# Appraisal Environmental and Social Review Summary

## Appraisal Stage

## **(ESRS Appraisal Stage)**

Date Prepared/Updated: 02/23/2021 | Report No: ESRSA01262

## BASIC INFORMATION

### A. Basic Project Data

| Country | Region | Project ID | Parent Project ID (if any) |
|---|---|---|---|
| Moldova | EUROPE AND CENTRAL ASIA | P173076 | |
| Project Name | Moldova Water Security and Sanitation Project | | |
| Practice Area (Lead) | Financing Instrument | Estimated Appraisal Date | Estimated Board Date |
| Water | Investment Project Financing | 3/8/2021 | 5/17/2021 |
| Borrower(s) | Implementing Agency(ies) | | |
| Ministry of Finance | Office for the Management of Foreign Aid Programs (OMFAP) , Ministry of Agriculture, Regional Development and Environment (MARDE) | | |

Proposed Development Objective

To increase access to safely managed water supply and sanitation services in selected rural areas and small towns and to strengthen national and local institutional capacity for water supply and sanitation delivery.

| Financing (in USD Million) | Amount |
|---|---|
| **Total Project Cost** | **53.30** |

### B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

### C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]

Country and sectoral context

Despite many years of solid economic growth and impressive poverty reduction gains, Moldova remains vulnerable to economic and financial shocks and political instability . Moldova, one of the poorest countries in Europe, is a landlocked country between Romania to the west and Ukraine to the north, east and south. The country is home to

2.7 million people with a Gross National Income (GNI) per capita of US$ 4,590 (current US$ 2019, Atlas method), placing it at the upper end of lower middle-income economies. In the context of overall growth, Moldova has made significant progress in reducing poverty and boosting shared prosperity: with average annual growth of 4.5 percent since 2000, poverty has decreased dramatically and benefitted more citizens. The poverty headcount ratio at US$5.50 a day (PPP) dropped from 90.1 to 13.4 percent between 2000 and 2018 . However, the Moldovan economy moved into recession in 2015 due to weaker external flows, large-scale bank fraud, and a drought. Economic recovery since then has now eroded due to the COVID-19 pandemic, combined with another extensive drought in 2020. The magnitude of the social and economic impacts of the COVID-19 pandemic is large and not yet over.

Moldova's demographic trends exert additional stress on its development, and inequalities in basic services persist. Moldova remains amongst the poorest countries in Europe, while citizens' aspirations are rising in line with living conditions and income levels of middle and higher-income European neighbors. Emigration of the working-age population and an annual population decline of around 1.5 percent add to the country's economic, fiscal, and social fragility, although somewhat mitigated by the reversal due to the COVID-19 pandemic, although this might be short-lived. Based on existing trends, Moldova may lose a fifth of its current population by 2050. Poverty remains a largely rural phenomenon with absolute poverty rates three times as high in rural as compared to urban areas. Moldova is characterized by a largely rural population, with roughly 55 percent of the population residing in rural areas. National poverty estimates, based on a recently revised methodology, show a challenging picture for rural areas, with 34.5 percent of the rural population below the absolute poverty line compared to 11.2 percent in urban areas such as Chisinau and Balti. Outmigration and aging of the rural population especially leaves older, single-headed households in a vulnerable position to sustain their livelihoods. Vulnerabilities are also felt by families with three or more children, which make up more than 40 percent of those living below the national poverty line. Public service delivery in rural areas lags urban areas on all fronts, including education, health, water and sanitation.

Access in water supply and sanitation (WSS) is constrained by large coverage gaps in rural areas, compounded by income status. The gap between urban and rural remains one of the largest in Europe and is one of the key water security issues the country is facing. Based on JMP-data , gains were made in rural water supply access from piped networks from 33 percent in 2000 to 40 percent in 2017, while urban access to piped services remained stable at 85 percent. The rural-urban access to safely managed sanitation is very large and the poorest segment of the rural population has the lowest level of service. Over the past decade access to sewer services has not seen much improvement. Sewer systems in rural areas only serve 3.6 percent of the rural population, while reaching 76.3 percent of urban residents. The poorest quintile of the rural population is twice as likely (60.1 percent) to have an outdoor pit latrine compared to the richest quintile of the rural population (30 percent). The discharge of untreated wastewater is widespread, polluting water sources and increasing the cost of treatment of surface water. The Water Supply, Sanitation and Hygiene (WASH) situation in many public institutions, such as schools and health care facilities, is poor, especially in rural areas. No comprehensive data on WASH in health care facilities is available, but preliminary data from the Ministry of Health, Social protection and Labor (MHSPL) indicates that at least half of rural health care facilities do not have safely managed sanitation or drinking water services and lack adequate hygiene.

Institutional weaknesses underpin many of the infrastructure, service delivery and finance gaps in the WSS sector. Several reforms and legislative documents have been enacted in recent years, focused on harmonization and alignment with the EU's Water Framework Directive. Moldova has embarked on regionalization of services, regulatory reform and a licensing system in the WSS sector, however implementation bottlenecks remain.

Pressing challenges to Moldova's water supply and sanitation sector are the following (i) inequalities in access and inadequate quality of water supply and sanitation in small towns and rural areas, (ii) weak performance of service providers; (iii) poor environmental health and environmental pollution due to lack of sanitation and wastewater treatment; (iv) weak institutions and unresolved reform areas that hinder a programmatic, efficient and inclusive approach in service delivery, (v) limited effectiveness of the economic regulatory framework to drive performance and financial sustainability.

