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WATER SECTOR ASSESSMENT OF MOLDOVA

Swiss Intervention Strategy under the new Cooperation Strategy Moldova 2014 – 2017

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Project Team

Lucas Beck
Hydrosolutions ltd.
Technoparkstrasse 1
CH-8005 Zurich, Switzerland
Telephone: +41 44 632 73 28
beck@hydrosolutions.ch and www.hydrosolutions.ch



and

Leonid Meleca
Water and Wastewater Consultant Engineer
Chisinau, Moldova
Phone: + 373 79 516 516
melecaleonid@gmail.com

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Abbreviations

ADA	Austrian Development Agency
EBRD	European Bank for Reconstruction and Development
EU	European Union
KFAED	Kuwait Fund For Arab Economic Development
SCO-M	Swiss Cooperation Office Representation of the Embassy of Switzerland in Moldova
SDC	Swiss Agency for Development and Cooperation
MCC	Millennium Challenge Corporation
MoEn	Ministry of Environment
MoH	Ministry of Health
MoRDC	Ministry of Reconstruction and Development
NEF	National Environmental Fund
NRDF	National Regional Development Fund
RDA	Regional Development Agency
WB	World Bank
WIU	Water Investment Unit
WSS	Water Supply and Sanitation

1. Executive summary

SDC has been present in Moldova for more than ten years now and is in the process of assessing their present and future strategy for the period from 2014 to 2017.

The past activities of SDC in Moldova have made them a strong and reliable partner in the water domain. At the local scale this includes the construction of water supply and sanitation infrastructure conjunctively with the creation of Water Users Associations for the operation and management of implemented facilities and systems. At the national level, SDC has been actively contributing to the development of policies and is also heading the secretariat of the Water Sector Coordination Council through the cooperation office of SDC in Chisinau (SCO-M).

Moldova features a series of challenges today with regard to the use and management of water resources at different levels:

At the *individual level* it is the lack of poor developed infrastructure for water supply and sanitation. Especially rural areas and small towns feature access rates of not more than 43% for water supply and for sanitation 21% only.

At the *local and regional level*, challenges are more related to the lack of finances and coherent coordination of development plans and to implement infrastructure.

At the *national level*, challenges are associated with weak sector regulation and very low absorption capacity of the administration to manage and implement projects funded by national funds and by the international community.

At all levels, there is a lack of communication between the different national agencies and ministries that makes coordination and implementation of development plans and new water related infrastructure very difficult. In addition, access to water related information for planning, design and management at all scales is very limited despite previous efforts towards the creation of a national water information system in Moldova.

To address the most important challenges and to boost the absorption capacity and scale up current activities, there are three lines of priority for the future suggested in this report. These priorities include:

- 1) Increasing the capacity of the ministries to be able to regulate the water sector and absorb larger investments that are coming from the international donor community.
- 2) The creation and facilitation of a sound base of water related information to stakeholders working in the water sector. This includes as well the establishment of a water cadaster.
- 3) Scaling up of current water and sanitation infrastructure activities to accelerate the coverage and pace of implementation. Model outreach of ApaSan's activities.

The suggested priorities in this report for the future strategy of SDC describe a set of complementary and coherent parts. To what extent SDC will engage in the respective fields, is a choice depending as well on the possibilities and means available for the water sector. It is foreseen, however, that SDC's financial efforts in Moldova will gradually double during the period from 2014 to 2017 what will widen the possibilities to diversify the portfolio of SDC in Moldova.

The main engagement from the perspective of SDC will be the support to ministries and the administration of the Republic of Moldova to increase their capability to handle more projects. While these activities do not necessarily involve a big financial effort it will require a devoted personal engagement of the present staff of SDC.

The largest involvement in terms of finances will probably continue to be the support of establishing Water Supply and Sanitation infrastructure on a local level as continuation and scaling up of previous activities in this domain.

2. Background and rationale

The Swiss Agency for Development Cooperation (SDC) and the Swiss Cooperation Office Representation of the Embassy of Switzerland in Moldova (SCO-M) initiated this report with the goal to conduct an assessment of the water sector of Moldova and to explore options for Swiss support in view with the next Swiss Cooperation Strategy for Moldova.

SDC has been present in Moldova for more than ten years and will work in 2013 on the development of a new Cooperation Strategy for Moldova for the period 2014 – 2017.

