Note to Task Teams: The following sections are system generated and can only be edited online in the Portal. ***Please delete this note when finalizing the document.***

Public Disclosure Authorized

Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 12-Oct-2020 | Report No: PIDC29826

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Parent Project ID (if any)	Project Name
Niger	P174414		Niger Integrated Water Security Platform Project (Niger-IWSP Project) (P174414)
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
AFRICA WEST	Mar 22, 2021	Jul 26, 2021	Water
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	Ministry of Planning	Ministry of water and Sanitation, Ministry of Environment Urban Health and Sustainable Development, Ministry of Agriculture and livestock	

Proposed Development Objective(s)

The project development objective is to strengthen the management of water resources and support increased access to water services and improve the resilience of livelihoods to climate variability in the selected areas in Niger

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	400.00
Total Financing	400.00
of which IBRD/IDA	400.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	400.00
IDA Credit	400.00

Environmental and Social Risk Classification	Concept Review Decision
Substantial	Track II-The review did authorize the preparation to continue

Note to Task Teams: End of system generated content, document is editable from here. ***Please delete this note when finalizing the document.***

Other Decision (as needed)

B. Introduction and Context

1. **A Sahelian country, Niger faces a number of mutually reinforcing challenges aggravating water security, including high climate variability, natural resource degradation, fragility and rapid population growth.** Climate change has increased the frequency of drought and floods, and with rainfall less predictable, has reduced agricultural productivity. Food security is further threatened by extensive land degradation due to over-farming, desertification and droughts. The poor management and development of water resources for multiple uses in the country has exacerbated the precariousness of the population, leading to poor economic and human capital outcomes. Meanwhile, a combination of drivers results in high risks of conflict and fragility, including regional insecurity, youth disenfranchisement, grievances over the allocation of governmental resources, and competition for scarce natural resources - all closely intertwined with water insecurity due to the vital role played by water in all aspects of life and development in Niger. These drivers are further exacerbated by the country's rapid population growth, increasing pressures on scarce resources, including water and arable land. Niger's climate change adaptation and water resource protection measures have proven inadequate to rise to these challenges, while the lack of a comprehensive social protection system has reinforced prevailing poverty traps.

2. **A systematic approach of well-coordinated water-related interventions is needed to reduce fragility, increase resilience to climate variability, and lay the foundations of socio-economic development in Niger.** This systematic approach would aim to support self-reinforcing livelihood enhancing interventions from the household level to the provincial level through spatially targeted watershed interventions. These interventions would span the areas of water resource management and ecosystems regeneration, irrigation and optimized rain-fed agriculture, flood management improvement, and expansion of access to sustainable and safely managed drinking water and sanitation.

3. **The proposed project aims to overcome issues around the protection, management and knowledge of water resources and associated natural environments to contribute to the sustainable development of water for all Nigeriens**. Niger's pervasive poverty is intertwined with the complete reliance of entire communities on the exploitation of natural resources, particularly in rural areas but also indirectly but crucially in urban settings, leading to the degradation of landscapes and ecosystems. This reliance is further exacerbated by the stretched capacity of these communities to withstand climate change impacts and existing infrastructure gaps. To respond to this reality, the project intends to promote socio-economic development through: (i) Increasing the availability of water resources for household (e.g. WASH) and productive (e.g. irrigation) uses to foster economic growth and improve livelihoods; (ii) Better protect

and ensure the sustainability of water resources through watershed ecosystems development; and, (iii) Improving the resilience of the project area's population and their ability to cope with climate change.

Country Context

4. **Poverty and human development indicators place Niger among the most socio-economically challenged countries in the world; the COVID-19 crisis further heightens its vulnerability.** Although the direct impact of the current COVID-19 pandemic is concentrated in Niamey, the virus has been identified in all regional capitals of the country (Agadez, Dosso, Diffa, Maradi, Tahoua, Tillabery and Zinder). Beyond direct impacts looms deeper concerns of income and food security shocks that could erase the poverty reduction gains achieved in recent years. Pre-crisis, Niger was already one of the world's poorest nations, which ranked next to last on the United Nations (UN) Human Development Index since 2010 and last in 2019. The lack of access to clean water and sanitation are significant factors in Niger's high poverty rates (as demonstrated through their substantial contributions to Niger's high multi-dimensional poverty index [MPI][1]).

5. **Though poverty rates have fallen in recent years, reaching 41.4 percent in 2019, the country's rapid demographic growth (among the highest in the world at 3.9 percent annually[2]) has resulted in a large increase in the absolute number of poor people.** The country's Human Capital Index of 0.32 is one of the lowest in the world. Life expectancy at birth is estimated at about 61 years. The under-five mortality rate is 84 per 1,000 live births,[3] 42.2 percent of children under-five years of age are stunted, and 31.7 percent are under-weight, while the maternal mortality rate is 509 per 100,000 live births.[4] Only about three of every ten Nigeriens can read and learning outcomes are among the weakest in the region, which in turn contributes to high youth unemployment. In turn, the country's high fertility rate further raises that bar: Niger's current population of 24 million is projected to increase to around 30 million by 2030 and 70 million by 2050.[5]The disaggregation of poverty by gender shows that women are more vulnerable to poverty than men; because three out of four poor people are women. Families with women as heads of households are most vulnerable.[6]

6. **Niger meets the definition of a country at risk of fragility, conflict, and violence.** Niger's fragility is underpinned by its environmental vulnerability.[7] In spite of this vulnerability, the country has managed to remain stable within a difficult and insecure regional environment. However, the country is subject to many Fragility, Conflict and Violence (FCV) risk factors. First, high population growth does not bode well for a country already lacking economic opportunities. Second, institutional deficits remain significant: Niger ranks 112th out of 180 countries in the 2017 Corruption Perceptions Index. Furthermore, external stresses play a large role in potential instability, as there has been an increasing number of attacks on Niger's territory by Boko Haram and other terrorist groups at the common borders of Niger-Nigeria-Chad and Niger-Mali-Burkina Faso. The country is currently hosting over 369,000 people displaced by conflict, which has important security

