Objectives, products, expected Outcomes, territorial environment.

The Project has been designed to fulfill the purpose described, and to avoid the risks, problems and barriers mentioned. The Project strategy is summarized, first, in a catalyst approach and support to IWRM in the TDPS, through converged actions to analyze and update the problems and design viable solutions; and, secondly, in capacity building and informed participation of actors in both countries, at the subnational and local levels, to help the ultimate purpose of having a new IWRM master plan and strategy for the TDPS System common interest.

The objective to be achieved with the implementation of the Project is described in PRODOC as:

‘To promote the conservation and sustainable use of water resources in the Titicaca - Desaguadero – Poopó - Salar de Coipasa (TDPS) transboundary system, through the updating the Global Binational Master Plan’

Within an operational and budgetary scheme, the Project is structured into four Components, which in turn refer to Outcomes and Products as follows:

Component 1: *Participatory development of a process to generate an integrated diagnosis of the situation of the TDPS and an updated and agreed Master Plan by both countries to guide the conservation and sustainable use of the water resources and biodiversity of the Titicaca - Desaguadero – Poopó – Salar de Coipasa System.*

Outcome 1: *Transboundary Diagnostic Analysis (TDA) and the Strategic Action Program (SAP) for the TDPS have been formulated and adopted.*

Product 1.1: Complementary studies in support of the preparation of TDPS ADD.

Product 1.2: Country-validated ASD.

Product 1.3: Strategic Action Program developed in a participatory way and with IWRM approach adopted by both countries.

Outcome 2: *Improved institutional capacity to implement IWRM in the TDPS system in both countries.*

Product 2.1: Key actors training in IWRM⁴

Product 2.2: Institutional strengthening actions for binational management of TDPS.

Component 2: *Development of eleven (11) pilot projects that generate learning for the management of resources in TDPS.*

Outcome 3: *Practical learning generated in pilot experiences contribute to the development of the SAP and to decision making.*

Product 3.1: Eleven pilot projects on issues of relevance to the TDPS system.

Product 3.2: Systematization of pilot project results and analysis of applicability to the TDPS system are accessible and available for all the actors in the area.

Component 3: *Consolidation of a monitoring system that is accessible to local technicians and actors.*

Outcome 4: *Updated, accurate, and relevant information on TDPS management is available and accessible to allow implementation of the SAP with an adaptively approach, including attention to social and gender variables.*

Product 4.1: Monitoring Program of TDPS.

⁴ Six pilot projects are carried out in Peru, and five in Bolivia, within a special budget component called ‘Component Bolivia 2’. This structure is kept for Bolivia; but in the case of Peru some expenses have been shifted to Component 1, which requires formalization for transparency.

Component 4: *Building human capital and social capital through actions of environmental education, communication and citizen articulation in support of IWRM.*

Outcome 5: *Key stakeholders know the core issues of the TDPS, become empowered and act in the context of IWRM to advance workable solutions.*

Product 5.1: *Web page for the dissemination of the Project outcomes, including exchange of experiences through IW:LEARN, and participation in IW conferences .*

Product 5.2: *Strategies for environmental education and communication for the IWRM in the TDPS.*

Outcome 6: *Key stakeholders actively participate in a coordinated manner to address the core problems in the TDPS system.*

Product 6.1: *Strategy for citizen participation and articulation between key stakeholders in support to IWRM in TDPS.*

The territorial scope for obtaining these outcomes and products is ample, and hosts diverse economic and social activities, rural and urban populations of national and regional importance, and different governance regimes, as widely and accurately described in the PRODOC

The strategy and design of the Project are consistent with its purpose, the most important part being Component 1, which will produce the updated diagnosis (TDA) and strategic action program (SAP), and which is expressed with Outcomes 1. and 2. totaling 54% of total expenditure. The second important component is Component 2, through which pilot projects are financed in Peru and Bolivia. In the case of Bolivia, there is a separate budget and an additional project document ('National Project Document'), agreed with the GEF for internal approval and implementation. In addition, amounts corresponding to pilot projects in Peru have been transferred to Component 1, which would require regularization for more transparent monitoring.

The other components and expected outcomes become complementary and enabling elements to contribute to the updating of the TDA and the sustainability of the SAP, through institutional strengthening and training, creation of a data base and monitoring, and open broadcast to users and actors. In total, the Project intends to invest with the support of the GEF and UNDP a budget of USD 6'563,000 over a four-year period (2017-2020), of which two years have already elapsed.

3.4 Mechanisms and Project execution scheme.

The project, due to its binational nature, has an inherent complexity in its implementation mechanisms, due to the need to address the political and protocol aspects between countries and implementation in two national territories, together with the respective and various institutional, normative and budgetary implementation environments, both from the countries themselves and UNDP in Peru and Bolivia. (See **Figure 1**).

The Project is implemented under the NIM modality through designated national institutions with support from UNDP country offices in Bolivia and Peru. Each country executes the corresponding pilot projects under this modality. Peru as host country is responsible for the

implementation of the binational components of the Project with support from UNDP Peru; and, likewise, this office has a responsibility to oversee the financial expenses of the binational budget.

In accordance with the requirements of the PRODOC and the provisions of the Project induction workshop, the entities and their roles in charge of the implementation of the Project are:

- **Implementing Agency:** The United Nations Development Program through its headquarters in Lima (UNDP Peru) is the implementing agency and provides project cycle management services, ensuring quality, monitoring and oversight of the implementation of the Project. Coordinates and delegates functions and logistical support with UNDP Bolivia's La Paz.
- **Implementing Partners:** Ministry of Foreign Affairs of the Plurinational State of Bolivia (MRE-B); Ministry of the Environment of Peru (MINAM), which is the National Directorate of the Project. In addition, the Ministry of Environment and Water of Bolivia, the Ministry of Foreign Affairs of Peru (MRE-P) and the National Water Authority of Peru have an essential role and are directly involved in the implementation of elements of the Project. In each country there is an agency responsible for the implementation of the agreed national activities, which will also be the National Coordinator (MINAM in Peru, and M. de RR. EE in Bolivia)

The Binational Autonomous Authority of Titicaca - TDPS System (ALT) is mentioned in the PRODOC and National Project Document of Bolivia, and in the documents and minutes of the CBD; and is referred to as a member of the CTB, through a representative of the Presidency. It does not integrate the Project's CBD, which could be a proposal to consider, as an adviser or observer entity, given its functions and responsibilities in binational issues of planning and implementation of projects linked to the current Master Plan. The ALT is included in the scheme because of its nominal nature as a binational entity, and to illustrate the precarious situation to be clarified in the future of the Project.