Past actions of SDC in the water sector in Moldova were characterized by humanitarian interventions (as part of Humanitarian Aid) that started in 2001 with the rehabilitation/construction of small water supply systems and on-site sanitation for the rural population. The infrastructure development activities had been gradually extended to the capacity building of local operators, institutional strengthening of the MoEn and policy dialogue in water supply, sanitation and health. These activities made the Swiss Cooperation Office a strong, reliable and competent player for governmental institutions as well as for private and international donors. SDC's approach is recognized, accepted and highly appreciated by sector stakeholders. New technology and management solutions developed and promoted by the SDC projects have been institutionalized and incorporated in the updated draft WSS sector strategy as part of the solution for rural areas.

Today, SDC plays a key role in the policy-dialogue in the water domain as a lead donor in the sector and co-chairs with the MoEN the Sector Coordination Council of Water, Environment and Sanitation. The goal of SDC in Moldova is to strengthen their position within the water sector of Moldova to be able to efficiently assist the administration and people of Moldova in their efforts towards a more developed country and their goal to have a closer link to the EU.

Today, SDC follows two lines of strategy in the water sector:

a) through the construction of water infrastructure, giving a high importance to the inclusion of poor and marginalized population and promoting equitable access to affordable safe drinking water and sanitation, development of new models and transfer of knowledge/experience to make it available to other partners. (Today mainly through the ApaSan project, and a contribution to the rehabilitation of Water Supply in Nisporeni)

b) Strategic support to the Government authorities concerned to stimulate policy dialogue and harmonize National legislation with EU standards. It includes the Protocol Water and Health, the development of secondary legislation to implement the new water law, and heading the secretariat of the water sector coordination council.

Based on these two lines of activity, this report should provide a base for discussion leading to a further diversification of the portfolio including aspects of health, human rights, and gender.

As described in the Terms of Reference for this assessment, the main objectives are to

- a) Assist SCO-M and SDC in making an informed decision about the need and relevance of enhancing Swiss support in water, sanitation and hygiene; and
- b) Identify priority fields of action and recommend feasible entry points for Swiss interventions in new sub domains.

The present report is structured as follows: In the first part (chapter 3) we provide an overview on the general context including main needs, identified main priorities and reform challenges of the Government; existing programs and partners and potential of cooperation, main risks and opportunities. The second part (chapter 4) offers an assessment of main priority areas, intervention levels and options for SDC. In the last part (chapter 5) we provide a comparison of the main options with recommendations.

3. Context

3.1. Geography

The Republic of Moldova is located at the eastern part of Europe between Romania and Ukraine. It is a small country with a surface area of 33'846 km². The population is estimated at approx. 3.6 Mio people in 2012¹ with a decreasing trend due to a high migration of people out of the country, mainly due to economic reasons.

The average annual precipitation in Moldova during 2002-2011 is estimated at 550 mm¹ what makes it a moderately dry country and highly dependent on external water resources provided by the Prut and the Dniester rivers. If Moldova could rely on their internally produced water resources only, it would be a very water scarce country with water availability of less than 500 m³/capita per year². Uneven spatial distribution and low access to the water resources is the main challenge today, affecting the capacity of the country to advance economically.

Moldova features two climatological zones: 1) The semi-arid and warm zone covering the south of the country (45%) with an average annual precipitation that varies from 370 mm in the extreme south to 450 mm in the southern part of the Dniester valley. 2) The moderately warm zone of forested steppe, covering the northern and central parts of the country (55%). The average annual precipitation varies from 420 mm in the central part to 550 mm in the north. Precipitation peaks in both climatological regions are concentrated between May and October with the peak in June or July.

The Republic of Moldova is prone to different kinds of natural hazards, including climate related disasters, such as drought, floods, severe weather and landslides. On average, northern Moldova experiences a drought once every 10 years, central Moldova once every five to six years, and southern Moldova once every three to four years. Heavy rains result in frequent floods (an average of 1.2 per year, 1992-2005), to which 40% of the settled areas in the country are exposed³.