[1] See latest: Global MPI 2020 – Charting pathways out of multidimensional poverty: Achieving the SDGs. https://ophi.org.uk/wp-content/uploads/G-MPI_Report_2020_Charting_Pathways.pdf
[2] World Bank. 2018. Niger - Country partnership framework (CPF) for the period of FY18-FY22. Washington, D.C.: World Bank Group.
[3] 2018 estimate by the UN Inter-agency Group for Child Mortality Estimation at https://childmortality.org/data/Niger
[4] WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. 2019. Maternal mortality: Levels and trends 2000 to 2017: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. Geneva: World Health Organization; 2019.
[5] As the number of children increases by 750,000 per year, families opt to rely more on labor and invest less in human capital, thus perpetuating poverty and making Niger the only Sahelian country yet to benefit from a demographic dividend World Bank. 2018. Niger - CPF for the period of FY18-FY22. Washington, D.C.: World Bank Group.
[6] https://www.nepad.org/file-download/download/public/14511 NEPAD. 2012. African Gender, Climate Change and Agriculture Support Program. https://www.nepad.org/file-download/download/public/14511
[7] Niger ranks 175th out of 181 countries in the Notre Dame Global Adaptation Initiative (ND-GAIN) index, which takes into account countries' vulnerability and readiness to adapt to climate change (ND-GAIN 2019)

and economic implications, as noted by key drivers of the 2019 Risk and Resilience Assessment (RRA).[8] Increased military spending as a result of this fragile security situation is putting a severe strain on public resources.

7. **Improving water security is key to reducing the country's fragility**. Recent analysis (Khan and Rodella, 2020 – upcoming) demonstrates the important link between water insecurity and fragility in the G5 Sahel. The region is historically at a higher risk of conflict induced by variation in water availability, a risk that has substantially increased since 2010. The authors also show a comparatively higher vulnerability of irrigated areas to conflict, likely reflecting competition for scarce resources, and demonstrating the importance of managing water resources well.

8. **Leveraging the development potential of water in Niger will be critical for its recovery from the COVID-19 crisis.** Recent scenarios from the World Bank estimate that between 70 to 100 million people could be pushed into extreme poverty globally as a result of the COVID-19 crisis.[9] A large share of the "new" extreme poor will be concentrated in countries that are already struggling with high poverty rates, with more than a third projected to be from Sub-Saharan Africa. Fragile countries face an added risk: under the baseline scenario, the number of extreme poor in IDA and FCV countries, both of which include Niger, are projected to increase by 21 and 18 million, respectively (World Bank, June 8, 2020). Few development levers can respond to as wide a range of concerns as water, including supporting livelihoods, promoting human capital, protecting public health, enhancing food security and generating employment opportunities for vulnerable groups.

Sectoral and Institutional Context

9. **Water is the bedrock of Niger's development.** Niger is one of the hottest and driest countries in the world, with three-fourths of the country classified as hyper-arid desert. The distribution of its population is largely determined by the availability of water, as it is a necessary condition for livelihoods and economic activity in the country. Although a majority of Niger is desert, the country's overall potential water resources are quite significant, estimated at 32 billion cubic meters per year.[10] Most of it is external – coming through the Niger river and its tributaries. However, most of those resources have not been adequately harnessed. To date, less than 1% of Niger's surface water and less than 20% of its groundwater being utilized currently. This lack of water resources development critically constrains the country's development: as an example, agriculture accounts for over 80 percent of employment, yet less than 1% of the total cultivated area (of 15 million ha) is irrigated,[11] leaving a majority of population in a poverty trap and extremely vulnerable to shocks and deepening gender inequities.[12] Uneven spatial distribution, unsustainable utilization practices and rapid population growth are also straining Niger's water resources, with per capita availability decreasing from a comfortable 2300 m3/year in 2004 (when population was ~13 million) to 1360 m3/year today (with population of 22 million). Therefore, Niger's long-term development requires a twin focus on developing new water resources and improving the management of existing supplies.[13]

[8] Approximately 369158,000 refugees, 190109,000 Internally Displaced People (IDPs), and 12016,000 Nigerians (Boko haram) and 58,000 Malians and 1000 refugees (Chadians/Soudanees).Nigerien nationals who returned from Nigeria because of the conflict
[9] See. World Bank estimates of projected poverty impact of COVID-19 (June 8, 2020). Available at : http://pubdocs.worldbank.org/en/461601591649316722/Projected-poverty-impacts-of-COVID-19.pdf
[10] Source : PANGIRE 2017
[11] Ministry of Agriculture and Livestock (MAG/EL): Programming Document Multi-year Expenditure 2020-2022 (Document de Programmation Pluriannuel des Dépenses 2020-2022 – DPPD 2020-2022
[12] UN Women and WSSCC 2017. Menstrual Hygiene Management: The Experience of Nomadic and Sedentary Populations in Niger. Regions of Maradi, Tahoua, Tillabéri and Zinder. https://menstrualhygieneday.org/wp-content/uploads/2017/03/Menstrual-Hygiene-Management-%e2%80%93-The-experience-of-nomadic-and-sedentary-populations-in-Niger.pdf
[13] PANGIRE-2017

10. **Water will be key to Building Back Better (BBB) and Greener in Niger.** The COVID 19 crisis presents an additional challenge for Niger amplifying those previously highlighted. For the water sector, the crisis can also present some opportunities to effect lasting change at scale, thanks to the cross-sectoral interest from economic recovery (sustaining growth, creating and enabling jobs) to public health and human capital (preventing illnesses and tackling the early childhood disadvantages amplified by poor nutrition, food insecurity) that can help ensure a water informed systematic BBB approach fit for Niger. The emergency response to the crisis highlighted the role that water, sanitation and hygiene can play to combat diseases and systemic risks like COVID-19, but water security at large constitutes a pre-condition to "Rebuild Better" in a greener, more sustainable and resilient way.[14]

11. **Actual water use is significantly below sector demands: increasing gaps illustrates how inadequate water management hinders Niger's growth**. Based on the requirements of sector development strategies and programs, annual water requirements will increase from 7.6 billion m3 in 2015 to more than 9.2 billion m3 in 2025. In contrast, actual water use numbers are 1.2 billion m3 (2015), projected to increase to 1.7 billion m3 in 2025 (Table 1). While the numbers are well below the annual renewable water resources, the gaps highlight the significant underdevelopment of infrastructure focused on water resources mobilization and how that restrains growth and development in the country.