Strategic relevance

The Project will contribute to a more resilient, inclusive, and sustainable recovery in Moldova as outlined in the World Bank Group COVID-19 Response Approach Paper, specifically the second pillar on "Protecting the Poor and Vulnerable", and the fourth pillar, "Strengthening Policies, Institutions and Investments for Resilient, Inclusive, and Sustainable Growth". Inadequate WSS directly impacts on human capital accumulation, cognition, educational outcomes and welfare. Access to improved water, sanitation and hygiene (WASH) services positive impacts hand washing practices that can curb the spread of COVID-19 and reduce the incidence of water-borne and infectious diseases. Improving WSS access supports wide economic benefits with disproportionate and immediate benefits to the poor. Women and children are among those who benefit most from access to improved services, specifically in schools and health centers. Better and more reliable WSS services enable industrial productivity, economic growth and creation of jobs, and can contribute to slowing outmigration, especially in the rural areas where most of the poor live. The Project is closely aligned with the World Bank's twin goals of ending extreme poverty and boosting shared prosperity, and is fully aligned with the FY18-21 Country Partnership Framework (CPF) between the Republic of Moldova and the World Bank and will directly support the forthcoming CPF (FY22-FY27). By improving access to sustainable WSS services with a focus on lagging regions, small towns and rural areas, the project directly contributes to the second pillar of the CPF "improving inclusive access to, efficiency and quality of public services". The project also supports the first pillar of the CPF on economic governance, through strengthened management of public sector assets and activities that improve economic regulation, as well as to the cross-cutting climate change theme by increasing the resilience of WSS services and reducing the vulnerability of rural households to the impacts of droughts.



Project description

The project aims to respond to the critical challenges facing the sector. Given the urgency to deliver tangible benefits for citizens, the Project will finance priority water supply and sanitation investments in rural areas and small towns to expand access and improve service quality, complemented by institutional strengthening measures at the national and local level. The transformational impact of the project will be delivered by creating the foundations for a national programmatic approach focused on inclusive, resilient and sustainable WSS service delivery, and by demonstrating the implementation of this approach in selected sub-project locations, where integrated, inclusive WSS access is pursued and utilities shift to higher performance levels on multiple dimensions. The Project will elaborate and start the implementation of a National WSS Development Plan and investment program, support sector modernization and reform, build capacities for investment planning, management, financing, and contribute to a more effective regulatory framework.

The Project has four components with a proposed envelope of US$ 53.3 million, including US$ 18.2 million IDA credit, US$ 31.8 million IBRD loan, a US$ 1.8 million co-financing grant administered by the World Bank from the Austrian Development Cooperation Agency (ADA), and an estimated US$ 1.5 million counterpart contribution, provided through local government contributions.

Component 1 – Increasing access to safely managed water supply and sanitation services in selected rural areas and small towns (US$ 47.5 million). This component will develop new and rehabilitate existing WSS infrastructure and facilities in rural areas and small towns, expanding access and quality of services for households, businesses and in public social institutions, namely health care centers and schools.

Subcomponent 1.1: Expanding Access and Quality of WSS services (US$ 43.8 million)
This includes: a) water supply investments for the expansion and rehabilitation of water supply infrastructure in two subprojects preliminary identified (i.e. regional water system expansion for Local Public Administrations (LPAs) in Cahul district and in Gagauzia and regional water supply system with drinking water treatment plant in Riscani district); b) wastewater investments for the expansion and rehabilitation of wastewater systems in two subprojects preliminary identified (i.e. expansion of wastewater collection systems and new wastewater treatment plant for Soroca and Comrat towns); and c) pilot for on-site rural sanitation in rural villages (to be selected) to support household on-site sanitation facilities following a demand-based approach.

This sub-component will finance works, goods, consulting services, non-consulting services for the construction and protection measures for water intake facilities, drinking water treatment facilities, reservoirs, pumping stations, transmission mains, water distribution network and household connections, construction and rehabilitation of sewer networks, sewer pumping stations, wastewater treatment plants including sludge treatment and disposal, sewer connections for households, on-site household sanitation facilities (e.g. septic tanks and adequate infiltration systems), IT/SCADA-systems and other required activities. It also finances feasibility, design and other required preparation studies, technical supervision services, capacity building for citizen engagement and social mobilization activities with project beneficiaries, technical assistance and training/workshops to help develop the required tariff submission and sustainable management arrangements through delegation contracts between local governments and regional operators.



Subcomponent 1.2: Improving WASH facilities in public social institutions (US$ 3.7 million)
Subcomponent 1.2 will finance works, goods, consulting services, non-consulting services and training/workshops to realize improvements of WASH facilities in health care facilities (HCFs) and schools. It will construct water supply connections to centralized networks or existing point sources, connections to sewer systems or construction of on-site sanitation facilities and indoor toilet facilities with adequate handwashing and hygiene facilities. It will finance capacity development for school and health center management and LPAs to ensure adequate O&M of the facilities and the delivery of a communication and behavior change campaign on hygiene promotion.

Component 2 - Strengthening institutional capacity at national and local levels for WSS service delivery (US$ 3.8 million). This component supports WSS sector development and modernization by strengthening institutional capacities of national and sub-national entities and WSS operators for management, planning, regulation and reform implementation for service delivery improvements.