From a hydrological perspective, Moldova can be divided into two main river basins: The Dniester ('Nistru' in Romanian) basin covering about 57% of the country with an average annual discharge of 10 km³. The Danube-Prut basin covers about 35% of the country through the Prut River, a tributary to the Danube. The average annual flow of the Prut River is estimated at 2.9 km³. In addition to the two main river basins, there are the southern basins made of several small rivers across the border to Ukraine covering about 8% of the country.

3.2. Main needs with regard to water resources

Moldova features a series of challenges with regard to the use and management of water resources at different levels:

¹ Source: National Bureau of Statistics of the Republic of Moldova

² Source: FAO, Aquastat database

³ Source: UNDP Moldova Disaster and Climate Risk Reduction Project, Project Document

- At the individual household level it is the lack of- or poor developed infrastructure for water supply and sanitation. Especially rural areas show access rates to water supply of 43% and for sanitation 21% only⁴. Affordability especially for rural people is also an issue. The lack of access to water and sanitation has a severe effect on human health. It exacerbates poverty and undermines economic and social development. (see more information about access to water in Annex 6)
- At the local and regional level, key challenge is the poor inter-municipal cooperation, incoherent coordination of development plans, and the lack of finances to implement infrastructure. There are some individual communities, however, with elaborated projects and the capacity to improve and create new water related infrastructure. Especially Water Users Associations created by the SDC ApaSan Project feature increased capacity to pursue their own projects.
- At the national level, challenges are associated with weak sector regulation and very low absorption capacity of the administration to manage and implement projects funded by national funds and by the international community. This attributes mainly to the MoEn that has no clear strategic financial and investment planning. Moreover there is a lack of inter-ministerial communication that makes coordination, policy making and implementation of development plans and new water related infrastructure very difficult.

The following tables list some of the most important needs and gaps with regard to water resources use and management considering a) water and sanitation status, b) infrastructure, c) institutional challenges, and d) planning and information tools.

a) Water and sanitation status (access, health and human rights)

The status on water and sanitation refers to the Resolution 64/292 of the United Nations General Assembly from 28 July 2010 that explicitly recognized the human right to water and sanitation and acknowledged that clean drinking water and sanitation are essential to the realization of all human rights⁵.

Topic	Issues
Access to water	Access to water especially in the rural areas is still insufficiently low. Access includes as well affordability and implies the ability to receive daily at least 20 liters of water per person from "improved" sources located within 1 km from a consumer's residence with an affordable price. Improved water sources include household connections, public standpipes, boreholes, protected dug wells, and protected springs. Especially in the rural areas of Moldova, many people collect water of dubious quality from unprotected shallow wells or surface water sources. Access rate to safe water in the rural areas of Moldova is estimated to 43% only.

⁴ Republic of Moldova's Water Supply & Sanitation Strategy (Revised Version 2012) – 2nd Draft October 2012, Technical Assistance for the Implementation of Sector Policy Support Programme in the Water Sector

⁵ http://www.un.org/waterforlifedecade/human_right_to_water.shtml

Access to sanitation	Toilets and sewage systems are often seen as unnecessary or unaffordable. Access to sanitation in the rural parts of Moldova is estimated at 21% only. The construction of wetlands for wastewater treatment in some parts of the country is basically a successful concept but faces especially challenges in a) a lack of legal instruments to motivate users to connect to the sewage system, b) underutilization (or oversizing) for the real number of users and loads.
Water and human health	<p>The lack of access to water and sanitation has a severe effect on human health. Some 2 million people in Moldova, or half the country's population, use polluted water from in their daily lives. In 2003, 82% of the wells with drinking water did not meet sanitary standards. This percentage rose to 84.8% in 2008. In these circumstances, the morbidity associated with polluted water has increased. Some 80 percent of the diseases associated with a bad environment are caused by excessive water pollution and only 20 percent by other environmental factors. Polluted water is responsible for shortening the life expectancy of every rural resident by four to five years.⁶</p> <p>Low access to drinking water and sanitation exacerbates poverty and undermines economic and social development, due to the costs of disease, the unequal burden on women and children and the high costs of accessing water (in terms of time and money) that reduce people's ability to secure other essential goods.</p>
Poor ground-water quality (natural)	Ground water is an important source of drinking water in the Republic of Moldova. Water quality in most confined aquifers in Moldova (except some small part in the east of Moldova and along Dniester river) is affected by high concentrations of fluorine ⁷ , high content of sodium and ammonium, boron as observed for Gagauzia Autonomous Region and strontium as observed for Orhei. Hydrogen disulfide is in the ground water in almost the entire country.
Poor ground-water quality (anthropo-genic influence)	<p>The human factor plays an increasingly significant role in polluting water in aquifers, through infiltration of polluted water and through abandoned boreholes. Man-made pollution results in an increasing number of polluted water withdrawal sources that threaten centralized water supply systems in several towns⁷.</p> <p>The other problem is a widespread microbiological pollution through untreated municipal wastewater and insufficient sanitation. Moreover, chemical pollution from industries or from collective farms is a common problem affecting mainly the phreatic water layer.</p>