Table 1: Annual renewable water resources, total water requirements per sector strategies, and estimated actual water withdrawals (in millions m3)

($X10^6$ m^3)	**2015**	**2020**	**2025**
Surface water resources	**30 000**		
Groundwater resources	**2 500**		
Water Requirements per Sector Strategies	**7 604**	**8 496**	**9 214**
Water for irrigation	*4 059*	*4 865*	*5 485*
Drinking Water	*126*	*176*	*235*
Water for Industry and mining	*33*	*40*	*48*
Water for livestock	*225*	*253*	*284*
Ecological water flow	*3 160*	*3 160*	*3 160*
Current (2015) and trend (2025) withdrawals	**1 200**		**1 700**

Source: PANGIRE-2017

12. **The National Action Plan for Integrated Water Resources Management (PANGIRE)[15] provides a strong roadmap to overcoming the significant obstacles to mobilizing Niger's water endowment.** These obstacles include: (i) highly uneven spatial and temporal distribution of rainfall, (ii) insufficient knowledge of water resources, (iii) poor management

[14] As highlighted in the Niger WASH Poverty Diagnostic (2017), the sector also presents an untapped potential for economic activity and job creation. A basic simulation shows that the number of jobs that could be created to respond to the needs for improved sanitation of the population by 2030 to be between 100,000 and up to 300,000 full-time qualified and unqualified jobs. To those jobs related to construction one would have to also add direct and indirect jobs created along the value chain. Similarly, better activities related to the improvement of resource management can not only set the preconditions for sustainable economic activity but can also offer job opportunities related to public work and maintenance of WRM infrastructure.

[15] PANGIRE: Plan d'Action National de Gestion Intégrée des Ressources en Eau

of existing water resources, and (iv) inadequate coordination between resource mobilization activities and downstream investment planning. Building on the 2010 water code, PANGIRE aims to: (i) improve the knowledge of water resources, (ii) mobilize and develop natural resources and related socioeconomic activities, (iii) preserve the environment and build resilience to climate change and (iv) improve water governance and strengthen capacity. There is broad consensus that, through the Water Code and PANGIRE, Niger has developed a harmonized framework and implementation plan for the management and development of its water sector. The challenge now lies in its operationalization, by adopting a "water platform" approach coordinate the multiple different investments, and by developing the needed technical and management capacities.[16] The water platform is a process to systematically coordinate water-related planning, policies and investments across all water-using sectors, potentially including the World Bank Group, government, private companies, civil society organizations and development partners, providing a more holistic and effective approach to managing water for sustainable development.

Water in Agriculture

13. **Agriculture is Niger's most important economic sector, accounting for over 40 percent of national GDP and serving as the principle source of livelihood for over 80 percent of the country's population.** About 96 percent of Niger's agriculture is based on smallholder production of rainfed staple crops, mainly millet, sorghum, and cowpeas integrated with livestock production, as opposed to more intensive agriculture that could more effectively harnesses Niger's water resources for improved land productivity, provided adequate water resource management. The imbalance between population growth (3.9 percent) and agricultural growth (2.2 percent) in the country has contributed to increased land pressure and the expansion of crops to marginal land (Poverty Reduction Strategy Paper 2010). Although women play an important role in the production, processing, and commercialization of commodities, they are poorly empowered across the sector: women usually do not receive extension services, agriculture and market information, or inputs to increase their productivity.[17]

14. **Agricultural productivity and productivity growth remain low, even compared to neighboring countries, with degraded land constituting a major obstacle to improving food security.** Agricultural productivity has been stagnant since independence, which has resulted in the expansion of cultivated area to respond to growing demand**.** Despite this expansion, per capita land use is declining. Farms are small (average 4.1 ha) and getting smaller, as Niger's population growth exceeds the rate of agricultural area expansion. Strikingly, Niger ranks 101st out of 117 countries according to the 2019 Global Hunger Index.[18] Indeed, despite efforts to combat malnutrition, the country continues to face stunting rates around 40%.[19] The country is not self-sufficient when it comes to food production, further heightening its vulnerably to global crisis and price shocks. In recognition of the increasing pressure on its land resources and the importance of improving food security, the GoN has made agricultural productivity a cross-sectoral priority. This includes explicitly recognizing the Nigeriens Nourishing Nigeriens (3N) initiative, a food security and agricultural development strategy, as a key component of the government's 2017-2021 Economic and Social Development Plan (PDES).[20]

[16] For example, a number of sub-sector regulations need to be drafted in order to implement the provisions of the Water Code. Similarly, financial resources are needed to meet the PANGIRE targets of mobilizing surface and groundwater resources for both existing and future demand of water.
[17] International Food Policy Research Institute (IFPRI): Empowerment matters: "Invisible women" in Niger produce less food (2016).
[18] with a 2019 GHI score of 30.2, considered serious, down from 52.1 in 2000, considered extremely alarming. See. Global Hunger Index Niger Case Study (2019), available at : https://www.globalhungerindex.org/case-studies/2019-niger.html
[19] UNICEF, WHO, World Bank joint child malnutrition estimates
[20] Adopting a multisectoral and multi-agency approach, the 3N initiative builds on the multisectoral National Nutrition Security Policy (PNSN, 2016–2025) which establishes the roles and responsibilities of all actors involved in nutrition action, while the associated multisectoral plan establishes the budget for nutrition activities (NIPN 2017).[20] On the agricultural side, in addition to Niger's Agriculture Policy (Politique Agricole, 2016) which seeks to contribute to the growth of the economy and