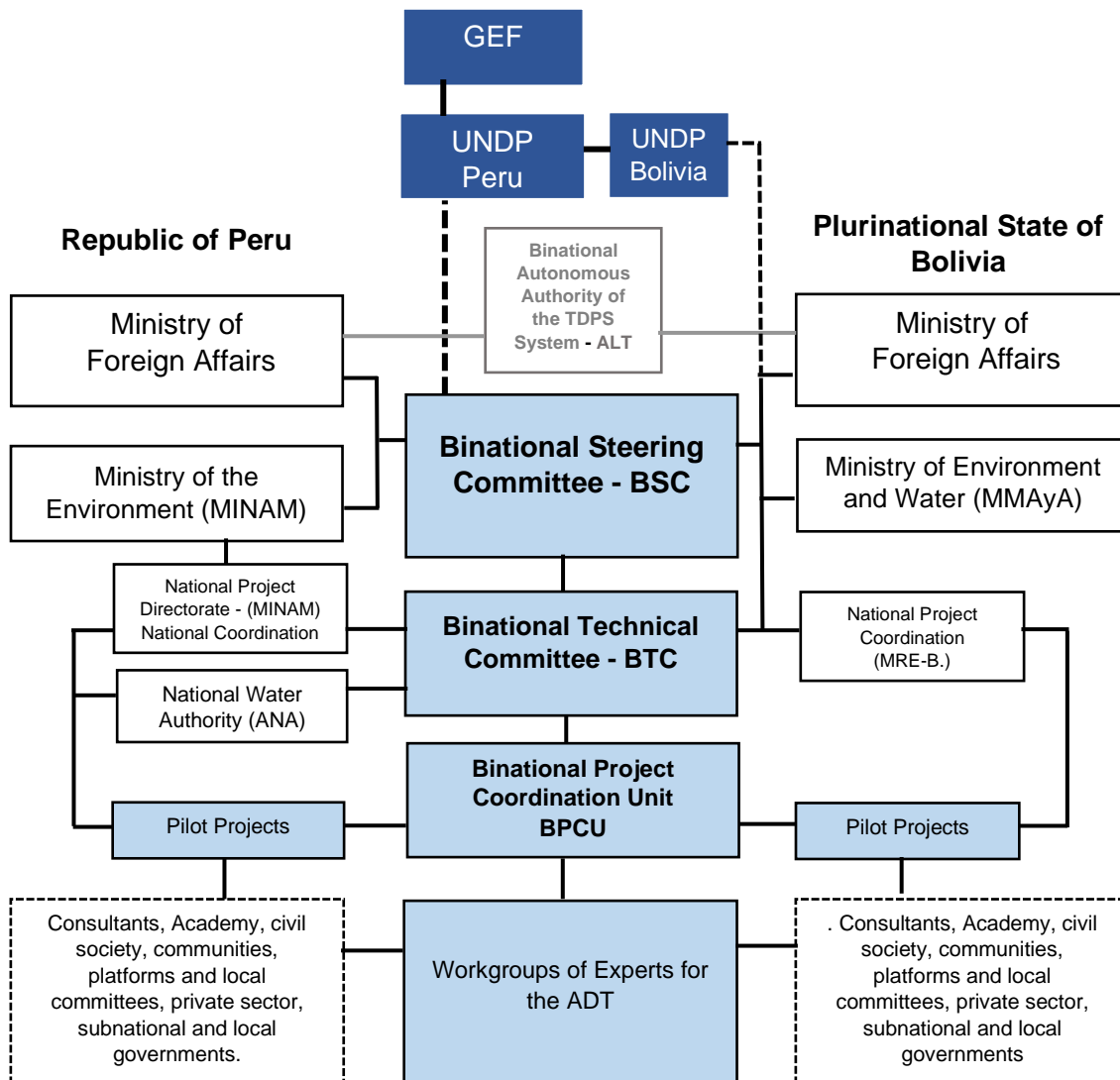
3.5 Timeframe for execution and level of relative progress.

The implementation period of the Project is set at four years, in accordance with PRODOC, from the signing of the implementing agreement on November 22, 2016. It should therefore conclude in November 2020, that is, in just under 18 months. It is recognized, on both sides, that this deadline should be extended to meet the main milestones: the completion of the updated system diagnosis and the approval by both sides of the Strategic Action Plan (SAP), which would allow to move to the phase of implementation of concerted actions. This MTR discusses this situation in detail below, and finally includes recommendations in this regard.

The GEF-funded budget amounts to USD 6'133,750, as a cash contribution for binational investment and in Peru (USD 5,133,750); and Bolivia (USD 1'430,000) for the National Project for Investment in Pilot Projects in its territorial area.

The contribution in kind, from various sources and projects from Bolivia (USD 16'529,000), Peru (USD 18'474,400), UNDP (USD 315,000) and other sources (USD 186,000) amounts to a total of USD 35'504,400).

Figure 1 Project Organization Scheme⁵



⁵ Sources: PRODOC, official records, and interviews with officials and actors. Elaborated for MTR.

3.6 Entities and institutions involved.

The main stakeholders are those in the diagram in **Figure 1**. Apart from the official entities of both countries, the Ministries of Foreign Affairs, the Ministry of Environment and Water in Bolivia; and the Ministry of the Environment and the National Water Authority in Peru, the ALT should be pointed out, an entity mentioned above, by its legal nature and binational mission in the same field as the Project.

In addition, the international cooperation articulated by UNDP and bilateral cooperation entities related to the Project (IRD, BRIDGE and others), Universities and NGOs residing in the field of the Project, and decentralized bodies of the public administration, which have a component execution role.

The committees, collaboration platforms and working groups of the organized population in the area are important and interested in the Outcomes and products of the Project, although the advancement and communications to involve them to a greater extent are still emerging.

Special cases are the subnational and local governments, and resident sectoral representatives, who will be called upon to implement the project's sustainability policies and activities, and which currently have a weak relationship with the Project, which requires attention and approach measures. The Regional Government of Puno, and the Departmental Government of La Paz, to a lesser extent that of Oruro, should have an earlier and greater involvement in the actions and proposals of the Project.

4. Proven facts

4.1 Research questions answered.

The main questions that have guided the MRT have been done regarding the roles and levels of action of the interviewees, based on a menu of questions related to the following topics (see questionnaire in **Annex E**):

- Importance and relevance of the Project in long-term national policies and plans.
- Importance of the problems and the border relationship in the design of the Project and its governance; including experiences and technical views of other similar cases.
- The participation of actors and stakeholders in the design of the Project; perception of the importance of this approach.
- The Project's emphasis on action efficiency (short-term executive vision), vs. efficiency and long-term sustainability for the development of the area.
- Vision of the adaptation needs of the Project since its initial conception, and changes introduced.
- Relevance of the outcomes obtained to date, related to the effort and investment deployed; arrears, risks and barriers to completion of the Project.
- Quality of reference documents and diagnostics that feed the actions. Incorporation of considerations on climate change and environmental and biological degradation.
- Perception of the importance of the inclusion of gender and intercultural approaches.

- Appreciation of the role of the Steering and Technical Committees at the national and binational levels.
- Appreciation of the technical teams in charge of the Project, suggestions for improvement.
- Role and quality of support received from UNDP.
- Alignment of the initiated processes, with the expected outcomes framework; necessary adaptations and suggestions.
- Perception of problems in the elaboration of cross-border diagnosis.
- Perception of the relevance and approach of pilot projects; knowledge about them and their advancement.
- Perception of the mechanisms for monitoring and controlling the actions of the Project; flow of funds, and efficiency of administrative processes.
- Identification and power of alliances and partners; commitment of those involved.
- Perception of the relationship of the Project with subnational and local actors and authorities.
- Documentation on the progress of the Project and dissemination of information. Perception of the internal and external communication actions of the Project.
- Perception of political, financial, social and environmental risks; institutional and regulatory needs.

4.2 Project strategy

4.2.1 Project design

The strategy applied to the Project gave place to a design that has a clear approach to solve the main binational-level problems affecting the TDPS system: (i) The urgent need for update a diagnosis that identifies and relates problems, overcoming the eminently water vision of the prior Master Plan; (ii) formulate a strategic action plan of common interest for both countries; (iii) introduce ecological and climate variables into the plan, with particular attention to the growing environmental and productive management needs affecting TDPS; and (iv) generate a binational government approach to solutions, and support it with strengthening and training of officials and users of the system.

The design assumes that the prior director plan (PDGB) requires updating and enhancement, but apparently - judging by the perception of several specialists involved - a full assessment would not have been made in this regard, which would have helped a more refined design of components, indicators and outcomes. The Project is clearly aimed at renewing the diagnosis and pursuing a new master plan, in the form of the SAP, as an immediate objective, taking into account that the longest-term objective is the implementation of SAP under new governance and more binational agreements, whose characteristics are not disclosed in this implementation period.

In short, it is a promotional Project that catalyzes and renew the foundations of a new binational plan of action and agreement. It will provide technical and scientific elements; but fails to consider or evaluate - in the form of an additional supplementary study, for example - the needs and characteristics of such a binational regime and ways of harmonizing it with the respective national standards and institutions, or to identify with more accuracy the change needs for the restructured ALT and its instruments.

Available indicators and baselines (some to be developed) are consistent and appropriate; and generally, meet the desired characteristics (SMART) that are prescribed for the measurement and evaluation elements of projects.

It should be noted that the structure of the Project contains a logic of interdependence and subordination of outcomes and products, in relation to the processes of formulation of the fundamental elements of Component 1, which is technically appropriate, including the incorporation of pilot projects into this component. In this scheme, however, the delay or lack of articulation in the execution of the other components, or late achievement of outcomes, may alter the consistency and coherence of the Project's actions with a view to its ultimate objective

The structure of the Project, in its components and expected outcomes, is consistent with this logic, but it could have been more incisive in the substantial Components 1 and 2, while the aspects that develop in Components 3 and 4 could have been integrated in a single component, as adjuvant and enabling products for the execution of the former, and obtention of the main outcomes.