b) State of water infrastructure and institutional challenges

Topic	Issues
Decay of Old Water Infrastructure	Lacking operation and efficient maintenance of water monitoring, supply and absence of sanitation infrastructure leads to unproductive water losses and low quality of services delivered to the population of Moldova. The average share of non-revenue water out of total volume of water produced for 41 municipal water companies (Apa-Canal) in Moldova constituted 52% in 2010, showing worsening of situation as compared to 47% in 2008 ⁸ .
Weak design of national water supply	Most of national water supply systems are designed by the state owned design institutes (managed under Apele Moldovei and MoRDC), which apply old-fashioned norms and methods that are relicts from soviet times. Such outdated design norms

⁶ UNDP The Second Millennium Development Goals Report, Republic of Moldova

⁷ UNDP National Human Development Report, 2009/2010

⁸ Moldova Apa-Canal Association database. www.amac.md

	impose overestimated consumptions parameters and other technical requirements (e.g. high fire-flow demands), which contribute significantly to oversizing of piped systems, especially in rural areas.
Underutilization of new water supply systems	New water supply systems are based on calculations that take into account more users than eventually experienced. Large migrations of people from the local centers to the capital of Moldova or outside the country result in under-utilized systems that are difficult to sustain because of a lack of paying users. Apa Canal, the service provider in Orhei for example tries to connect neighboring villages to their current system to increase the number of users.
Institutional incapability	Institutional incapability leads to poor maintenance and operation of infrastructure. Especially the high number of Apa-Canals is very inefficient. Efforts by the government to dissolve these institutions into better organized bodies were not successful so far.
Low absorption capacity	The current government has a very low capacity to absorb investments by foreign donors. Especially the Ministry of Environment (including Apele Moldovei Agency), which is the responsible governmental body of Moldova with regard to water resources management and development is incapable to manage large and a high number of projects.

c) Planning and information tools

Topic	Issues
Lack of adequate hydrological information	The lack of adequate hydrological information incapacitates agencies to forecast water availability and poses increasing risk to society over the long-run as it becomes more vulnerable to hazards, including flooding, mudflows, earthquakes, etc.. The significant investment needs for information management that have accumulated over time are immense.
Lack of structured water related data	Different ministries have strong interests in the collection of data that is related to management of water resources in Moldova. The Ministry of Health for instance is responsible for assessing health risks related to the use of water and relevant information about it. Today, there is no information system of the State which can provide data on environmental factors and the health status of the population and which would allow stakeholders to access information on infectious and non-infectious diseases (e.g. a register).
Water Sector Reforms	While the reforms target sensible changes in line with the integrated water resources management requirements, the exact implementation roadmap is not known. From the donor perspective, this presents significant uncertainty with regard to a future phasing of water-related projects. The creation of a better water future in the region heavily depends on joint efforts and synergies between the government of Moldova and donors.
Transboundary Water Resources Management	Water related challenges <i>on an international level</i> are not adequately addressed and the government of Moldova is insufficiently prepared to react to activities of <i>upstream countries</i> that influence the flows and quality of water coming to Moldova. Moreover, the absence of a clear water use strategy within the country complicates negotiations with the neighboring countries and the effective and equitable allocation of water for domestic use, energy and agriculture.

3.3. Existing programs and actors

There are various development partners that have been providing certain support to the ministries in policy dialogue and institutional development, as well as financing of WSS infrastructure. Notwithstanding a considerable effort from the Official Development Assistance (ODA), the allocations from the State budget remain to be very low, while in

many instances the foreign aid is not used properly. More coordinated and coherent action from both donor community and Moldovan authorities will be needed in future.