Subcomponent 2.1: Building national institutional capacity for WSS (US$ 2.35 million)
This sub-component finances goods, non-consulting services, consulting services and training/workshops for activities that strengthen institutional capacities for planning, financing, economic regulation, performance monitoring, professional development and the revision and development of new policies and normative documents. Under leadership of the Ministry of Agriculture Regional Development and Environment (MARDE) and in collaboration with

other entities, activities under this sub-component include but are not limited to: a) the elaboration of a National WSS Development Plan, investment program and financing strategy and the capacity development of its assigned lead entity; b) technical assistance to selected LPAs and WSS Operators to support the aggregation process into licensed regional operators (on legal, technical, financial) as per the National WSS plan; c) Preparation of amendments and/or new legislation, policies and normative documents and related capacity building; d) the development and roll-out of a national WSS Management Information System (MIS) for WSS operators and support to introduce benchmarking; e) assistance to the national WSS regulator (ANRE), WSS Operators and LPAs to prepare tariff submissions and reviews; f) delivery of a professional development program to increase qualifications of WSS sector staff, retain and attract people, specifically women, to the sector .

Subcomponent 2.2: Improving performance of WSS service providers (US$ 1.45 million)
Sub-component 2.2. will finance works, goods, consulting services, non-consulting services, and training to support the implementation of a prioritized rolling multi-year Performance Improvement Plan (PIP) to lift the operational performance of selected WSS Operators involved under component 1.1. WSS Operators will carry out annual assessments on PIP implementation and KPIs, including publication of results and feedback rounds with customers. Investments and technical assistance activities identified in the PIPs are based on utility diagnostics and include but are not limited to the following: improving technical and commercial operations, improving financial management, human resource management and organization & strategy aspects, including improving asset management systems and inventories, operational efficiency, water metering practices and equipment, strategic planning, water safety and business continuity, and enhancing transparency and responsiveness to customers.
Component 3 - Project Management and Coordination (US$ 2.0 million)

This component will finance operational costs, consulting services, non-consulting services, goods, and training to finance the overall Project management cost, including the core Project Team at the Project Implementation Unit (PIU), implementation support consultants at regional level within MARDE's Regional Development Agencies (RDAs) for civil works supervision and social/environmental standard implementation, and at national level for MARDE as Project Implementing Entity (PIE). It will finance capacity building in areas of procurement, environmental and social standards, specialized short-term implementation support consultants, financial audits, cost for project communication and citizen consultations, and monitoring and evaluation of Project results.

Component 4 - Contingent Emergency Response Component (CERC) (US$ 0 million)
A provisional zero-amount component is included, which will allow for rapid reallocation of credit/loan proceeds from other components during an emergency under streamlined procurement and disbursement procedures. This component allows the Government to request the Bank to re-categorize and reallocate financing from other Project components to cover emergency response and recovery costs. The CERC will be established and managed in accordance with the provisions of the Bank Policy and Bank Directive on Investment Project Financing.

## D. Environmental and Social Overview

D.1. Detailed project location(s) and salient physical characteristics relevant to the E&S assessment [geographic, environmental, social]

The Project activities will take place nationwide and by the appraisal several subprojects for Project financing have been proposed where investments in the water supply and wastewater systems will be carried out, however the

location and scope of investments and other technical design parameters have not yet been concluded. Therefore, the level of design readiness is not sufficient for meaningful environmental and social due diligence preparation.
The subprojects for water supply investments were selected using criteria: i) unfunded projects in MARDE's Action Plan 2020-2024, ii) potential for future expansion and increase of beneficiaries iii) areas with non-compliant water quality of existing groundwater sources, iv) rural areas with high poverty, v) availability on feasibility studies, and vi) high engagement and interest of LPAs. Subprojects for wastewater collection and treatment are selected based on: i) unfunded projects in the Action Plan 2020-2024, ii) towns with populations higher than 15,000 people as per the National WSS Strategy, iii) high level of water supply connection rate (at least 75 percent), iv) high positive environmental impact due to existing pollution of surface water resources, v) conceptual studies available; and vi) high engagement and interest of LPAs. In line with these criteria, under component 1.1, the following four subprojects are selected.

- Riscani Water Supply: new regional water system in Riscani district taking water from the Prut for a cluster of rural villages including Costesti town (expected beneficiaries: 10,400 people)
- Cahul/Vulcanesti Water Supply: expansion of the water supply system in Cahul district (using Prut water) to connect a cluster of rural villages in Cahul district, as well as Vulcanesti town in ATU Gagauzia (expected beneficiaries 19,600 people)
- Soroca Wastewater: expansion of wastewater network and new WWTP in Soroca town; currently discharge directly pollutes the Dniester river (expected beneficiaries: 17,000 people)
- Comrat Wastewater: expansion of wastewater network and new WWTP, where untreated wastewater directly pollutes the Ialpug river, Comrat lake, and downstream Congaz lake (expected beneficiaries: 18,000 people)

The villages for implementation of the on-site rural sanitation pilot (with household-level improvements) have not yet been determined (expected beneficiaries 1,500 people)
Under component 1.2, the location of the new construction and/or rehabilitation of WASH facilities in schools and health care facilities will be nation-wide with locations to be selected during the project implementation; the performance improvements investments under component 2.2 will take place in the service area of the WSS operators under the above mentioned four sub-projects.
Moldova is a small landlocked country of 33,850 km2 and is located in south-eastern Europe, between Ukraine and Romania, with an estimated population of approximately 2.7 million people. Moldova is characterized by a largely rural population, with roughly 55 percent of the population residing in rural areas. It is estimated that 84 percent of the poor are concentrated in rural areas. The surface area is roughly divided in 91% rural and 9% urban. Agricultural land use covers about 75% of Moldova's total land area. Moldova is divided into 32 districts (rayons), 3 municipalities and 2 Autonomous Teritorial Units (ATU) (Gagauzia and Transnistria). Moldova's economy is vulnerable to changes in external demand and climate shocks due to its small size, open economy, and reliance on mostly rainfed agriculture. Moldova has ample total renewable water resources, estimated at 15.6 billion m3 annually, or 4,952 m3/cap/year. Moldova's physical water endowments are currently not a constraint for its development. On average, demands for drinking water, industry and irrigation can reliably be fulfilled, even in drier years and under future development scenarios that expand drinking water and irrigation systems (World Bank Water Security Diagnostic and Future Outlook 2020). However, with progressing climate change, and in years of droughts, scarcity will occur at the end of the growing season in certain catchments and local (shallow) groundwater resources are specifically vulnerable to decline. Therefore, the sustainability of water sources represents the main criteria when considering these for different users. Drinking water services provided through centralized systems are sourced either through surface water (Dniester and Prut Rivers) or through deep groundwater aquifer, although often with highly mineralized water quality. Most individual supplies rely on shallow wells. While larger licensed WSS operators with water treatment facilities produce water generally compliant with the national drinking water standards, compliance of water quality