Regarding gender considerations, PRODOC broadly addresses the issue, in particular in the topics of adoption of the TDA, and formulation and validation of the SAP, in terms of the inclusion of gender considerations and interculturality in SAP construction and activities, and training, and communications on the Project. The PRODOC does not establish specific indicators in this regard, but for complementary studies (study on user information of the TDPS system) the need for the gender approach is established. For pilot projects in general it is considered that the gender approach should be present, but except in studies 01-B-01 and 02-B-02, which mention a desirable participation of 30% of women in the relevant activities, or in project 05-B-05 that mentions that 'no gender discrimination will be made in the call for technicians', no specific indicators of gender approach are raised.

On the other hand, the original PRODOC is a comprehensive and detailed document, not only of the structure of the Project but also of the needs and activities necessary to address the tasks of adaptive management, the organization of activities to obtain the references to other experiences and convergent actions. In this regard, it is important to refer it as a key roadmap for all actors in the implementation of the Project and its monitoring and evaluation system.

The binational approach of the PRODOC was not administratively operational for the Project activities in Bolivia. This led to the formulation of the *ad-hoc* document 'Bolivia's National Project', which was approved six months after Peru's signing of the binational PRODOC, marking the beginning of the Project. A lesson learned in this regard is the need to involve from the outset in the coordination for projects of this caliber, the ministries of economy and/or finance, especially the national budget management bodies, to avoid bureaucratic barriers or technical issues, by omitting national investment formalities or protocols, that may cause further delays.

4.2.2 Frame for Outcomes/logic framework

The outcomes framework, except as noted above, is generally well structured in its components, outcomes, outputs and indicators. There is a problem of scale in the indicators referred to outcomes of greater complexity and importance, such as in the cases of SAP and the TDA, where they are very global. In these cases, partial and stepping SMART indicators for products and means of verification could be established within the framework of the monitoring, follow-up and control activities by the BPCU (e.g. core group meetings, roadmaps, progress reports, draft plan, etc.).

It has been a change, by a PRODOC budget note, in the allocation of resources by Outcomes and Components, for the case of pilot projects in Peru (they shift from Component 2,

Outcome 3, to Component 1, Outcome 1. This variation should be considered for budget monitoring and eventual reformulation of indicators and targets.

In the case of capacity building, the difficulties in assessing progress are known, due to the factors of high turnover of officials, measurement of knowledge assimilation, willingness to implement what has been learned, and others of difficult appreciation. If an impact measurement methodology is not developed in this regard, the number of trained or informed persons is practical and simple, but not necessarily effective.

The same can be said of communication and dissemination activities, and of surveys of knowledge or satisfaction with the actions of the Project, as regards the application of tools and instruments that imply subjective, cultural, and other factors that may distort the findings. Both in capacity building and communication cases, it would be necessary to refine the instruments and data according to gender and culture, and the level and role of the trained and interviewed in the actions of the Project.

4.3 Progress in the achievement of Outcomes

4.3.1 Progress analysis

The following is a summary analysis of the Outcomes and achievements, which is presented in greater detail as **Annex A** in the format established in the TdR as the '**Outcome Progress Matrix**', and which reviews and evaluates more broadly the achievements, to-dos and barriers that have been encountered, and that could be recurrent for the rest of the Project's execution. It should be added that the analysis refers to the Project as a whole, and therefore includes the evaluation of the outcomes and achievements of the so-called 'Bolivia 2 Component'.

Progress assessment is based on both the GEF Tracking Tool and the self-reported for the first and second PIR (as of June 2019), as well as on the relevant additional information obtained during the mission and on the interviews and documents produced by the Project. The Tracking Tool mentioned was updated by UNDP on 25 May 2019, the date from which there has been no substantial progress leading to a positive change in the dimensions it contains (assigned ratings): The supplementary studies have not yet concluded and the pilot projects are in the process of initiation, except in two cases, as reported above.

The assessment of achievements in the annexed matrix and in this summary refers to the current indicators. The "yellow" assessment is predominant in that there is a recognized and explained backwardness in the implementation of the Project, which is only overcoming a prolonged stage of initiation and technical concertation, especially in the Bolivian part.

Considering the backlog, and the prospects of having an extension of the implementation period in line with the importance of the Project and the feasibility of boosting its pace of progress, achievements can be described, on average, from **moderately unsatisfactory** to **moderately satisfactory**, with a predictable tendency to improve in the remainder of the Project's implementation. No new situations deserving a high-risk rating have been detected in this instance.

In short, the achievements reported and proven, in relation to the indicators per Outcome have been valued according to the table of valuation of 6 points (**HS**=Highly Satisfactory; **S**=Satisfactory; **MS**=Moderately Satisfactory; **MU**=Moderately Unsatisfactory; **U**=Unsatisfactory;

and **HU**=Highly Unsatisfactory. The colors correspond to the respective code (**green** = attained, **yellow** = in way of being achieved, and **red** = is not on the way to be achieved):

Project Objective:

To promote the conservation and sustainable use of water resources in the Titicaca -Desaguadero-Poopó-Salar de Coipasa (TDPS) transboundary system, through the updating the Global Binational Master Plan (GBMP).

- *Number of specific binational commitments to address aspects critical to the conservation and sustainable use of water resources and advance in TDPS IWRM.*

MU

For this indicator the Objective does not report concrete progress towards the project's end-of-project goals, beyond the 2015 commitments, the reiteration of the binational policy of prioritizing a new Master Plan through the TDA and the Strategic Action Plan (SAP) in June 2019 (Presidential meeting in Ilo, Peru); and the incipient alignment of advances in complementary studies towards TDA already reported.

There are clear signs that the Project's actions are entering a phase of greater acceleration, having taken some decisions at the Steering and Technical Committees in the past months, and having overcome impasses in the design of the complementary studies. However, the backlog is still considerable and requires urgent adaptive action.

- *Number of organizations for watershed management / councils for basin water resources*

MS

The established and current organizations are: 'Katari River Basin Management Agency' (pre-existing); the 'Inter-Agency Platform of the Poopó Basin', established by Bolivia; and the establishment of the 'Lake Titicaca Basin Council' by the National Water Authority (AAA Titicaca headquarters) in Peru, which brings together all the municipalities of the TDPS system.⁶

The nominal target would be met with the active involvement of the three organizations, consideration should be given to the need to maintain coordinated and synchronous action by all organizations, for their persistence and effective role in the implementation of the SAP and its future implementation.

- *Government investment to control and mitigate major environmental pressures in the TDPS (USD).*

MS

The Project has not been involved in specific actions for this indicator, because "it is an end-of-project goal"⁷, and does not have the respective baseline, as this indicator and its baseline will be defined during the SAP formulation process.

It is presumable, given that the initial tranche has been passed and the negotiations have been fine-tuned in the Project-side - including greater awareness in both countries of the need to

⁶ <http://www.ana.gob.pe/noticia/crearan-consejo-de-recursos-hidricos-del-titicaca>

⁷ PIR 2019, y PIR 2019.

accelerate implementation - that the pace of implementation improves in the remaining period assuming the replenishment of the initial delay time with an extension of the Project's implementation term. The pending baselines should not be a major problem if an *ad-hoc* technical working group is formed, with participation of the respective ministries of economy and finance on both sides.

Outcome 1:

Transboundary Diagnostic Analysis (TDA) and the Strategic Action Program (SAP) for the TDPS have been formulated and adopted.

- *Approval of TDA and SAP. The SAP is based on IWRM and watershed management*

MU

Outcome 1 is gravitating on all other outcomes, and its achievement is a priority. Delays in initiating activities for this outcome require urgent decisions to accelerate and adapt current mechanisms of coordination and institutional articulation.

The definition and scope, already agreed for 22 complementary studies, and progress with courses on methodology, core group training, and ongoing consulting hiring are relevant. However, progress in the implementation of the studies, given the time it has taken for its definition and scopes, is worrying: only two studies (2) are being carried out (5.6% of the budget in this area); eight (8) studies are in the process of starting their implementation (44.4%); five (5) are in the process of consulting (23.8%); and seven (7) studies do not yet have a consensus-approved TdR (26.2% of the total amount).