The most important projects and programs are the following, for further information please consult Annex 5 and 7:

- **SDC** supports Moldova through four major projects including a) infrastructure development through the ApaSan Project which will be ending in 2015 (continuation is very likely), b) The Protocol on Water and Health Project which ended in 2010 (continuous support is provided), c) through a contribution to ADA for the rehabilitation of the Water Supply System in the Rayon of Nisporeni, and d) Development of secondary legislation to implement the new water law project, which assists the Moldovan Ministry of Environment (MoEn) in developing four regulations
- **The European Union** engages in the water sector through a) the European Union High Level Policy Advice Mission to the Republic of Moldova, b) the Water Sector Policy Support Programme (WSPSP), c) a study on improving the environmental quality of the Black Sea through better waste water treatment and climate change adaptation of the water sector in Moldova (ended in 2012), and d) the Moldova Regional Development and Social Protection Project which ended in September 2012⁹.
- **The GiZ** works together with the Ministry of Regional Development and Construction on the development and update of Regional Development Plans for three country regions – North, Center and South. The main objective is the improvement of provision of municipal services.
- **Millennium Challenge Corporation** (MCC) is a US initiative with the goal to support Moldova in their transition to high value agriculture including the rehabilitation of the irrigation systems. So far, MCC provided tools and software for better data management and geographical data acquisition, which could be a base for further development of the database in Moldova.
- **The World Bank** engages in the National Water Supply and Sanitation Project, which includes renovation of WSS systems in 6 towns and 9 villages and is phasing out in 2013, and with contributions to the Moldova Social Investment Fund with a large variety of small water related initiatives across the country (phasing out in 2013 as well).
- **KFAED** extended a loan for the improvement of water supply systems in six regions, to be implemented by Apele Moldovei Agency.
- **The contribution of the EBRD** targets a reform process in Moldova by financing the modernization of municipal infrastructure. Programmes are the Moldova Water

⁹ EC financed compartments. Co-financing activities from the other donors/Government are under implementation

Utilities Development Programme, Feasibility Study for the WSS systems in Chisinau, and the development of PPP for the improvement of water supply in the northern region of Moldova.

- **The Austrian Development Agency** (ADA) concentrates on water and sanitation in rural areas in the southern and western parts of Moldova. They support the ApaSan project of SDC, the rehabilitation of the WSS-system in the town of Cantemir, and the Investment- and Action Plan for the Implementation of the Moldovan National Water Strategy as well as the rehabilitation of the water supply system in the Rayon of Nisporeni.

The main governmental actors in Moldova in the water sector are¹⁰

- **The Ministry of Environment** (MoEn) which is the lead ministry in the water sector. In essence, the MoEn is responsible for the development of policies related to water resources development, planning and monitoring. In addition to these tasks, the MoEn governs also implementation units including a) the Agency Apele Moldovei which is a drinking water supply and irrigation service provider as well as consisting of two design institutes. b) Project Implementation/Management Units (PIU/PMU) that implement number of donor financed WSS projects.
- According to several donors, the absorption capacity of the MoEn is very weak, mainly due to a poor governance of the ministry lacking proper division and delegation of tasks and competencies.
- **The Ministry of Regional Development and Construction** (MoRDC) which is responsible for policy, planning and monitoring on various aspects of regional development and construction sector. The MoRDC is more efficiently organized with clear delegation of responsibilities and strong involvement of Regional Development Agencies, and features a much higher potential absorption capacity than the MoEn. GiZ for instance chose the MoRDC for the implementation of their own projects.
- **The Ministry of Health** (MoH) is responsible for policy, planning and monitoring on various aspects of the health sector, including drinking water quality. It is the main counterpart of the MoEn for the implementation of the Protocol on Water and Health.

3.4. Moldova's development strategy

The basis of Moldova's development policy is expressed in both National Development Strategy 2008-2011 and Strategy "Moldova 2020" aiming at strengthening Moldova's alignment with EU acquis and standards. International cooperation is laid out in the

¹⁰ We did not mention the Ministry of Agriculture as they can not really be considered as decision makers in the water sector. They mostly represent irrigation consumers, rather than provide any services or making policies. All such activities stay with Apele Moldovei Agency under the MoEn as described in the following.

Partnership Principles Implementation Plan (PPIP), which was signed in March 2010 between the Government, the World Bank and other relevant donors (European Union, United Nations, as well as many bilateral donors).