15. **Water is critical to Niger's goal of promoting agriculture and food security; the mobilization and development of natural resources and related socio-economic activities is a central goal of PANGIRE and forms Pillar 1 of i3N.** Niger has an irrigable land potential of more than 270,000 hectares, of which more than 52% is located around the Niger river. Recent studies indicate that this potential may be much greater, especially in the Niger River valley.[21] The development of this potential is reflected in the National Strategy for the Development of Irrigation and Stormwater harvesting drafted in 2005 (SNDI / CER)[22] in which water demand for irrigation is estimated at around 788 million m3. Although this demand is much lower than the available water resources, irrigation development is substantially constrained by the country's deficient water resource mobilization infrastructure and the inadequate technical capacity to manage it. Between 2014 and 2017, the institutional reform for large scale irrigation supported by the Bank through DPL, has led to the restructuring of the national office of large-scale irrigation, ONAHA.[23] The reform confirmed the existing water user association introduced a performance contract for ONAHA (modernization of its status) and redefined the interactions between stakeholders around the various functions while enhancing accountability. The regional Sahel Irrigation Initiative Project (SIIP, P154482) which is primarily focused on small-scale irrigation by improving the capacity of practitioners to design and mainstream irrigation solutions, intends to also impact the entire irrigation sector.

16. **Climate change threatens ecosystems and landscapes which critically contribute to improving water availability and agriculture productivity, as well as to increasing the resilience of communities.** Healthy ecosystems clean water, purify air, maintain soil, regulate the climate, recycle nutrients and provide food. They provide raw materials and resources for energy, medicines and other purposes. These "ecosystems services" are the foundation of healthy populations and sustainable economies and constitute a country's natural capital base. Niger's Intended Nationally Determined Contribution (INDC) highlights sustainable land management (SLM) as the core of its adaptation efforts. The document highlights the co-benefits in the Agriculture, Forestry, and Other Land Uses (AFOLU) sector resulting from implementing and upscaling climate-smart agriculture (CSA) activities (ANR, recovery of degraded land etc.).

Water Supply, Sanitation, and Hygiene

17. **Increasing access to and improving the quality of potable water in Niger is key to reducing poverty, improving human capital and protecting the population from high climate variability**. A recent World Bank report[24] has shown how better access to water and sanitation can contribute to improving households' resilience to high climate variability by limiting the risk of contamination associated with both floods and droughts. Niger's Water, Sanitation and Hygiene Sectoral Program (*Programme Sectoriel Eau, Hygiène et Assainissement,* PROSEHA 2016-2030) aims to provide access to safe and sustainable drinking water and sanitation services for all by 2030. Access to water and sanitation in Niger is lagging compared to the average for sub-Saharan Africa (SSA), particularly in rural areas. Access to at least basic water service was 50% in Niger (95% in urban and 46% in rural), while the SSA's average is 61% in 2017. Niger is one of the bottom ten countries in the world with regard to access to improved water in rural areas. Meanwhile, 68% of Nigeriens practice open defecation (11% in urban and 79% in rural), compared with the 27% SSA average (JMP 2019).

ensure food and nutrition security (GoN 2016), the GoN adopted in 2019 the National Strategy for Agricultural Research, Training, and Innovation, which is intended to strengthen governance of agricultural research and increase the diversification and resilience of agricultural production systems (ANP 2019).
[21] MUSU/DD : Politique Nationale de Gestion des Zones 2018 (HumidesNational Wetlands Management Policy Document 2018)
[22] SNDI/CER : Strategie Nationale de Développement de l'Irrigation et de Collecte des Eaux de Ruissellement
[23] ONAHA : Office National des Aménagements Hydro-Agricoles
[24] Niger WASH Poverty Diagnostic – 2017: World Bank.

18. **While important reforms have been made in the urban water sector since 2001, particularly regarding the development of public-private partnership (PPP) initiatives, more remains to be done, especially in peri-urban and rural areas.** An asset-holding company — SPEN[25] — was set up as a public corporation in charge of sector development with a ten-year concession contract. A private operator —SEEN[26] — was also engaged to operate and maintain the facilities and commercial activities (billing and collection) under a 10-year *affermage* - lease contract. Both contracts were renewed for an additional ten years in 2011, which proved essential in Niger's achievement of the MDG targets for improved water access in urban areas. The reform, supported by the government and development partners, has led to an increase in access to potable water from 64% in 2001 to 96% in 2019, corresponding to an increase from 1,874,735 people with access in 2001 to 3,541,803 people in 2019. In addition, the efficiency of the pipe network improved from 78% in 2001, to 87% in 2019. Niger is expected to continue with this institutional setup after November 2021 – the end of the current *affermage* lease contract.

19. **The rural water sector has also undergone important reforms, yet insufficient implementation has impeded progress in responding to existing needs and growing demand.** Since 2010, rural reforms have sought to move away from community-based management and promote delegated management and private sector participation, establishing the responsibilities of three primary actors: (i) Communes are responsible for public water supply services and own the water supply assets built by the Ministry of Water and Sanitation (MHA)[27]; (ii) Private operators operate and manage water supply systems under a lease (*affermage*) management contract with the commune; and (iii) The water sector regulation Authority (ARSEau)[28] is responsible for regulation. Although this reform has resulted in more than 68% of rural water supply systems (1589 out of 2329) being managed by private operators as of December 2019, improvements in sector performance have been limited[29]. Water supply systems management in growing centers and small towns have proven especially problematic because of increasing demand for both water quantity and quality, and infrastructure limitations preventing household connections.[30] With the communes and private operators unable to fully respond to this challenge, the government, under PROSEHA, plans to transfer 75 rural centers to SPEN, envisioned to improve service delivery for approximately 1,150,000 people of whom 44 percent are poor. With this arrangement, assets will no longer be owned by the municipalities, but rather the national holding company. The success of this strategy relies upon a financially healthy sector and private sector involvement in investment.