It is considered that this is a broad indicator that may contain subcomponents of greater relative advancement; but in general, if the deadline for the target was not extended, the remaining time would not be enough to have a completed TDA, which would thereby delay SAP approval. It should also be explained in this area the incorporation of expenditure on products such as pilot projects in Peru, assigned in concept to Component – Outcome 3, but with budget allocated in Component 1, should be clarified.

Outcome 2

Improved institutional capacity to implement IWRM in the TDPS system in both countries.

- *Number of officials of national, regional, and local governments trained on IWRM (people/ hydrographic unit of levels 3 and 4).*

MS

Beyond the delays in agreeing the TdR and procurement process, the design of the Integrated Water Resources Management (IWRM) course for regional and local governments is underway. Progress in the TdR process and the hiring of the firm that will carry out the training, including the thematic definition and structure of the courses, makes it possible - in the face of the simultaneous delay of the other components - the fulfillment of the Project end goals for years 3 and 4, as long as there is no additional delay. Conditioned at a necessary extension of the Project's implementation period, accelerated progress in this indicator is feasible, and can therefore be considered moderately satisfactory.

- *Number of social and productive organizations trained in IWRM (people / hydrographic unit of levels 3 and 4).*

MU

The delay in institutional strengthening activities, without an extension of the Project implementation period, may affect the formulation and implementation of strategies which are expected to be formulated with greater knowledge and management of IWRM within these organizations. Consequently, the capacity building of officials in these units should be prior and consolidated when formulating management strategies. The delay in the first aspect makes the indicator in the second aspect considered moderately unsatisfactory.

Outcome 3

Practical learning generated in pilot experiences contribute to the development of the SAP and to decision making.

- *Number of municipal, regional and national policies based on the outcomes of pilot projects*

MS

The delay in the start of the pilot projects - also linked to the relative delay in the approval of the 'National Project of Bolivia' - and in the development and results of the supplementary studies, do not allow to assess in this instance whether the practical learnings generated in experiences will contribute to the formulation of appropriate policies in the case of SAP.

Nonetheless, the positive results that are being obtained in the pilot projects started and visited, especially 10-P-05 with the communities around the Laguna de Chacas, Peru, and project 03-B-03 and 05-B-05, with the IRD and UMSA in Bolivia, generate expectation of goals compliance. The valuation granted assumes that an extension of the execution times will be possible, as a result of the parallel progress in the other indicators, in particular those of Outcome 1, which condition the execution of the other activities and which are linked to pilot project execution.

This progress will accelerate - as is the intention of the officials interviewed - the current nascent implementation of the 11 pilot projects scheduled. As of the MTR, only the three pilot projects already mentioned, project 06-P-01 on the Ramis river, had been initiated and the 04-B-04 project in Bolivia on the Rio Suche basin was about to begin in September.

Outcome 4

Updated, accurate, and relevant information on TDPS management is available and accessible to allow implementation of the SAP with an adaptively approach, including attention to social and gender variables.

- *Level of satisfaction with the quality of information and accessibility for national, regional and local authorities, and social and productive organizations.*

MU

Apart from the actions already reported in the 2018 RIP, with the proposal of the BPCU to form the Binational Coordination Group in Monitoring and the binational workshop on analysis and prioritization of monitoring indicators, no further progress has been made on this indicator of

Outcome. The overcharge in work at UBCP, due to the pending appointment of the new Coordinator, in the process of contracting to date, has limited progress on this indicator.

Satisfaction goals and indicators require clear identification of actors to be surveyed and appropriate samples and questionnaires. This cannot be done without a coordinated monitoring plan. The barriers that have prevented this progress in the BPCU should be removed, and the prior activities and the corresponding enabling conditions should be accelerated.

Outcome 5

Key stakeholders know the core issues of the TDPS, become empowered and act in the context of IWRM to advance workable solutions.

- *Level of knowledge of public authorities and social and productive leaders about the issues in the TDPS and on existing instruments for binational management of the system.*

MU

For this indicator, progress is conditioned by slow progress in Outcome 2, related to strengthening of the capacities of key public officials and social and productive leaders, whom cannot be surveyed about the Project without an update and knowledge of their scope. Consequently, an empowerment process based on involvement in the problem and the respective solutions has not been initiated.

The advances made until the 2018 RIP, with the web portal in design, blogs and social networks, do not reach - consequently - the necessary impact, and are relatively isolated from their key audience. In this context of relative progress and reliance on previous outcomes, which are delayed, this product indicator is rated as moderately unsatisfactory.

Outcome 6

Key stakeholders actively participate in a coordinated manner to address the core problems in the TDPS system.

- *Number of platforms with active involvement from public authorities and social and productive leaders.*

MS

This Outcome, and in particular its 'active participation' indicator, is also conditioned by the delay in activities for the previous outcomes. Such full participation will not be possible without informed involvement of the stakeholders in - and on - the progress of the Project. However, given that two of the platforms already exist and are operational, and that there are five more in the process of activation and development by the respective governments, the final goal of involvement of eight platforms in Project activities would be achievable in this indicator.

4.3.2 Remaining barriers to the achievement of the objectives of the Project

The main remaining barriers that limit the pace of implementation of the Project, which have been mentioned by the interviewees or noted in the reports, are:

- (i) The weakened situation of the UBCP, which has been without a titular coordinator for several months, although steps have already been taken to designate it; and consequently, the limited capacity of the Project's technical team to assume additional responsibilities and tasks to their own;
- (ii) delay in procedures for formalizing procurements and contracts, for additional requests to UNDP, not foreseen, or modified in the process by implementers; and the need to articulate UNDP actions between Peru and Bolivia for the implementation purposes of the 'Bolivia NCC Project';
- (iii) the endorsed work of the members appointed to the steering and technical committees in their respective governmental functions, which limits effective decision-making and follow-up to strata and executing bodies;
- (iv) the high turnover in national and subnational public posts in both countries, which delays the coordination and smooth performance of the managers, coupled with consultations and doubts on binational issues to which they are subjected because they lack decision-making power, and the lack of an updated legal and regulatory framework for this purpose; and, to a certain extent,
- (v) the scant internalization of the parties of the intrinsic binational nature of the objectives of the Project, with the risk of overlapping or doubling efforts or biased views on the implementation of solutions and the role of binational entities that should design and implement the SAP.

4.4 Execution of the project and adaptive management

4.4.1 Work management and planning mechanisms

The planning and implementation mechanisms for expenditure are carried out by the UBCP, which prepares reports that, as appropriate, have inputs from the National Project Directorate, and are submitted to UNDP-Peru and other bodies on a regular basis. Annual work plans (AWP) and funding plans are also developed and submitted to the CBD for approval. On the other hand, the Bolivia 2 Component funds are administered by UNDP Bolivia - and their administrative and financial implementation is reported independently.

Delays in the initiation of the Project have coincided with a task surcharge in UNDP's unit, causing some additional delay. On the other hand, the problem of administrative coordination by the binational nature of the Project has forced ad-hoc solutions and special efforts to incorporate UNDP Bolivia in supporting the pilot projects that are part of the National Document of Bolivia project. These initial difficulties have been perceived by implementing partners as inconvenient, but they are already on track for final resolution, and there have been no problems of transparency or proper follow-up by UNDP.

On the other hand, the processes are in line with UNDP and GEF protocols, although they could be shortened with better coordination and attention to the specifications of the respective projects and disbursements. In some cases, alternative mechanisms have been required to resolve enforcement processes, incorporating other governmental institutions that already have such instruments (SENAMHI, IMARPE), or replacing the entities initially envisaged by lack the quality of the necessary mechanisms.

Table 1 in this section, as well as **Figures 2** and **3** illustrate the budgetary execution situation versus what was scheduled in the PRODOC. Budget execution figures disaggregated by Outcomes or Products are not available, so component totals issued from UNDP's ATLAS

system are taken. For this reason, Table 1 does not provide such information, which would be recommended for BPCU to obtain as a routine part of its monitoring systems to guide decision-making on project implementation priorities and end-of project balance. The information obtained neither distinguish expenditure on products that have gone from Component 2 to Component 1.