Moldova is a focus country for the EU Fast-Track Initiative (FTI) of Division of Labour (DoL) which was led by Austria who acted as Lead Facilitator for the FTI, with Sweden, Romania, Lithuania, UK and the Czech Republic as co-facilitators, before handing over the lead to Sweden. The goal is to strengthen Moldova's alignment with EU standard.

The EU is developing an increasingly close relationship with Moldova, going beyond co-operation, to gradual economic integration and a deepening of political co-operation. Moldova is a partner country within the European Neighbourhood Policy (ENP). A joint EU-Moldova ENP Action Plan lays out the strategic objectives based on commitments to shared values and effective implementation of political, economic and institutional reforms.

The EU-Moldova ENP Action Plan is based on the Partnership & Cooperation Agreement (PCA) and encourages and supports Moldova's objective of further integration into European economic and social structures.

The EU and the Republic of Moldova are currently negotiating an Association Agreement to succeed the PCA. This Association Agreement will significantly deepen Moldova's political association and economic integration with the EU. The Agreement is seen as a reform agenda for Moldova, based around a comprehensive programme of regulatory approximation. Negotiations on the Association Agreement, as the successor agreement to the Partnership & Cooperation Agreement (PCA), were launched in Chisinau in 2010 and in February 2012 the negotiations on a Deep and Comprehensive Free Trade Area (DCFTA) as a core element of the Association Agreement were launched.

The Strategy of Water Supply and Sewage in Communities of the Republic of Moldova (2007) as well as the Water Law are two main documents prior to the Draft WSS Strategy in 2012, which is currently under consultation process.

The major lines of the existing WSS development programs can be summarized as follows:

- The superordinate goal remains the improvement of wealth and health, protection of the population through the implementation and modernization of WSS infrastructure.
- Today, the administration of the Republic of Moldova aims at decentralizing public water supply and sewage services. A new draft National Decentralization Strategy aiming at consolidation of the capacities of the local public administration authorities and at improvement of the management and the quality of public services provided to the citizens, is currently under the consultation process. The decentralized WSS services together with a

professionalization of public WSS services based on more market oriented principles will have a considerable impact on WSS sector development.

- More emphasis in the existing programs is also given to more efficient and cost-effective systems. This includes the development and modernization of regional infrastructure and the promotion of private public partnerships.
- Most of the current WSS development programs also aim at increasing the capacity of the WSS Sector to absorb financial and technical assistance through a more strategic planning approach.

For further details on the development programs in the WSS Sector we refer to Annex 8.

3.5. Risks and opportunities to existing programs and actors

SDC has proven to be a reliable and devoted partner for the Moldovan government but also for other partners and stakeholders in the water domain in Moldova. The importance of SDC in Moldova today offers a lot of opportunities to strengthen the position of SDC. Several statements during the interviews for the elaboration of this report showed, that some donors (e.g. the World Bank) intend to considerably reduce their activities and financial involvements in the water sector in Moldova.

This might open the door for SDC to broaden and diversify their activities, but at the same time puts also a larger burden and more responsibility on the presence of SDC.

The new strategy of SDC for the period from 2014 to 2017 includes, but is not limited to the following opportunities and risks:

Opportunities are:

- SDC gained a lot of knowledge and experience through past and present activities in the WSS domain. This experience makes SDC to an acknowledged center of competence in the WSS sector for many stakeholders and donors including the Moldovan administration. Solution models developed and promoted by the SDC have been institutionalized and incorporated in the updated WSS sector strategy. The current experience and position of SDC opens the opportunity to diversify the portfolio in many directions.
- The fact that SDC engages more and more in the policy dialogue and contributes to strategic decision making at the national level opens a broad range of possibilities targeting governance and sustainable development at the national level.
- The Moldovan authorities are very much committed to develop their own country. Despite the fact that reforms at a political (ministerial) level are rather tedious and slow, there are however many committed people within the administration who provide a good entry point for institutional improvements.
- Even though some institutions within the Moldovan administration lack the capacity to properly plan and implement projects, there are present individual competencies that provide a good base to scaling up of efforts to WSS development. The major

challenge will be to identify the capacity and to help reorganizing the governance structure to achieve highest possible efficiency.