in wells and rural piped systems is low, with 80% of wells non-compliant with one or more parameters, due to both anthropogenic and geogenic pollution. In 2018, out of a total of 1220 centralized water systems in Moldova, 1,168 were functional, although performance data is not systematically available for these systems. Although recent investments in wastewater treatment plants for major towns have been initiated, many existing plants are out of use or obsolete. Out of 1,168 functional centralized water systems, only 110 have a functional sewer collection system, and 73 have some form of functional treatment plant. Out of 89 million m3 supplied to customers, only 67 million m3 is treated (nearly all in urban areas), although the effectiveness of the treatment is not known.

Currently, protected areas cover 6% of the country's territory, including wetlands, protected forests, floodplains, with a total area of almost 67,000 ha. Based on the tentative list of proposed sub-projects, these are not expected to be located within existing nature and protected areas.

Climate change threatens sustainability of future growth, and disproportionately impacts rural populations as households rely on shallow wells for drinking water and on rainfed agriculture vulnerable to drought. In rural areas, livelihoods depend on agriculture, which employs 70 percent of the bottom 40 percent of the population. Rural areas felt the impact of the 2007, 2015 and 2020 droughts much more than urban. Droughts and floods are expected to occur more frequently and be more severe and most climate models predict a warming effect with longer dry spells. Moldova's climate is moderately continental, characterized by relatively mild winters (January average of -4°C) with little snow, long warm summers (average 20 °C) and low humidity. The current climate shows annual precipitation of 460 mm varying from 370 to 560 mm with a declining gradient towards the south . Climate change is projected to increase mean annual temperatures with approximately 2-3°C by 2050, and an increase of 32 hot days annually. Predictions for mean annual precipitation are uncertain with most models showing no significant or a small decrease (10-15 percent) by 2050. Winters are projected to be drier and summers wetter, which could result in both increased floods and droughts . The country has a limited adaptive capacity due to its dependence on rainfed agriculture and limited irrigation due to the collapse of systems after independence. With increasing future water demand, vulnerability to droughts in specific catchments along the Dniester and Prut rivers increases. Drinking water sources are also vulnerable to climate change, with two thirds sourced from surface water and a third from groundwater resources. National policies are geared towards replacing groundwater with surface water for drinking water use due to geogenic and anthropogenic pollution rendering it unsuitable or too costly to treat.

Inequalities in access and poor quality of water supply in rural areas and small town hinder inclusive development. Household Budget Survey (HBS) (2018) estimates national access to a public piped water supply at 70 percent, with urban access at 92.4 percent and rural access at 52 percent. Rurality is the major determinant of access to a centralized public system, but income levels also play a role with households in the richest quintile 12 percentage points more likely to be connected than households in the poorest quintile. Sewer systems in rural areas only serve 3.6 percent of the rural population, while reaching 76.3 percent of urban residents. Reliance on various types of on-site facilities in rural areas is near universal. HBS (2018) data illustrates that access to flush toilets, either disposing of in a public sewer or in an individual on-site facility, is 93.8 percent for urban and only 48.1 percent for rural areas. This leaves most rural households using outdoor dry pit latrines of poor hygienic status with limited comfort, often lacking nearby handwashing facilities.

Given the known barriers for rural communities and specifically poor and vulnerable households, the Project is directly addressing social inequalities by its geographic focus on rural areas and small towns, and by including measures to ensure that poor and vulnerable will benefit from improved water supply and sanitation services under planned project interventions. The following households are tentatively defined as poor and vulnerable: i) households that benefited from winter heating subsidy support in the past two years, ii) households with three and more children, ii) single person households with age > 60, iv) single parent households with children, iv) households with disabled family member.

D. 2. Borrower's Institutional Capacity

The Ministry of Agriculture, Regional Development and Environment of Moldova (MARDE) is responsible to ensure that the Project is implemented in an efficient manner, consistent with the Project objectives and agreements signed, acting as Project Implementing Entity (PIE). The day-to-day project implementation will be delegated to a central Project Implementation Unit (PIU), which report to MARDE. The PIU will have responsibility for project management and reporting, procurement, financial management and fiduciary compliance, ensuring compliance with the Environmental and Social Standards (ESS) and technical oversight. The PIU team will be staffed with a combination of salaried staff, recruited following the internal regulations of the EPIU, and/or consultants. Based on assessments carried out during the project preparation, the PIU team will include one environmental specialist, one social specialist and one communications and gender specialist, among others. For specific technical input necessary for project implementation the PIU will hire additional short-term consultants.