20. **Making progress towards universal access means significantly expanding rural access to improved water sources, tapping into private investment and strengthening regulatory institutions.** While in urban areas the priority is on improving network and water quality, expanding access to improved sources remains the main priority for rural areas to reduce the existing gap. For rural centers not covered by the SPEN/SEEN reform that are also expected to grow in the near future, the government is planning to create a dedicated entity to provide technical support to municipalities to enable the emergence of well-qualified private sector entities to manage their rural drinking water systems. In addition, the government of Niger is establishing an independent water sector regulatory body (ARSEau) with the support of Bank 2019-2020 DPL serie, covering both urban and rural water supply, to enforce associated legislation that aims to protect

[25] SPEN: Société de Patrimoine des Eaux du Niger
[26] SEEN is the private operator insuring the management of water supply in the urban area
[27] MHA : Ministère de l'Hydraulique et de l'Assainissement
[28] ARSEau : Autorite de regulation du secteur de l'eau
[29] MHA: Annual reports 2019 (Rapport Annuel et Rapport des indicateurs 2019).
[30] In rural Niger, most water supply systems and water points do no have treatment facility (chlorination or other require treatment)

the sector's economic and financial equilibrium.[31] Regulation committee board members and the director general were recently nominated in April 2020 and the installation and recruitment of key members began on July 23rd.

21. **Although important policy reforms have also been advanced for sanitation, implementation remains challenging.** There is recognition of the critical role played by sanitation in human development and gender equality and how poor sanitation undercuts other efforts and investments made to improve human capital in Niger. Still implementation continues to lag behind, and higher political commitment matched by adequate funding support is needed to decisively change this protracted situation. Besides the PROSEHA, the government of Niger has developed a sanitation and hygiene policy document (DPNHA)[32] to reinforce the regulatory framework of sanitation in the country, which is now pending the formal adoption. Community Led Total Sanitation (CLTS) is the preferred intervention approach, in large part due to limited options for other more capital-intensive approaches to respond to the existing gap. Public sanitation infrastructure will need to be prioritized in strategic high-use areas (schools, health centers, marketplaces, etc.) alongside continued work to change social norms and address gender gaps, and in particular, menstrual hygiene. However, CLTS is just the first step in addressing community-level sanitation in Niger: it is important to recognize that high rates of open defecation are primarily driven by lack of access, not by preferences.[33] Therefore, behavior change campaigns aimed at expanding access will need to be complemented by financial support for the poor and vulnerable, as well as the development of local actors such as artisans and small businesses across the entire sanitation service chain to promote sustainability.

Gender

24. **Gender-based inequality is pronounced in Niger with a range of socioeconomic, health, and education factors driving poor Human Development Indicators for women and aggravated by water-related challenges.** Niger has the highest gender level of inequality among the 189 countries rated by the gender inequality index.34 Niger has the world's highest rates of both child marriage and fertility. Only 2.5 percent of Nigerien women over 25 have achieved a secondary education, resulting in one of the lowest literacy rates in the world (as of 2015, 11 percent of women over 15 are literate as compared to 27.3 percent for men).[35] Health indicators are equally dire for women in Niger, with high rates of maternal mortality and a shortage of healthcare services for women.[36] In 2018, only 8.1 percent of women were employed in salaried or waged work, as compared to 11.4 percent of men.[37] Women are also underrepresented in decision-making, with only 15 percent of parliamentarians being women.[38] These gender inequalities drive various forms

[31] The regulatory body will help ensure that all the stakeholders of the sector – (i) the Niger Water Asset Company (*Société de Patrimoine des Eaux du Niger*, SPEN) which manages assets and investment in the sector and (ii) the Water Utility of Niger (*Société d'Exploitation des Eaux du Niger,* SEEN) in charge of the commercial activities – work together seamlessly and that a mechanism exists to address issues as they arise. It will also play a critical role in facilitating the adjustment of tariffs to account for water use under climate shocks (ex. droughts) to help with consumption management for urban centers. In rural areas ARSEau is expected to have the same mandate but with different actors (municipalities and the local private sector)

[32] DPNHA : Document de Politique Nationale d'Hygiène et d'Assainissement

[33] A 2014 report on attitudes towards sanitation (WSP, 2014) found that the vast majority of respondents (82%) did not mention any advantage of open defecation, with no difference between male and female respondents. 73% of the respondents are not satisfied with the available place for defecation. 86% of respondents would stop open defecation if they had access to a latrine, increasing to95% if they had a latrine in their compound. Respondent identified key motivations for the construction of the latrines were: (1) The desire for more privacy (61.4%), (2) Hope for better health at home (57.6%), (3) The reception of external support by an NGO (28.3%), (4) Aspiration for better health for the community (22.5%), and (5) More comfort (20%). For more detail, refer to the Niger WASH Poverty Diagnostic (World Bank, 2018)

[34] UN 2019. The UN Human Development report gender inequality index measures gender inequalities reproductive health, (measured by maternal mortality ratio and adolescent birth rates) empowerment, (measured by proportion of parliamentary seats occupied by females and proportion of adult females and males aged 25 years and older with at least some secondary education); and economic status (measured by labour force participation rate of females and males s aged 15 years and older.) http://data.un.org/DocumentData.aspx?q=Gender+Inequality+Index&id=415http://data.un.org/DocumentData.aspx?q=Gender+Inequality+Index&id=415

[35] CIA, World Fact Book, Literacy (2015)

[36] UNICEF, Issue Brief, Maternal, Child and Newborn Care in Niger (August 2018)

[37] The World Bank, Data Bank, Labor Force Participation Rate (2018)

[38] The World Bank, Data Bank, Proportion of seats held by women in national parliaments (2018)

of Gender Based Violence (GBV) across the country. According to a national study conducted by the Government of Niger in 2015, 53 percent of women interviewed indicated that they had experienced at least one form of violence in their lives, with 33.5 percent reporting that they had experienced some form of GBV over the past 12 months.[39] In Niger WASH access gaps are reinforced by strong social norms that can heightened other areas gender-based inequality particularly in terms of schooling and overall time management. For this reason, improving access to and quality of water also has positive gender implications as it will alleviate some of the time burden placed on women and girls by water collection chores as well as the caring for sick children and family members resulting from water-related diseases. Furthermore, women and vulnerable groups also face higher risks and consequences in the event of global crisis and price shocks.[40] In such context, water variability - rainfall shocks constraining livelihoods and households access - can play the role of threat multiplier- making the inter-seasonal and inter-year smoothing of water availability a critical component for improving gender and inclusion outcomes.