- The current trend in Moldova to decentralize services and agencies offer possibilities for restructuring and reforming of the water sector at the local, but also at the national level.

Risks are:

- There are several ministries involved in decision-making, planning, and implementation of projects in the WSS domain. This leads to overlapping of activities and duplication of initiatives. Such overlapping and duplication can lead to an unhealthy competition between the ministries and agencies if proper inter-ministerial communication is absent.
- Insufficient information and information management at all levels makes planning, implementation, and operation of new projects and WSS infrastructure very difficult. Without proper information system that connects the different administrative units vertically and horizontally sustainable development and governance will be very difficult. This includes also the current practice of some ministries and institutions that are unwilling to release their existing datasets for a broader use.
- Most of the staff at ministerial level is underpaid which leads to a high fluctuation of personnel and low motivation. Capacity building efforts by development agencies could be unsustainable in the sense that they are very welcome for ministerial staff to find new working positions in the private economy.
- The high migration rate out of the country is challenging for many years now and includes especially well educated people that migrate for economic reasons.

4. Main priority areas and options for SDC cooperation strategy 2014 to 2017

The many water-related challenges in Moldova call in the first instance for increasing the capacity of the ministries to be able to absorb larger investments that are coming in future from the international donor community. The priority areas, which are identified in the following, are described quite open. It will be very important to discuss and refine the various intervention targets as otherwise the different objectives will be too ambitious.

Main priority of all future interventions should target to:

- 1) Institutional strengthening and increase of the absorption capacity of the Moldovan government.
- 2) Creation and facilitation of a sound base of water related information to stakeholders working in the water sector.
- 3) Scaling up of current activities to accelerate the coverage and pace of implementation. Model outreach of ApaSan's activities.

In the following paragraphs we describe all main priority areas more in detail.

4.1. Interventions targeting the institutional setup

The main counterpart with regard to water supply and sanitation activities of SDC is the Ministry of Environment. The MoEn features today an estimated absorption capacity of not more than 20 Mio EUR annually¹¹. It is estimated, that the MoEn will be able to double their capacity within the next decade what is still not sufficient for the required pace of investment. Institutional interventions should therefore target to increase the capacity of the MoEn conjunctively with the other ministries to plan, implement, and manage water resources projects.

Desired outcome: Increased capacity of the MoEn conjunctively with the other ministries to plan, implement, and manage water resources projects

Key features of the desired outcome include but are not limited to:

Key feature	Considerations on drivers and restrainers of change (remarks)
1. Improving inter-ministerial communication	
Improve communication between the different ministries to build up synergies and to avoid overlapping of activities.	<ul style="list-style-type: none">• It is urgently needed to build up synergies between the different ministries and to avoid overlapping of activities.• One possibility could be to strengthen and extend current activities and efforts of SDC within the Water Sector Coordination Council (WSCC)• SDC is in a very good position to connect other ministries to the WSCC through their contacts to other donors with good links to the administration.• WSCC might be covering too many stakeholders and it possibly makes sense to create a new Inter-Ministerial Working Group (as e.g. created and supported by SDC in Tajikistan), which can be done either at high or departmental level.