Project implementation will be supported at the regional level through MARDE's subordinate Regional Development Agencies (RDAs). Based on the capacity assessment, local presence and comparative advantage and experience of RDAs in the implementation of WSS Infrastructure projects, RDAs will take on several project implementation roles, while all fiduciary, procurement and ESS compliance functions will be retained at central level through their delegation to the PIU. RDAs will act as employer for major civil works in the subprojects under component 1.1 and will take on distinct technical, contract administration, and supervision roles. However, MARDE will hire licensed companies to carry out technical supervision for all subprojects in close coordination with the RDAs. RDAs will form Project Implementation Teams, consisting of WSS engineers, financed through the RDA budget, complemented with environmental and social consultants funded by the Project - capacity assessments revealed the relative weakness and inexperience of RDAs in ensuring environmental and social requirements of project implementation are carried out in compliance with the new ESS. RDAs will be supported at their level by one environmental and one social consultant hired under the Project to help build capacity and support the implementation of the ESS under the central PIU's oversight. Even though the PIU and RDAs have significant experience in implementing World Bank and other donors' projects and its management, they have no prior experience with the new ESF and Environmental and Social Standards. Therefore, further capacity-building will be needed to strengthen their capacity to manage environmental and social risks through project specific training on ESF and for environmentally and socially responsive sub-project planning and implementation. The Borrower's performance on E&S requirements implementation will be assessed by the Bank on a regular basis, informed by project reports and site visits during implementation support missions.

The CERC component 4 – if activated– will be implemented by the Ministry of Internal Affairs (MIA) through its General Inspectorate for Emergency Services (GIES), given its mandate to lead emergency response and recovery efforts. The MIA and GIES will be supported in all the procurement, financial management, ESS compliance and M&E functions related to the CERC by the Project's PIU.

## II. SUMMARY OF ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

### A. Environmental and Social Risk Classification (ESRC) — Substantial

**Environmental Risk Rating** — Substantial

The Project's environmental risks are anticipated to be Substantial. Although the long-term impacts of the Project are likely to be positive, its activities carry several risks that are mainly generated under Component 1 which develops

WSS infrastructure and services in small towns and rural areas and improves WASH facilities in schools and health care facilities. Component 1 includes small-to medium-scale civil works such as the construction and rehabilitation of WSS facilities in rural communities and small/medium towns (e.g. Soroca has about 25,000 people, considered a medium town; the water supply extension will cover clusters of villages up to 20,000 population), local institutions and public spaces. However, no large scale and/or irreversible adverse impact, direct or indirect, is expected to occur from activities under the proposed project. Civil works for water supply and wastewater systems and household-level improvements will likely generate adverse site-specific risks and impacts, such as: interruption of water supply service; disposal of material excavated during construction/rehabilitation activities; occupational health and safety of workers during construction and operational phases; increased levels of dust, noise and vibration; potential finds of hazardous materials such as asbestos-cement pipes; community health and safety risks from, in particular, the risk of pollution of soil, surface and groundwater sources during construction; and access to roads and homes of vulnerable populations. Potential negative risks associated with the replacement of the old water pipes containing asbestos material will be analyzed at the respective sites and will adopt the best options (e.g. to leave old ACM pipes in the ground and install new adjacent pipes; to extract, transport and dispose of the old ACM pipes following specific protection measures and conditions, etc.).

For managing environmental and social impacts and risks, MARDE has prepared an Environmental and Social Management Framework and an Environmental and Social Commitment Plan. Both these documents will be disclosed and publicly consulted by Project's appraisal.

All site specific environmental and social impacts will be detailed in the subprojects specific environmental assessment documents (such as Environmental and Social Impact Assessment and Environmental and Social Management Plan) to be prepared by MARDE, on behalf of the related local public authorities, once locations and technologies have been selected and as per the requirements in the Environmental and Social Commitment Plan. The ESMF sets out the E&S assessment requirements of the Project's activities and provides guidance on the preparation of site-specific Environmental and Social Management Plans and/or ESMP checklists, as well as the Contractors' Codes of Conduct. The ESMF refers to activities that can be addressed with good engineering and construction practices, as well as by preparing and implementing adequate mitigation measures and applying adequate work-related health and safety practices (OHS aspects) during construction both for the construction workers and the related communities. The ESMF will serve as a screening tool for all sub-projects. The ESMF shall screen out high-risk project activities as ineligible for financing under this Project. The requirement for the development of the site-specific ESMPs - along with adequate staffing of the PIU as well as RDAs with respect to environmental and social management - is reflected in the Environmental and Social Commitment Plan prepared for the Project and integrated into the Loan Agreement. Given that MARDE, the PIU, and the majority of participating municipalities have weak capacity to manage the project in accordance to ESS, environmental risk is rated as substantial.

As the project will also include Contingent Emergency Response Component, the ESMF provides for environmental and social guidelines for such emergency cases.

**Social Risk Rating** Substantial

The Project's social risks are expected to be Substantial. Main social impacts are: (i) potential involuntary resettlement due to land acquisitions for rehabilitation and new constructions for civil works; (ii) impact of tariffs and connection costs on poor and vulnerable groups (iii) addressing gender gaps within water sector institutions, including the needs of women and girls with regard to impacts of reliable WASH service; (iv) outreach and feedback on reforms including tariff changes (v) potential for complaints without a robust grievance system; (vii) labour and worker safety including Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH). Civil works under component 1 in particular may cause economic displacement, and/or temporary construction induced impacts on private assets and businesses,

and disruptions to residents and local businesses,which will need to be thoroughly screened for potential negative social impacts and monitored during construction. Adverse social and economic impact caused by land acquisition and restrictions on land use may be unavoidable and there might be damages to utility service lines, access restrictions to residences and parking lots during reconstructions. Other adverse impacts may arise from labor influx brought into areas by contractors, occupational health and safety issues, adverse impacts on impacts on community health and a risk of SEA/SH.