The UBCP has worked on a proposal for the implementation of the integrated project monitoring and control system – as set out in the PRODOC – which has not yet been approved by the CBD. It is hoped that the incorporation of the new Coordinator and the required auxiliary staff will help to achieve this work and contribute to strengthening the planning and management mechanisms identified by PRODOC. In this regard, concerns have been raised from interviewees who perceive problems in the sequence of decisions and actions, both because of the relative dispersion of responsibilities among the actors, as well as the functional weakness and lack of ancestry of the UBCP to articulate and facilitate the process.

Budget execution figures are quite low, even in relation to progress in field actions and the perceived level of progress in actions and coordination. Binational and Peru expenses show a 9% advance; and in 'Bolivia Component 2', 23%⁸, with a combined Project total of 12%. It is clear from these figures that the backlog in the start of the activities has significantly influenced the execution, since PRODOC had established for 2017 an investment amount of 34% of the total, and only less than 1% was spent in that year.

The Annual Work Plan (AWP) for 2019 extends the Project budget of the PRODOC to adapt to the backlog in previous years (2017, 2018), but realistic projections for this year would indicate that it is not feasible to meet: 2.83 million, versus 1.18 million originally planned in the PRODOC.

In short, a significant improvement in adaptive project management is expected during the second half of 2019, and 2020. To this end, the strengthening of the BPCU and a commensurable extension of at least one year in the implementation period is needed, along with a drastic increase in the pace of actions and investments, supported by ongoing and timely information on monitoring and clearing of bottlenecks and delays.

4.4.2 Monitoring and Evaluation systems

As mentioned, the situation of the BPCU has not yet allowed for a full implementation of the monitoring and evaluation systems, since the staff member in charge of this task has had to assume *ad interim* the functions of the Project Coordinator.

In general, differentiated treatment and internal coordination difficulties are observed in the monitoring responsibilities, expressed in the division of budget management to be implemented in Bolivia, and the binational and Peru budget, as well as in administrative coordination gaps between the two headquarters and the respective UNDP offices. These tasks require an effective concentration of methods and systems that allow for more detailed monitoring, at the level of activities, products and outcomes; with an order capable of producing useful information for timely BSD and BTC decisions. The PRODOC provides precise guidelines and guidance for these tasks, but the poor progress of activities to date does not allow to assign priority for these activities.

⁸ Figures of Project expenses provided by PNUD Bolivia.

In addition to formal meetings of the Committees, field visits are being carried out by those responsible at the leadership level, including UNDP; but the largest input of current monitoring time and effort focuses on the preparation of quarterly, semi-annual and annual reports; as well as PIRs, which are insufficient to improve processes, anticipate barriers and bottlenecks, and provide a broader panorama for implementation in the binational context, including monitoring co-financing actions.

4.4.3 Financing and co-financing

There have been no changes in PRODOC allocations and no barriers or limitations, beyond those already identified, have been noticed in the flow of funds from UNDP or the GEF. Problems and delays in requests for procurement of goods or services have been reported, either because of selection of suppliers, increase in initial amounts, higher prices of high-tech services and goods, or extensions requested by the executors, which is relatively normal given the specialized nature of the requests and the time elapsed since budget formulation, in addition to the chronic needs of public bodies to meet additional costs beyond their current budgets.

In terms of co-financing, the Project updated the information as of the MTR date, which is detailed in **Annex G**. The activities and investments underway amount, in the case of Peru, to USD 9'255,465, then reaching 105% of those committed in PRODOC. These are investments that are part of the national solid waste program, in the amounts corresponding to the cities of the Peruvian TDPS area (Puno, Ilave, Azángaro and Juliaca).

In the case of Bolivia, works and studies directly linked to the sanitation and water management policies have started in the Bolivian area of the TDPS, amounting to USD 8,610,323, this is 58% of what was originally committed in the PRODOC (*'Proyecto Nacional Bolivia'*).

These figures and projects reveal the potential addition to the Project's objective, and the need to continue the identification – apart from the amounts already committed – of studies, projects and activities converging to the environmental improvement of the TDPS, in order to optimize the combined impact of the Project in terms of indicators of achievement, and strengthen IWRM by contributing to the articulation and sustainability of SAP in the system. In the case of Peru, for example, the start of an additional investment of USD 254.8 million for wastewater treatment plants for the TDPS System has been recently announced by the Ministry of Housing, Construction and Sanitation

4.4.4 Stakeholder involvement

In terms of stakeholder participation, apart from the political and technical actors involved in the implementation, the Project does not yet seem to achieve the desirable levels of involvement for the integrating and inclusive nature of the Project. Further progress would be needed in the implementation of pilot studies and projects, and in the dissemination of their concrete results among users and beneficiaries.

The platforms and action committees of the population and civil society entities are crucial, and their interest must be cultivated and maintained so as not to weaken their institutionalization and sustainability, as the channels of participation are established through the activities that the Project must carry out.

Table 1. Comparative of PRODOC Budget vs Real Expenditure**PROGRAMMED, EXPENDED AND REMAINING EXPENDITURE 2016 - 2021**

Budget in PRODOC	2017	2018	2019	2020	Total Budget
Component 1	1.313.950	1.682.700	518.200	27.200	3.542.050
Component 2	15.200	17.200	15.200	11.600	59.200
Component 3	19.400	84.400	232.050	13.600	349.450
Component 4	175.300	267.850	120.900	85.250	649.300
Project Management	126.550	141.500	102.900	162.800	533.750
Sub-Total Binational and Peru	1.650.400	2.193.650	989.250	300.450	5.133.750
Component 2 Bolivia	569.187	662.375	190.938	7.500	1.430.000
Total PRODOC	2.219.587	2.856.025	1.180.188	307.950	6.563.750

Expended (USD)	2017	2018	2019 (*)	2020 (Prevision)	Accumulated 2017-2019	Remaining for 2019-2021
Component 1						
Component 2						
Component 3						
Component 4						
Project Management						
Sub-Total Binational and Peru	40.359	305.257	91.166	¿?	436.782	4.696.968
Component 2 Bolivia	0	150.000	173.646	¿?	323.646	1.106.354
Total Expended	40.359	455.257	264.812	¿?	760.428	5.803.322

(*) A junio 11, 2019, Binacional y Peru; y a junio 30, 2019 Bolivia 2

ACCUMULATED PROGRAMMED AND EXPENDED 2014 - 2020

PROGRAMMED	2017	2018	2019	2020
Component 1	1.313.950	2.996.650	3.514.850	3.542.050
Component 2	15.200	32.400	47.600	59.200
Component 3	19.400	103.800	335.850	349.450
Component 4	175.300	443.150	564.050	649.300
Project Management	126.550	268.050	370.950	533.750
Sub-Total Binational and Peru	1.650.400	3.844.050	4.833.300	5.133.750
Component 2 Bolivia	569.187	1.231.562	1.422.500	1.430.000
TOTAL	2.219.587	5.075.612	6.255.800	6.563.750

EXPENDED	2017	2018	2019	2020	% Expended
Component 1					
Component 2					
Component 3					
Component 4					
Project Management					
Sub-Total Binational and Peru	40.359	345.616	436.782		9
Component 2 Bolivia	0	150.000	323.646		23
TOTAL	40.359	495.616	760.428		12

Accumulated Totals	2017	2018	2019	2020
Programmed (PRODOC)	2.219.587	5.075.612	6.255.800	6.563.750
Expended	40.359	495.616	760.428	

Source: PRODOC, PIR 2018, PIR 2019, Quarterly and Annual Reports. Elaborated for MTR