Relationship to CPF

22. **The long-standing collaboration between the World Bank and Niger has led to a coordinated, cross-sectoral, and multi-faceted approach to address water security and its many impacts on the country's socio-economic development.** Since 2001, the Bank has been a prominent partner in the sector through projects and technical assistance that have helped ramp up capacity and knowledge to a level enabling the game-changing ambitious of the proposed project. Through it different projects, the Bank supported water supply sector reform through investment programs and many other regional projects/programs (irrigation-SIIP, water resources management-Niger Basin Authority) totaling $ US 664 million. Looking forward, the project will also be coordinated with the following regional project and activities under preparation: the Community-based Recovery and Stabilization Project for the Sahel (P173830) and the ASAs Improving Water Resources Management in West and Central Sahel (P173152) and Sahel Groundwater Initiative (P175105).

23. **The project's objectives are fully aligned with the Niger Country Partnership Framework (CPF) and the Niger Economic and Social Development Plan (PDES).** The proposed project is fully aligned with the three focus areas of the CPF by: (1) increasing rural productivity and incomes through the development of small-scale irrigation and the associated establishment of watershed management committees, all of which will augment agricultural productivity and food security; (2) improving human capital by increasing access to clean drinking water and sanitation services;[41] and (3) strengthening governance by promoting important sectoral reforms that improve service delivery, expand economic opportunity bolster economic growth, and augment the resilience of the population to fragility and climate change. The project is also aligned with Niger's vision for 2035, as expressed through the Sustainable Development and Inclusive Growth Strategy (SCDDI),[42] as well as with Niger's economic and social development plan 2017 - 2021 (PDES 2017-2021), which intends to "*strengthen the resilience of the economic and social development system.*" More specifically, the project supports pillar 2 (Social development and demographic transition), pillar 3 (accelerating economic growth) and pillar 5

[39] Gouvernement du Niger, Enquête sur l'ampleur et les déterminants des VBG au Niger (2015)

[40] Women play an important role in the production, processing, and commercialization of commodities, whether as individuals within households, heads of households, and/or as owners of small or informal businesses. The disempowerment they experience, however, means they are often invisible in agriculture: women usually do not receive extension services, agriculture and market information, or inputs to increase their productivity. The disempowered status of women in households with both women and men has particularly negative repercussions for agricultural production and productivity See. Wouterse, Fleur. 2016. Empowerment and Agricultural Production Evidence from Rural Households in Niger. IFPRI Discussion Paper 01509 February 2016 International Food and Policy Research Institute, West and Central Africa Office.

[41] The project, by providing clean drinking water and improved sanitation and augmenting the availability of water for agriculture, contributes to improved human capital outcomes, including reduced incidence of waterborne disease and chronic malnutrition, both of which lead to increased early childhood survival and enhanced lifetime labor productivity, as well as heightened food security and improved educational attainment, particularly for girls who are generally charged with fetching water for their households.

[42] SDDCI: Stratégie de Développement Durable et Croissance Inclusive

(Sustainable management of the environment) by increasing water and food security through coordinated and sustainable multi-sectoral investments.

24. **The project also directly contributes to the World Bank's corporate goals of ending extreme poverty and promoting shared prosperity, the World Bank's Africa Climate Business Plan, and the World Bank's COVID-19 response.** In accordance with the Niger Systematic Country Diagnostic (SCD-2017), the project targets rural areas with some of the highest poverty rates in the country. Furthermore, these areas are especially vulnerable to climate change, therefore contributing to the action areas "creating climate-resilient landscapes" and "promoting climate smart agriculture" set out in the World Bank's Africa Climate Business Plan. The project similarly aligns with the World Bank Group's Climate Change Action Plan (2016). Finally, the project reinforces the World Bank's COVID 19 response, which recognizes that the COVID-19 crisis can be leveraged by countries to "Rebuild Better" in a greener, more sustainable and resilient way.[43] The position paper recognizes that landscape and watershed management, ecosystem restoration, sustainable management of forests, regenerative agriculture and food systems can create jobs quickly, and can generate long-term benefits thanks to reduced water scarcity, flood mitigation, lower carbon emissions, and higher agricultural productivity and food security.

25. **And ultimately, the project is also in line with the CPF FCV filter and will contribute to the portfolio showing that it is addressing root causes of FCV.** One of selection criteria of sub-basin is that priority will be given to poor, lagging and/or conflict-prone sub-basins. The project intends to contribute in the reduction of fragility, increase resilience to climate variability, and lay the foundations of socio-economic development in Niger. The identification of sub-basins in the regions of Tillabery and Tahoua participates in selection of the broader Niger fragile and conflict prone areas to address the root causes of the fragility.

C. Development Objective(s)

26. ***The project development objectives are to strengthen the management of water resources, support increased access to water services, and improve resilience of livelihoods to climate variability in select areas of Niger.*** *More specifically, it aims to (i) improve water resources knowledge and management capacity in at least the project area; (ii) mobilize water resources and promote their sustainable use among various sectors, including for drinking water, irrigation, livestock, and fish farming; (iii) restore select watershed landscapes in the project area for more resilient agricultural and rural livelihoods, and restoring ecosystem functions in land and water conservation; (iv) improve household incomes and food security through expanding rainwater harvesting, soil moisture management, small-scale irrigation to improve agricultural productivity, and fish farming where possible; and (v) improve access to drinking water and sanitation services. Sustainable and integrated agro-sylvo-pastoral production systems will be promoted by focusing on vulnerable groups who depend upon, or are likely to depend upon, resources in protected areas as a survival strategy.* The project's *primary beneficiaries will be population in the project target area, with a particular focus on women and youth.*

27. ***Criteria for selecting the project area:*** Government counterparts (the Ministry of Water and Sanitation, the Ministry of Agriculture and Livestock, and the Ministry of Environment and Sustainable Development) shared a longlist of possible investments at nation-wide scale; *While this list can serve as a reference and identify investments with strong synergetic potential, this list far exceeds the expected project financing*. Therefore, clear criteria are needed for

[43] The World Bank Group COVID-19 Crisis Response Approach Paper Crisis Response Approach Paper Saving Lives, Scaling-up Impact and Getting Back on Track (June 2020)

prioritization and selection. The project team has reached an agreement with the counterparts on a two-tier selection process to first identify suitable sub-basins, and then select specific investment activities within each project sub-basin. In addition, the project will ensure that project activities are coordinated with other World Bank projects,[44] as well as with those of other humanitarian and development partners.