In rural areas, most people are engaged in agriculture and rural industries for their livelihood and considered poor. Inequalities in access and poor quality of water supply in rural areas and small towns hinder inclusive development. While the development of water supply and wastewater systems intends to benefit all people living in the proposed service areas, exclusion risks may occur resulting from connection barriers for poor vulnerability of households, in terms of their ability to pay for connection costs, future tariffs and communication barriers to participate meaningfully in project related consultations. The proposed project activities will be screened per the procedure laid out in the ESMF, RPF and LMP and no high risk activities will be financed. The SEP prepared by the Borrower lays out a detailed plan for outreach to direct and indirect stakeholders and specific outreach to vulnerable groups. While the PIU has experience working with World Bank and other IFI-funded projects, they have no experience in addressing new ESF standards such as labor standards and working conditions, stakeholder engagement and information disclosure, and community health and safety.

## B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered

### B.1. General Assessment



#### ESS1 Assessment and Management of Environmental and Social Risks and Impacts

***Overview of the relevance of the Standard for the Project:***

The standard is relevant and, in line with the provisions of this standard, the Borrower has prepared an Environmental and Social Management Framework (ESMF) document that will be disclosed and consulted upon the Project's appraisal. While a number of locations and subprojects have been identified by the Borrower, the level of design development and readiness was not sufficient for a meaningful site specific due diligence.. As such, a generic template for an Environmental and Social Management Plan has been included in the ESMF that can be further adapted to the requirements for each specific site and can be used as a starting point for the site specific due diligence. The ESMF screening determines whether a site specific ESIA and/or ESMP, or ESMP checklist will be required, and provide guidance for thepreparation of these documents.

The construction works envisaged under Component 1 will cause a variety of small/medium scale, localized impacts typical to such construction activities, such as: generation of noise and dust; solid waste generation; temporary blockage of access and diversion of local traffic due to mobilization of heavy machinery and localized excavation works within public rights-of-way; potential temporary drainage impacts related to excavation and temporary stockpiling of excavated material; minor works to resurface pavement following excavation and installation of water infrastructure; temporary localized shut-down of domestic water supply services while works are taking place along water supply lines or at the plants; etc. With regards to wastewater treatment, one of the main environmental impacts is the management of produced sludge. The project will take a deliberate approach as regards the management of sludge with a focus on cost-effective and innovative technology selection (e.g. selection of reed-bed technologies) with recycling and use of wastes (e.g. in agriculture) as preferred options for sustainable development, rather than incineration or landfilling.

However, the Project is expected to have a positive impact on improving the environmental, social, health and safety aspects of Moldova's water supply and sanitation operational service delivery performances, including by: (a) improving efficiency of water supply management, modernizing treatment process and addressing critical water pressure issues throughout the system, which will result in reduced water losses, higher energy efficiency, and more reliable potable water supply to consumers; b) improving sewer networks and expansions, as well as developing appropriate wastewater treatment solutions (including sludge treatment and disposal) for small towns, while ensuring minimum environmental impact; (c) improving the O&M and use of WASH facilities within social institutions; (d) improving the use and O&M of on-site sanitation facilities with higher service levels (compared to unhygienic pit latrines) the and (e) improving performance of WSS operators to provide services in line with regulations, including efficiency improvements, non-revenue water reduction, and water safety and resilience plans. The ESMF provides a screening procedure that screens out activities that would, in their scope, size, capacity or due to the specifics of the location of such plants, correspond to a high risk activity. No high risk activities would be financed under this Project. The remainder of the proposed activities will, following the ESMF screening, be classified into one of the three categories of environmental and social risk: substantial, moderate or low. Based on these categories the ESMF stipulates the scope and level of the site specific due diligence reports to be prepared during implementation. The ESMF also includes requirements of ESS3, ESS4, ESS5, ESS6, ESS8 and ESS10 and integrates these into the screening process and includes the requirements of the specific standards as integrated elements of the site specific ESIA or ESMPs to be prepared under implementation. For activities that deal with technical assistance or strategic planning, all of the Terms of Reference and outputs that may have direct or indirect environmental and social implications will be prepared in line with WB's ESF and ESSs.

Each ESIA and ESMP will also be developed in accordance with the World Bank's Environmental Health and Safety General Guidelines with specific consideration of the Guidelines on Water and Sanitation and all construction works will follow the World Bank guidelines to minimize the risk of COVID-19 transmission during execution of civil works. Social risks include impacts due to potential land acquisition; equity issues; economic displacement; access issues, impacts from outside workers brought into areas by contractors, impacts on community health and potential GBV issues; issues related to connection barriers for vulnerable and disadvantaged group living in certain areas potentially selected for project interventions.. The ESMF prepared by the Borrower before appraisal has assessed those impacts and provided guidance on appropriate mitigation measures to be taken. In addition, MARDE has prepared the Labor Management Procedure (LMP) (annexed to ESMF), Resettlement Policy Framework (RPF) and Stakeholder Engagement Plan (SEP) prior to appraisal to identify broader social risks and impacts, address adverse social and economic impact caused by land acquisition and/or restrictions on land use and outline labor management procedures. Other social and environmental risks will be addressed by site specific Environmental and Social Management Plans (ESMPs) based on the principles provided in the ESMF or site specific Abbreviated Resettlement Action Plans.

Environmental and Social due diligence for the CERC component will be carried when the component is activated during project implementation, with both the ESMF and RPF amended accordingly.