Figure 2

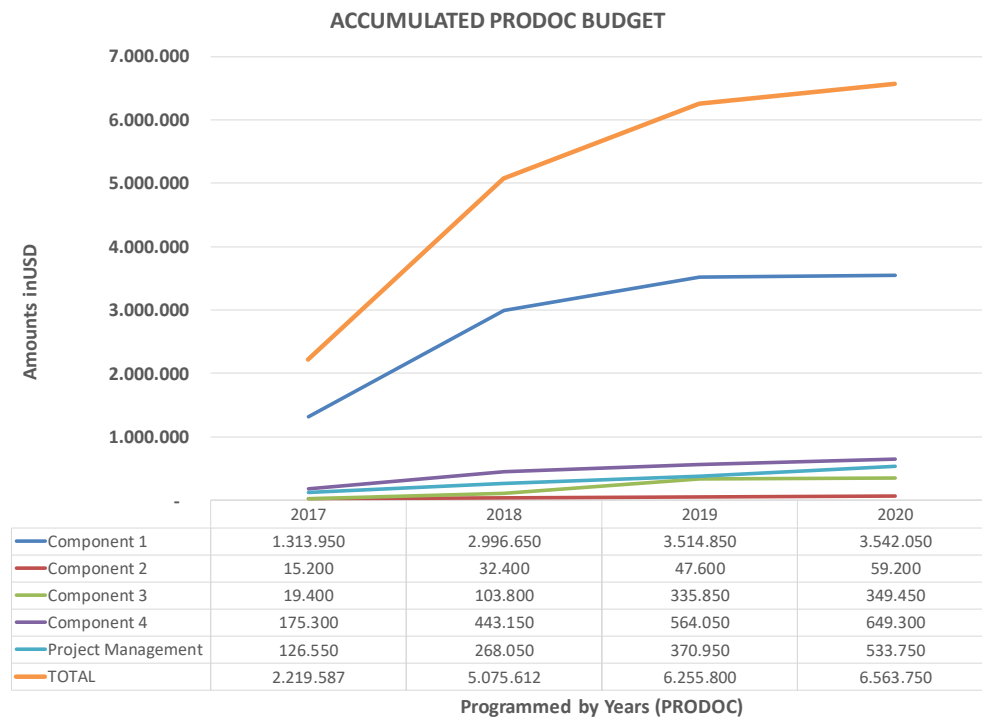
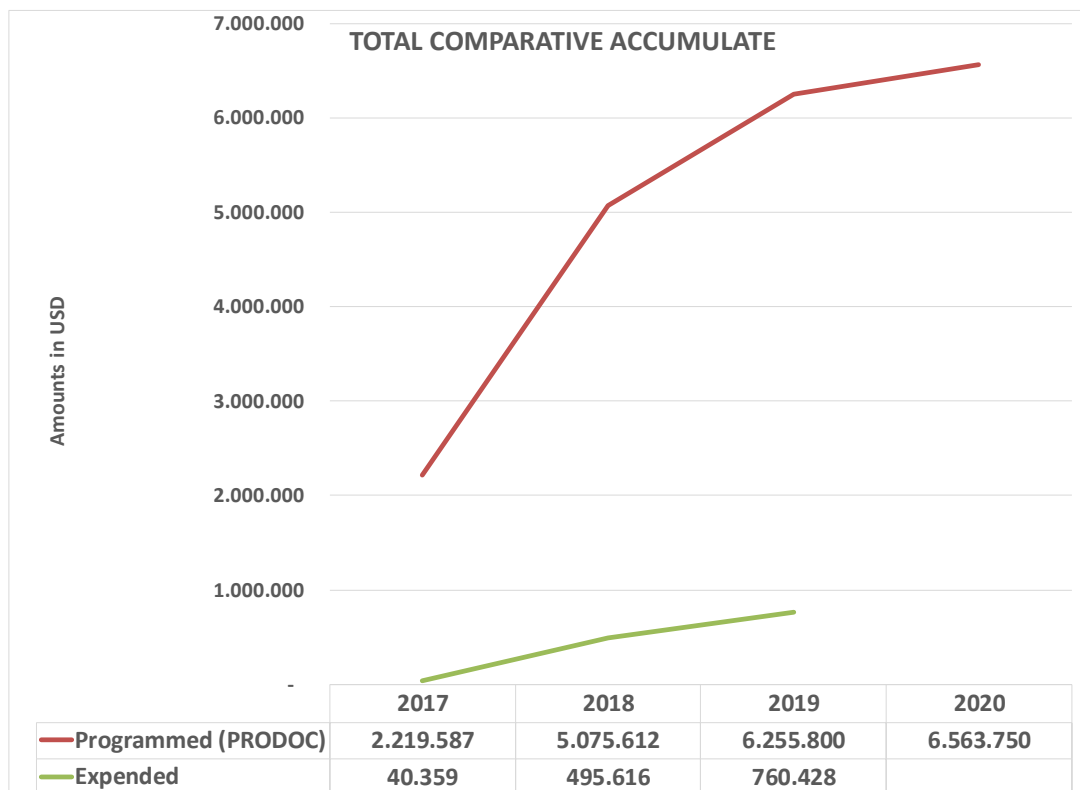


Figure 3



Fuente: PRODOC, PIR 2018, PIR 2019. MTR elaboration.

On the other hand, it must be sought, through BPCU and under the auspices of the BSC, a direct approach to the relevant subnational and local government bodies, and involve them in consultations, visits, dissemination and appropriateness of the Project. Regardless of its high turnover, institutional bond building is key to the future of the actions initiated and the SAP implementation.

4.4.5 Information and communication

In terms of internal communication, there is a need to improve channels and systematize information. Again, it is the BPCU that must articulate and encourage the circulation of reports and reports, especially the PIRs – there are actors who claim to be unaware of its content – and the progress, lessons learned and adaptive management alerts in the implementation of the agreements managerial and technical level. The support by UNDP funded by the Project budget in La Paz and Lima should further articulate its work with the BPCU, as well as better clarify the respective roles of the BPCU and the National Project Directorate (MINAM) in terms of monitoring and information.

As a result of the delay in implementation, there is insufficient external communication and dissemination material. The technicians responsible at BPCU do not have enough support for their work; but, on the other hand, the interviewees reiterate the need for better work to disseminate the Project and greater proactivity in their work.

There is a website in design process, and access on social networks, which cannot yet give wider coverage on the incipient advances in studies and pilot projects; and there is also a motivating video of interest, which does not yet have the approval of the management levels in Bolivia. It has also been proposed the development of a 'Strategy for Education and Citizen Participation', which cannot yet be designed because of delays in the recruitment process. The inventory of ancestral practices and knowledge has also been delayed, which could have been motivating in capturing the interest of local social actors.

This area requires more work and agreement on collaboration and support from the BSC and the BTC to devise an approach that removes any cultural and governmental barriers between the parties. Messages and strategies should be homologated for exchange of experiences between the two countries, both at the national and political levels, as well as at the regional and local level with civil society authorities and institutions.

4.5 Sustainability

The risks identified at the Project design stage, as outlined in the PRODOC, remain for the most part, because of the limited progress in the execution of the actions in general. Many of them, both environmental and social and political, are structural in nature, so the Project can propose only mitigating measures. Institutionally, however, there is scope for action for innovative proposals for the restructuring of the current ALT, and in the implementation of SAP.

4.5.1 Financial risks

The financial risks of the Project itself are linked to the low execution, if this pace of action continues, which is not necessary. A dramatic increase in implementation is expected in the remaining period, by keeping under control the political or institutional risks.

On the co-financing side, the implementation of projects by both governments seems to be making good progress, and there would be reason to assume that this dynamic will continue, given the political and social importance of the TDPS environmental problem to both countries, even in the impending conditions of electoral environment and government change.

The formulation of the TDA must address the scenarios and the current potential for financial continuity of replication or formulation of new projects based on the experience of the pilot projects; and the SAP design should include financial sustainability provisions, including private contributions (mining, fishing, sustainable tourism).

4.5.2 Economic risks

Economic risks are linked to environmental and social risks, duly identified in PRODOC, in terms of affecting interests in activities of agricultural, fishing and mining activities in the TDPS, resulting in social conflicts that in turn affect the regional and local economy. In the aspects of IWRM these aspects are considered substantial and are part of the policies and strategies to be included by the SAP. In their economic effects, these risks are already identified, and are being considered – at least at the declarative level for now – in the formulation of Project actions.

4.5.2 Institutional and governance risks

The institutional and governance aspects are key issues in the Project scenario. Previous experience, since the 1950s, of cross-border partnership initiatives indicates that changes are slow and arduously negotiated, beyond political statements and the goodwill of rulers on both sides. Despite a relative cultural and geographical homogeneity in the landscape and population of both countries in the TDPS, differences and levels of mutual distrust persist, which are reinforced as the institutional and governmental pyramid ascends.