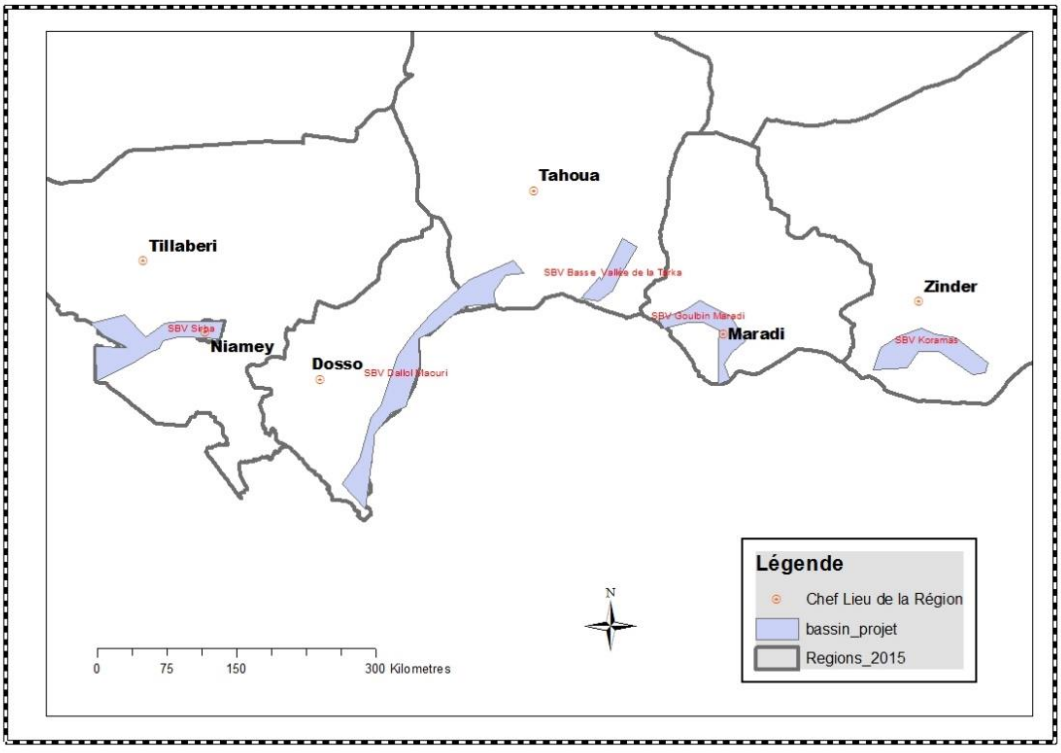
(i) ***Criteria for selecting sub-basin:***

- Consistent with PANGIRE priority sub-basins (6 sub-basins)
- No more than 6 sub-basins
- Priority to be given to poor, lagging and/or conflict-prone sub-basins

(ii) ***Criteria for selecting investments within the selected sub-basins:***

- Impact (number of beneficiaries)
- Community needs
- Potential for synergies across investments and with other World Bank and GON projects across sectors (current and planned)
- Implementation readiness
- Priority to areas with high Social and environmental risks
- Implementation feasibility (if located in conflict prone region)

Map 1: Map of PANGIRE identified priority basins in the proposed areas of the project



[44] Projects that have ongoing or are planning to have activities in these areas include, for example, the Lake Chad Region Recovery and Development Project (Zinder), the Community-Based Stabilization and Recovery Project for the Sahel (planned activities in Tillaberi), the Niger Refugees and Host Communities Support Project (Tillaberi and other regions), the Climate Smart Agriculture Support Project, climate resilience and environment projects, etc..

B. Key Results

Table 3: PDO outcomes and outcomes indicators

PDO outcomes	Outcomes indicators
Strengthen the management of water resources in select areas of Niger	Areas (ha) with enhanced water availability and irrigation
	Number of sub-basins that have operationalized an integrated water and natural resources management plan
Support increased access to water services in select areas of Niger	People provided with access to an improved drinking water source (CRI disaggregated by gender)
	Direct number of beneficiaries disaggregated by gender
	number of households with access to water for agricultural and livestock productive use
Improve the resilience of livelihoods to climate variability in select areas of Niger	Farmers adopting improved agricultural technology (CRI – disaggregated by gender).
	Land area under the Sustainable Landscape Management practices (CRI)

Possible intermediate indicators include:

- ✓ Users forecasting plan and monitoring strategy elaborated for water resources mobilization, irrigation, water supply, and watershed plain restoration;
- ✓ Percentage of monthly and/or annual water resources information database publicly available;
- ✓ Number of legal instruments adopted for institutional setup financing mechanism for water code;
- ✓ Number of drinking water systems rehabilitated/built;
- ✓ Number of household connections established;
- ✓ Number of stand-posts built;
- ✓ Number of drinking water systems managed through PPP arrangement
- ✓ Number of monthly water quality monitoring tests conducted at water points;
- ✓ Number of schools and health centers with at least basic drinking water and sanitation services;
- ✓ Number of cubic meters of water mobilized for all uses;
- ✓ Hectares of irrigation schemes (CRI);
- ✓ Hectares of areas stabilized against erosion;
- ✓ Number of operational inclusive and participatory local community SNRM committees and mechanisms;
- ✓ Number of farmers reached with agricultural assets or services (sex disaggregated);
- ✓ hectares of areas stabilized against erosion;
- ✓ Percentage of representatives and leaders in community-based decision-making and management structures that are females;
- ✓ Percentage of registered grievances that are addressed related to delivery of project benefits.