### ESS10 Stakeholder Engagement and Information Disclosure

A stakeholder analysis and Stakeholder Engagement Plan (SEP) has been prepared before appraisal for the project by MARDE, to map out the various stakeholders and develop a strategy on how to engage with them and how to share project information (including but not limited to relevant environmental and social issues and risks), mitigate potential social conflicts and/or misperception about project impacts and benefits, and to solicit feedback on the

project. Water supply, sanitation require systematic and intensive engagement of stakeholders to implement them effectively and successfully. During SEP preparation MARDE had conducted a series of meetings with a wide range of stakeholders including water service operators (both larger operators at the rayon level as well as local operators at the commune level); business and trade organizations; civil society organizations; other public sector institutions, and the general public. Some of the stakeholders identified include: MARDE and the Regional Development Agencies, Regional Development Councils, Local Public Administrations and Local Government Councils, ANRE (which is the regulatory entity for WSS in Moldova), Apele Moldovei (Moldova Water Agency), informal water supply consumer group, as well as local and national level NGOs representing service providers and local interests (such as AMAC, the national water utility association and CALM, the national association of Local governments, Technical University of Moldova (UTM)), the as well as NGOs concerned with water and environmental interests (e.g. Ecocontact) and/or specific interest of women, youth, the elderly, and the disabled. The Stakeholder Engagement Plan (SEP) will be implemented by the Borrower with the participation of potentially affected parties to ensure the adequacy of the project design, and inform stakeholders about the Project and its potential environmental and social risks and impacts including how the Project would address potential exclusion risks. The Project will ensure that stakeholder engagements are conducted on the basis of timely, relevant, understandable and accessible information. In addition, due to the COVID-19 pandemic, additional steps may need to be taken to ensure that any outreach or consultation includes social distancing measures, appropriate technologies (e.g. video-conferencing) and other tools (email questionnaires, phone calls) to engage stakeholders.
An accessible grievance mechanism for the Project shall be established, publicized, maintained and operated in a transparent manner that is culturally appropriate and readily accessible to all Project-affected parties, at no cost and without retribution, including concerns and grievances filed anonymously, in a manner consistent with ESS10. The grievance mechanism shall also receive, register and address concerns and grievances related to the sexual exploitation and abuse, sexual harassment in a safe and confidential manner, including through the referral of survivors to gender-based violence service providers. Such mechanism will be developed for communities to lodge complaints and receive answers to any questions they have about the project through using a combination of local mechanism with physical grievance boxes, as well as an on-line digital platform, including site-specific sub-portals for targeted grievance posting.



### B.2. Specific Risks and Impacts

**A brief description of the potential environmental and social risks and impacts relevant to the Project.**

**ESS2 Labor and Working Conditions**

The standard is relevant. The Project work force will include direct workers, primary suppliers and contracted workers. The Project would source labor locally and construction materials both locally, as well as internationally. The Borrower has prepared an ESMF which includes Labor Management Procedures (LMP) and sections on Environment Health and Safety (EHS), including, inter alia, emergency preparedness and response measures, setting out grievance arrangements for Project workers, and incorporating labor requirements into the ESHS specifications of the procurement documents. In addition, the LMP for the Project outlines the expected number and type of workers, key gaps between ESS2 and national legislation and regulations that need to be addressed at the project level, as well as monitoring and supervision arrangements. Key aspects of the LMP pertaining to contracted workers, such as Occupational Health and Safety (OHS), adequate working conditions, terms of contract, adequate living conditions in

the unlikely event of work camps, labor influx and a functioning grievance and redress mechanism for workers, will be included in Contractors' ESMP.
The COVID-19 pandemic imposes extra challengers for workers. To this end, following an assessment of needs, the project will include measures to: socially distance workers; provide them with PPE (including masks and hand sanitizers); develop a procedure for protection of workers in relation to infection control precautions and include these in the labor management procedures and in contracts; provide immediate and ongoing training on the procedures to all categories of workers, and post signage in all public spaces mandating hand hygiene and PPE; ensure adequate OHS protections in accordance with General EHSGs and industry specific EHSGs and follow evolving international best practice in relation to protection from COVID-19, including, as appropriate, codes of conduct and WHO protocols.
The Government has established institutional mechanisms for the enforcement of laws and regulations on child labor. No risk of child and forced labor is expected as Moldova national labor legislation prevents child labor for civil works.
There is a low risk of labor influx as most civil works are expected to be conducted by local workers. SEA/SH risks are also estimated to be 'Low' based on the scale of activities, existing analysis of the country context on SEA/SH, and of referral mechanisms and support services.

### ESS3 Resource Efficiency and Pollution Prevention and Management

The standard is relevant and will apply to all Project activities. Resource efficinency is considered while preparing Terms of Reference for technical assistance and strategic or planning documents, such as the national Water Supply and Sanitation Plan, to be developed under component 2.1. In addition to investments to expand access, the Project will focus on the improvement of WSS operators efficiency, with a number of institutional and investment measures. These will include increased efficiency of resource use (such as energy) and more professional management of operations including better asset management.The Project will also focus on the better financial management of the WSS operators which would help lead the utilities on a more sustainable path and further help them better manage the WSS systems. Under component 2.2, the Project will finance a series of interventions to help reduce both physical losses (lead detection, rehabilitation, metering and pressure management) as well as commercial losses (increasing billing and connection, reducing unauthorized consumpotion) to decrease the overall amount of non revenue water.
The issue of potential replacement of asbestos-cement pipes will be managed as prescribed in the ESMF, which corresponds to best available practices and in line with the World Bank Good Practice Note on Asbestos and the provisions of ESS3 and ESS4.
The site-specifc ESMPs will include thorough actions regarding pollution prevention and management aspects associated with all proposed construction works and direct impacts on air, soil, water and noise pollution, as well as solid waste minimization and management. The management of sludge generated from wastewater treatment systems will focus on cost-effective and innovative technology selection (e.g. selection of reed-bed technologies) that will ensure environmentally sound environmental results, with recycling and use of wastes (e.g. in agriculture) as preferred options for sustainable development, rather than incineration or landfilling.
The project will also include the expanding of the sewerage systems in some localities and therefore, helping the people to shift from on-site, non-sanitary facilities (pit latrines) to sewer connections which will eliminate the point pollution of soil and underground waters.
Energy and resource efficiency will be promoted through incorporation of green procurement clauses in civil works contracts.