The biggest challenge in mitigating these risks is the formulation and approval of the SAP, and the binational management infrastructure that will be required to transform and implement the work of the renewed ALT. In this effort, the preparatory work of the Project and its management levels will be crucial to maintain constructive dialogue and seek appropriate negotiating channels, including international support in the form of successful examples and work cases of cross-border development actions.

4.5.3 Environmental and social risks

The project, by its very nature, is called to mitigate through its results social risks and greater environmental degradation in the area, and to ensure that actions do not adversely affect the peace and economy of the population and enterprises; and in the case of interventions in which they are necessarily affected (such as in informal or illegal mining, and inappropriate overfishing or fish farming), risk is foreseen and mitigation is incorporated into the actions themselves, or by coordinating with other bodies.

In this context of an essentially social and environmental project, called to mitigate the threats and risks of degradation of the water resource and the biodiversity it underpins, the major

risks reside in the inadequacies or omissions of action, rather than in their implementation. In this perspective, the increasing degradation of the water bodies of the TDPS system are a risk to avoid through the full conduct of the necessary studies, the formulation and implementation of SAP, and the formation and functioning of an authority indeed, nationally effective. The delay in the implementation of the core activities of the TEA and the SAP entails an aggravation of the conditions for the conservation and functional sustainability of ecosystems and their services to the population.

As for the pilot projects, they all aim to improve socio-environmental conditions, so their full implementation is important, as well as the pursuit of their conditions to support environmental policies, learning and dissemination of knowledge, and replicability in similar areas. To a lesser extent, there are environmental risks that may result from the introduction of breeding practices, non-native species, or imbalances in the system or in the quality of services. At this stage of implementation of the Project there are no signs of these impacts, in which – judging by the pilots visited and the interviews conducted – mitigation approaches would be envisaged.

TDPS, on the other hand, as noted in PRODOC, is not without natural environmental risks (El Niño, extreme or progressive climate events, losses of ecological diversity, etc.) that, to the extent that they can be foreseen, they should be part of the studies and the parameters that the SAP will assume. The pilot projects under way are already considering these aspects, both in Peru and Bolivia, working with local populations

5. Project alignment to the CPD, UNDP Strategic Plan and SDG

As a binational project, the contribution of the IWRM-TDPS Project is outlined in the matching and converging aspects, based on the respective results of plans and programs in each country, and as a whole, to the global SDGs.

In application at the binational scale of the Project, the UNDAF, in the Primary Outcome of "Environment and Sustainable Development, sets out in Outcome 2, Product 2.5: *"... legal and regulatory frameworks, policies and institutions have the capacity to ensure conservation and sustainable use, and access and benefit-sharing of natural resources, biodiversity and ecosystems, according to conventions national legislation"*; and in Indicator 2.5.2: *"Number of countries implementing national and local plans for integrated water resource management"*.

Plurinational State of Bolivia:

- UNDAF 2018-2022 takes the name of 'Marco de Complementariedad de Naciones Unidas para Vivir Bien en Bolivia' (United Nations Complementarity Framework for Living Well in Bolivia'), and in its Outcome 4 coincides with the objectives of the Project, with the statement of aspiring to "... Promote and support the conservation and sustainable use of the environment", with priorities of "... support for government and community actions to expand and improve the management of forests, conservation areas, and protected areas, support for actions to reduce environmental degradation, desertification, and strengthening sustainable water management."

- The Country Program (CP), includes as expected Outcome (Outcome 4.2.) *"... Mother Earth's sustainable comprehensive management systems developed in prioritized areas of intervention"; Product Expected 4.2.1: "... Proposal for the national strategy of sustainable comprehensive management systems of Mother Earth in priority areas of intervention developed by the Vice-Ministry of Environment in coordination with other government entities."*

Republic of Peru:

- UNDAF (2018-2022), ED4: *"... The State, with the participation of civil society, the private sector, scientific and academic institutions, will have designed, implemented and/or strengthened, policies programs and plans, with an environmental sustainability approach to the sustainable management of natural resources and biodiversity conservation."*
- In the Country Program (CP), is included as outcome (Outcome CPAP 4): *"... The State, with the participation of civil society, the private sector, scientific and academic institutions, will have designed, implemented and/or strengthened, policies programs and plans, with an environmental sustainability approach to the sustainable management of natural resources and biodiversity conservation."* And as Product 4.4: *"... Management tools to improve environmental quality, elaborated, agreed, and in the process of implementation at the national, regional and local levels".*

The Project contributes directly to the following SDGs: 6 (Drinking Water and Sanitation); 11 (Sustainable cities and communities); 12 (Responsible production and consumption); 13 (Climate Action); 15 (Life of terrestrial ecosystems). It also contributes to the achievement of Objectives 1 (Poverty Reduction), and 17 (Alliances to Achieve the Goals).

6. Conclusions and Recommendations

6.1 Conclusions

- *On the nature and importance of the Project*
 - The importance of the Project and its relevance of its implementation and conclusion to address the TDPS's problems and long-term actions for sustainability, are widely recognized by all stakeholders.
 - There is also an increased political concern of the need for action towards TDPS, that is expressed in agreements and coordination at the highest level of government in both countries; but there are some barriers to assuming them on binational terms.
 - The Project is well formulated from a conceptual and structural logic point of view; but the weight of political, institutional and government culture differences in the design may have been underestimated, so an adaptive process of incorporating these conditions and strategies will be needed.

- In terms of organization and roles for management, there are some gaps that need to be addressed, based on the experience gained; this is the case of the roles and interactions between the National Project Directorate (MINAM), and the Binational Coordination, with respect to the Binational Technical Committee.
- There is scant internalization, in the parties and actors, of the intrinsic binational nature of the objectives of the Project, which conveys the risk of overlapping or doubling isolated efforts, or biased views on the implementation of solutions and the role of the binational entities.

➤ *Structural issues that call for attention*

- IWRM is an innovative approach that requires intensive work of reconciling methodologies and multidisciplinary cooperation. Sectoral divisions undermine the holistic vision; and the frequent rotation of officials, along with their overburdened work that limits their participation in decisions, undermines the smooth implementation of the Project.
- There is a tendency to miss the view of the Project as the main current contributor towards a new SAP and its long-term Implementation. Therefore, complementary components and technical products should not be seen, discussed and worked in isolation or with a *per se* scientific look (pilot projects and studies), nor should be so the strengthening, training, monitoring, information and knowledge management activities.
- The ultimate objective of the Project requires continued attention to the convergence and combination of actions by national sectors in both countries, and to the concerted design of an ATL that must overcome its current limitations.
- Neither the current ALT nor the former Master Plan have been evaluated with a view to taking on the new legacy of the Project and the implementation of the SAP. The Project design assumes that the antecedent plan (GBMP) requires updating and enhancement, but - judging from the perception of several specialists involved - a full evaluation has not been carried out for a more refined design of the Project.
- The Project promotes, catalyzes and lays the foundations for a new action plan and binational agreement. However, it is not intended to include or evaluate the needs and characteristics of such a new binational regime and the ways of harmonizing it with the respective national norms and institutions; this task would be part of a further process to be developed by the Chancelleries, but it is essential to articulate it from now on with the development of the Project..

➤ *Conjunctural problems that require attention and adaptive action.*

- There is a general recognition of the backlog of execution (9% expenditure). There is consensus among the parties and actors that it would not be possible to complete the Project as planned, without at least one additional year.