D. Concept Description

28. **The integrated water platform approach underpinning this project facilitates the development of a series of such projects to improve water security.** The water platform is a systematic process to better coordinate water-related planning, policies and investments across all water-using sectors, potentially including the World Bank Group, government and development partners, providing a more holistic and effective approach to managing water. Consultations supported by the Niger Water Platform technical dialogue (TF0B1557) have enabled the pre-identification of priority sub-basins in 5

regions for this initial project: the Dallol Maouri valley (Dosso), the Goulbi Maradi watershed (Maradi), the low Tarka valley (Tahoua), the valley of the Sirba river (Tillabery) and the Koroma valley (Zinder). These are priority sub-basins for PANGIRE and two out of the five include Ramsar sites. The current project is organized around four components:

- Integrated investments for water security and services
- Expansion of water supply and sanitation services and behavior change
- Project management and capacity strengthening
- Contingency Emergency Response Component (CERC, Standardized)

29. **The project design adopts an integrated approach to sustainably mobilize water resources and manage their multiple uses and related natural resources.** The project activities are geared toward: (1) the protection of livelihoods through sustainable natural resources management institutions;[45] (2) Natural Assisted Regeneration (NAR); and (3) resilient, community-driven infrastructure for the provision of water supply, sanitation, and irrigation services on lands belonging to and owned by communities.

30. **Improving the mangement of climate-driven water variability is central to the project.** The project aims to provide a sustainable approach that can smooth water availability through broadly spread resilience interventions. While the project will focus on small scale water management infrastructure to smooth seasonal and inter-year water availability such as complementary water harvesting infrastructure (ponds, benches on the plateaus, reforestation trenches on the slopes, half moons, stone bunds ets), infiltration weirs (seuils d'infiltration), flood control weirs and river bank protection, it will lay the ground for long term planning and management of water resources. This will complement existing large irrigation infrastrature and enable the sustainability of any future ones.

31. **Across components, project activities are interconnected, complementary and mutually reinforcing**. As Table 2 below illustrates, synergies will be leveraged at national, regional, and local levels for improved socio-economic development and resilience (see annex 2). At the local level, the project's geograpically-adapted approach strives to maximize impact and ensure the sustainability of implemented activities (see Annex 1 - Theory of Change). In addition to the three main ministries[46] that are directly involved, cross-cutting issues such as hygiene, water quality, gender, and pollution will be coordinated with the Ministry of Heath and the Ministry of Women Development and Child Protection.

32. **Reducing gender gaps.** To address the stark gender inequalities present in Niger (e.g. gender barriers to access to water, sanitation services and livelihood opportunities), the project will integrate gender-sensitive interventions into the project's key components that focus on promoting women and girls': (a) access to water and sanitation services, (b) access to knowledge and information on water resources; and (c) increased access to assets, agricultural inputs, climate smart agricultural practices and irrigation); and (d) agency, voice and decision-making power in community organization. Finally, the project will promote GBV prevention, mitigation and response mechanisms. A comprehensive gender analysis, to be prepared during project preparation, will further guide the operationalization of project gender interventions, including the identification and concretization of activities focused on multi-sectoral prevention and response to GBV.

Table 2. A multi-level watershed-based integrated approach

Water issues	Level of intervention	Cross-sectoral Synergies

[45] Sub-basin water agency at sub-basin level, local water committee at commune level and IWRM water users' association at community or village level.
[46] Ministry of Water and Sanitation (MHA), Ministry of Agriculture and livestock (MAG/EL), and the Ministry in charge of Environment and Sustainable Development (MESU/DD).

• Climate resilience • Inter-provincial watershed management • Cross-boundary water management • Coordinated watershed management entire watershed level • Information for decision making (at all levels)	***Province***	• Environment • Agriculture & food security • Value chains (interface of water, agriculture, energy and transportation – particularly in rural areas)
• Climate resilience and reliable water supply • Coordinated watershed management at commune level • Local water and sanitation plans • Infrastructure (here or above and below) dams, flood protection, conveyance canals, irrigation, drainage, pumps.	***Commune***	• CDD and Livelihoods • Women's empowerment • Environments and ecosystems • Agriculture & food security • Transportation • Energy • Value chains related to water and sanitation
• Resilience of water supply and irrigation • Water quality (public infrastructure in water & sanitation) • Water storage	***Community***	• CDD and Livelihoods programs • Women's empowerment • Health and education / human capital • Safety nets & economic opportunities
• Water supply and quality of service • Coordinated watershed management • Farm level water management • Ecosystem services	***Household***	• CDD and livelihoods programs • Safety nets programs • Women's empowerment

Note to Task Teams: The following sections are system generated and can only be edited online in the Portal. ***Please delete this note when finalizing the document.***

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	Yes
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

Note to Task Teams: This summary section is downloaded from the PCN data sheet and is editable. It should match the text provided by E&S specialist. If it is revised after the initial download the task team must manually update the summary in this section. ***Please delete this note when finalizing the document.***

Note: To view the Environmental and Social Risks and Impacts, please refer to the Concept Stage ESRS Document**.**
Please delete this note when finalizing the document.

CONTACT POINT

World Bank

Taibou Adamou Maiga, Aude-Sophie Rodella
Senior Water Supply and Sanitation Specialist

Borrower/Client/Recipient

Ministry of Planning
Saadou Bakoye
Secretary General
bb.saadou@gmail.com

Implementing Agencies

Ministry of water and Sanitation
Chaibou Tankari
Secretary General
chaiboutan@yahoo.fr

Ministry of Environment Urban Health and Sustainable Development
Ali Kokari
Director of Studies and Programming
alikokari@yahoo.fr

Ministry of Agriculture and livestock
Moussa Amadou
Director General of Rural Engineeringg
m.amadou@yahoo.fr

FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: http://www.worldbank.org/projects

APPROVAL

Task Team Leader(s):	Taibou Adamou Maiga, Aude-Sophie Rodella

Approved By

Country Director:	Joelle Beatrice Dehasse	06-Nov-2020

Note to Task Teams: End of system generated content, document is editable from here. ***Please delete this note when finalizing the document.***