### ESS4 Community Health and Safety

The standard is relevant. One of the core objectives of the Project is to improve the local authorities' ability to guarantee safe potable water and improve reliability of water service delivery to users across the country, by investing in improvements to water and sanitation systems, treatment facilities, on-site sanitation facilities and improving WASH conditions in social and public institutions, combined with community outreach and campaigns for hygiene behavior change, and strengthening of capacity of service providerss. Effective implementation of Project activities should therefore benefit community health in this respect. The water supply investments under the project will replace the respective communities' reliance on groundwater (through shallow and deep wells) with surface water with adequate potability treatment. Compliance monitoring will take place regularly as per the existing legislation of Moldova through the Public Health Institute.

In terms of potential community health and safety risks, road safety risks associated with traffic diversions for civil works activities will need to be assessed at a site specific level, and site specific Traffic Management Plans should be developed as necessary as part of site specific ESMPs. The Project will ensure the avoidance of any form of SEA/SH by relying on the WHO Code of Ethics and Professional conduct for all workers in the project. This will be particularly important for any potential labor influx even if the labor is coming from other communities within Moldova. The Project's risk communication and community engagement activities coupled with broader stakeholder engagement activities will ensure that clear information is provided to the public. The PIU will oversee the implementation of the GRM with the aim of addressing concerns or grievances early.

### ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

The standard is relevant. The Project aims to accelerate access to and sustainability of water supply and sanitation in small towns and rural areas. This includes using a framework approach, aligned with government procedures and (to be developed) National WSS Investment Plan. The Project will undertake an analysis of alternatives including a preliminary assessment of social and environmental assessments as inputs, financial and economic assessment, as well as the detailed assessment of selected alternative. A project level Resettlement Policy Framework (RPF) has been prepared before appraisal in order to provide procedures and guidance to minimize social risks associated with the detailed designs of potential planned project interventions. When technical designs and feasibility studies provide sufficient details and site-specific information of the investments for Component 1 during implementation, site specific Resettlement Action Plans (RAPs) will be prepared based on the RPF by the Borrower. The Project's ESMF and RPF describe the process for screening land and resettlement-related impacts and actions steps to be taken in the event that such impacts are identified and site specific RAPs are required.

### ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

The standard is relevant. No civil works activities under the Project are expected to have significant impacts on natural habitats or biodiversity, given their limited scale and location. Nonetheless, some aspects of this standard may be relevant, potentially for the intended location of the drinking water treatment plant for Riscani subproject along the Prut river and its protection zones and for the locations – to be determined - of the wastewater treatment plants.

If any of the proposed subprojects are located within the river protection zones or protected areas, a biodiversity management plan will be prepared to address any adverse impacts and adequate protection measures will be included in the site-specific ESMPs. If the Project's activities result in any proposed restrictions to existing land or natural resource uses which could cause livelihood impacts, or which would restrict local communities' access to provisioning ecosystem services, these effects will be duly assessed and appropriate mitigation and management measures developed through the subprojects preparation process.

**ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities**

This standard is not currently relevant, indigenous peoples defined by this standard are not considered to be present in Moldova.

**ESS8 Cultural Heritage**

This standard is not currently relevant. There is not expected to be any impact on any known cultural heritage. Nonetheless, the Project's ESMF and subsequent site-specific ESMPs for all activities which may involve any excavation of earth will include appropriate "chance find" procedures.

**ESS9 Financial Intermediaries**

This standard is not currently relevant. There is no FI involved in this project.



## C. Legal Operational Policies that Apply

| | |
|---|---|
| **OP 7.50 Projects on International Waterways** | Yes |
| **OP 7.60 Projects in Disputed Areas** | No |

**B.3. Reliance on Borrower's policy, legal and institutional framework, relevant to the Project risks and impacts**

| | |
|---|---|
| **Is this project being prepared for use of Borrower Framework?** | No |

**Areas where "Use of Borrower Framework" is being considered:**

While the Moldavian national and local E&S legislative framework may apply for environmental licensing or permitting requirements for some of the physical works activities, the Project does not intend to rely on these processes for purposes of environmental and social due diligence or risk management. The Project will ensure that all applicable national and local laws and regulations are followed; in addition, wherever gaps exist between national and local requirements and the ESF, the Project will develop activity-specific management and mitigation plans in accordance with the ESF, and include appropriate implementation arrangements and capacity to ensure effective management of identified risks and impacts as per ESF standards. To the extent feasible, the Project will look to

involve and strengthen the MARDE's existing Environmental Management Unit (PIU) within the implementation arrangements, so that they will benefit from capacity strengthening with further positive spillover effects for the Project's investments .

## IV. CONTACT POINTS

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**Borrower/Client/Recipient**

Borrower: Ministry of Finance

**Implementing Agency(ies)**

Implementing Agency: Office for the Management of Foreign Aid Programs (OMFAP)

Implementing Agency: Ministry of Agriculture, Regional Development and Environment (MARDE)



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## VI. APPROVAL

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|---|---|
| Task Team Leader(s): | Susanna Smets, Amelia Midgley |
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