- Some problems in coordination and implementation of BSC decisions are recurrent. The need to accelerate binational management and coordination processes adaptively, and to work on a political and diplomatic strategy to remove mutual mistrust and bias, are also notorious.
- There are difficulties in convening timing and priorities of decision-makers to attend sessions, as well as in their sustained attention to critical issues. There is also a need for greater specificity and precision in decisions and agreements, as well as more effective articulation with the Binational Technical Committee, in order to avoid redundancy and repetition in information, and to achieve greater accuracy and specificity in the decisions made.
- In terms of management, the current absence of a Binational Coordinator is causing further delays in action and loss of a hardly needed managerial intermediation in the technical support and capacities delegated from the BSC and technical committees. The location of the BPCU and the balance-system arrangements of its functions between the two parties appear to be not quite satisfactory for either one.
- Baselines have not been set for all the indicators to measure progress towards the Outcomes. On the other hand, there is a lack of consistency or coherence between the long-term objective indicators, and the product indicators leading to the objective, as in the case of public policy instruments to be achieved through pilot projects, or the relationship with the watershed councils, created and created, in terms of the activities raise
- Desirable convergence between the definition and implementation of complementary studies and those of the pilot projects requires an analysis for their better integration, articulation and interrelationship of findings for TDA and SAP. On the other hand, there are methodological differences in studies on both sides, on the same body of water or natural resource (Lake Titicaca, studies on the frog, and others).
- While long-term forecasts for financing future actions, and proposals for results transfer mechanisms and functions at the end of the Project will be seen in the formulation of the SAP, it is important to advance provisions, as part of the pilot projects and diagnostic of current conditions and potential.
- There is no coincidence of the academic approach and research, with administrative and fund management times. There are some problems in terms of opportunity for bidding and acquisitions, and in the expected times or season for academic research, troubleshooting equipment procurement, pricing and technical specifications.
- Director plans in sub-basins are being advanced, but there is no clear foresight of how synergies and their articulation will be raised with the new global master plan (SAP).
- Some actors perceive that the DNP in Peru exceeds its role of technical, administrative and monitoring support, intervening in matters that fall within Bolivia's remit. This may be due to inaccuracy in this regard in the PRODOC and the envisaged governance scheme, in the differentiation of the roles of the DNP and the UBCP, aggravated now by the temporary absence of a Project Coordinator.

- The representation of the GEF and the Focal Point (MINAM, OCAI), which report that they were not formally involved in the initial management of the Project, have already been invited to the CBD sessions, as bodies of international cooperation, to comply with the donor requirements, and those of official registration of the Project with the national agency of Peru (APCI). This linkage must be maintained throughout the implementation of the Project.
- Mentions on gender and interculturality issues elicit reactions referred them as tacit in working with the population and in the activities that are carried out; as well as cultural homogeneity within the scope of the Project. The topic, which is specifically addressed in only two of the pilot projects, is assumed to be considered or implied in the studies and activities, so it is not mentioned as a priority.
- Close relationship and synergies for binational cooperation between other akin governmental sectors within both countries has taken more time than expected. This situation did not allow to incorporate the full potential exchange of experiences in areas of binational cooperation and in information, dissemination, and citizen education in which there are comparative advantages in both countries that could be of mutual benefit.
- In terms of risks and sustainability, except as already stated in the above conclusions, no relevant variation is seen regarding the assumptions in the original PRODOC.

6.2 Recommendations

➤ On the objectives, design, and implementation strategy

- With basis on the PRODOC guidelines, promote coordination of BSC with the Chancelleries, in order to agree on a shared strategy for overcoming differences in the binational approach, exchanging experiences with other countries, and discussing options for mechanisms ad-hoc institutions.
- Anticipate and work from the BSC an assessment of the current state of the ALT, and the needs for design, faculties and scope of the new ALT, with international support, arbitration and application of the experience of similar cases (Rin, Peru-Ecuador, and others). Consider whether the current ALT should participate as an observer or adviser to the CBD, in addition to participating in the CTB.
- Monitor the commission to the UBCP of a review of the consistency and relevance of the selected complementary studies in relation to their binational implementation potential, goals and remaining implementation times. At the same time, establish intermediate and specific goals and milestones, consistent with the overall objectives, and with the advancement, and potential of pilot projects for policy design.

- Review indicators, especially those whose baseline has not yet been established, and make decisions, either to establish the indicator or to redefine them in the most appropriate way for the relevant outcome.

On adaptive management

- Drive on the incorporation of the new Regional Coordinator and review its functions in the framework of strengthening its articulating role between BSC decisions and technical committees, for the smooth implementation of decisions. Under its management, boost the hiring of the remaining administrative staff, and evaluate the Unit's performance to date to take steps to correct and optimize its functions.
- Prepare an official document to support the need and conditions for extension of the Project's implementation term. Include a long-term vision and subsequent phases, and a roadmap incorporating the measures and times envisaged to ensure compliance in time. Review the 2019 AWP and make the necessary adjustments. To this effect, ensure the support of both countries to submit the application for extension to the GEF.
- Continue and facilitate regular participation of the focal point of the GEF and national technical and financial cooperation entities – including consultations with the respective economy and finance sectors as appropriate – for better compliance of the guidelines on public investment and on projects that involve governmental counterpart or co-financing.
- Promote parallel cooperation of other governmental sectors in both countries with experience in the issues of citizen participation, private sector involvement, knowledge management and environmental education, through multisectoral working groups for the exchange of experiences and the formulation of mutual technical assistance schemes. Seek additional funding from cooperation entities, or concomitant projects, if current budgets are limited.
- Complete the designing and implementation of the Project monitoring and evaluation system, as outlined in the PRODOC; and proceed to the formation of the working groups for the ADT and the SAP, in line with the start of actions in capacity-building courses.
- Conduct review and evaluation sessions of the parties' and UNDP procedures (Peru and Bolivia), to harmonize criteria, remove barriers and delays, shorten deadlines, and agree on solutions that optimize procurement processes, contracts; and pave differences in technical and administrative approaches.
- Urge ministerial and decision-makers to participate with greater real or virtual presence in sessions requiring critical decisions, in order to avoid the need for further consultations and delays by alternate representatives, and the risk of additional delays in execution.
- Seek, through BPCU and under the auspices of the BSC, direct approach to the relevant subnational and local government bodies, involve them in consultations, visits, dissemination and appropriateness of the Project. Regardless of its high turnover, institutional bond building is key to the future of the actions initiated and the SAP implementation.

➤ On capacity building, knowledge management and communication

- Indicators of institutional strengthening need to be refined in terms of training, since attendance at courses and training actions may not reflect the effectiveness of actions. With chronic turnover of officials and managers, and innovation in the field being, more accurate and effective methods are required to measure the long-term impact of these actions, for which a monitoring system can be designed in addition to requiring consultants to incorporate these insights into their course design.
- Incorporate on the website links to pilot projects and to convergent and parallel actions of other sectors and institutions working in TDPS area on environmental and water resources issues.

➤ On gender and intercultural issues

- It is necessary to make explicit the approaches, if they have been raised, on gender consideration, both in pilot projects as in studies and trainings whose implementation may be conditioned by these approaches. The relative cultural homogeneity of the TDPS area may facilitate the adequacy of gender aspects, but it cannot be assumed that the issue is implicit in actions. In the case of interculturality, the homogeneity may be present in the rural area, but cultural differences in the technical, academic and urban-rural relationship of the executors in relation to users, can be overlooked.

3. On Lessons learned

In addition to lessons indirectly learned from the conclusions and recommendations expressed above, suggestions from interviewees and the consultant on their experiences in the Project and the like are added for analogue future project designs or their replicas:

- Binational projects present difficulties not always perceived by actors and decision makers. Before designing the Project, cultural and governance differences that are not likely to change in the short term of a project, should be foreseen; and the appearance and difficulty of work should be also foreseen and addressed as part of the project as an organic part of the issues to solve, and not as an obstacle, risk or barrier.
- The inception or start-up workshops, and even the design of a project should be preceded by an induction workshop, especially in the case of binational projects of similar complexity. In this way participation in the following inception workshop would be enriched with prior knowledge of the scopes, difficulties and barriers to be faced.
- The formulation of a binational project often overlooks details of institutional issues and regulations that vary from of one country to another. Typical cases are the international cooperation rules, loans and donations for investments that involve government warrant or co-funding, and budget management regulations. Early participation in the design and formulation of these projects of officials from the ministries or economics, finance and budgetary bodies, in addition to diplomatic channels, can anticipate problems and propose solutions.

7. ANNEXES

- A. - Outcomes Progress Matrix (Table 1 in TdR)
 - Report on the implementation of complementary studies for the TDA (Spa).
- B. MTR Terms of Reference (Spa)
- C. Evaluation matrix (Spa)
- D. List of documents examined
- E. Questionnaires for interviews (Spa).
- F. Itinerary of evaluation mission and persons interviewed (Spa)
- G. Tables of Co-Financing (Bolivia and Peru) (Spa).
- H. Valuation scales.
- I. UNEG Conduct Code signed.
- J. Approval of Final Report form

Reserved Annexes

- **Audit Trail**
- **Tracking Tools for MTR (METT, TT)**