¹¹ Source: TA-WSPSP

Key feature	Considerations on drivers and restrainers of change (remarks)
(especially MoRDC, and MoH)	<ul style="list-style-type: none"> Facilitation of inter-ministerial cooperation is seen as a complementary part to the EUWI National Policy Dialog. However, it is expected to envisage closer cooperation at all levels of WSS sector administration and as mentioned above, it can stimulate direct cooperation between different ministries' departments. Extension to other ministries needs to be planned carefully as this might also could lead to inter-ministerial competition, which is not necessarily an asset. SDC may formalize the relationship with MoRDC through signing of a Memorandum of Understanding The existing overlaps in activities of MoEn and MoRDC can be discussed, coordinated and a more clear division of responsibilities can be settled There is a lot of potential between MoEn and MoH (Health) in terms of water quality monitoring, and policy development with regard to drinking water supply and sanitation, including implementation and monitoring of the Protocol on Water and Health
2. Increase planning and management capacity of the MoEn: Adopt TA-WSPSP	
Increase planning and management capacity of the MoEn by adopting TA-WSPSP, which is phasing out at the end of 2014.	<ul style="list-style-type: none"> Would be a good entry point for SDC to continue and extend efforts of TA-WSPSP as lead donor at the moment. Many of the WSPSP-TA activities will be covered by activities proposed in the other sections (e.g. WIU, database etc.) So, it will be necessary to review all WSPSP-TA activities in more detail and see where SDC can contribute. The current competencies and position to effectively contribute to decision-making process of the MoEn is rather limited and needs to be extended. SDC who currently leads the secretariat of the Water Sector Coordination Council is in a strong position to substantially change the characteristics of TA-WSPSP Currently TA-WSPSP is mostly substituting capacity of the MoEn, while an extended SDC programme can focus on strengthening the Ministry's (especially Water Management Department) capacity and extension of cooperation with MoRDC Extension of the WSPSP-TA will contribute to further development of relationship with EU delegation in Moldova, which is expected to continue disbursements under the WSPS programme until 2016.
3. Increase planning and management capacity of the MoEn: Support to the Water Investment Unit (WIU) of the MoEn as entry point to the reform of public administration.	
Temporary support to the Water Investment Unit of the MoEn to create and build up capacity	<ul style="list-style-type: none"> The central institution of the MoEn (particularly Water Management Department) is understaffed in terms of number of staff but also in terms of expertise. Can only be considered as temporary solution and contribution to the MoEn to build up capacity in short term. Creation and good function of the WIU will contribute to implementation of (draft) WSS Strategy (see Section 4.2.2 of the Draft WSS Strategy, 2012). Would be a potentially reliable contact for donors and investors. Will Coordinate with other Ministries and Agencies the yearly prioritization and selection of WSS investment, as well as monitor WSS infrastructure investment progress and report to the government and other stakeholders (e.g. contributing donors) achievement Many of the projects administered by the MoEn are funded by the National Environmental Fund (NEF), while MoRDC uses National Regional Development Fund (NRDF). SDC with strong cooperation and advice from the WIU could channel a contribution through either NEF or NRDF, which would – depending on the conditions – additionally strengthen the position of WIU within the MoEn. A recent assessment of transparency of the National Environmental Fund has identified a number of deficiencies in operation of the Fund and therefore there is an overall concern in relation with transparency of decision making in the Fund¹².

¹² Assessment of transparency and economic efficiency of the Environmental Funds of Moldova, Expert Grup, 2011

Key feature	Considerations on drivers and restrainers of change (remarks)
	<ul style="list-style-type: none"> From this perspective, it is advisable to follow experience of GIZ and channel the funds through the NRDF, imposing selection criteria, strong conditions for procurement procedures and supervision and mandatory coordination of investments with SDC and WIU. This can be a good opportunity to create a good working connection between 2 ministries – MoEn will continue TA-WSPSP work in policy making, while MoRDC will implement the projects supplied by the MoEn WIU

4.2. Improving planning tools and mechanisms through the establishment of a sound water information system.

There have been previous efforts towards the creation of a national water information system in Moldova with little tangible output. The latest initiative stems from the Millennium Challenge Account of Moldova who provided Software and some training to staff of the MoEn. The here proposed efforts towards improved information management do not intend to duplicate existing efforts. The objective is to consolidate, organize, and modernize previous efforts and create one single efficient and sound water info system.

Modern Information Systems are important tools for decision-makers so as to a) manage resources in an integrated way, b) plan their allocation more effectively while taking into account sustainability perspectives c) for assessing tradeoffs between alternative uses and users throughout the basin, and d) as an inevitable base to plan new infrastructure projects, create master plans and assessments building a base for future development.

Desired outcome: Improved information management for water resources planning and management through consolidation of existing water information systems.

Key features of the desired outcome include but are not limited to:

Key feature	Considerations on drivers and restrainers of change (remarks)
1. Improve water related data base for informed decision making	
Establishment of a Geographic Information Systems (GIS) with associated databases, e.g. for water cadasters (see below), hazards and risk mapping, infrastructure assessments, etc., including possibility to extension/connection to the other relevant stakeholders, e.g. MoH, MoRDC, Apele Moldovei etc.	<ul style="list-style-type: none"> The establishment of such a system is a temporary add on to build up capacity and to provide a base for proper planning and management of water resources. Needs a proper coordination with E-Government http://www.egov.md and the National Geospatial Data Fund (see also www.geoportal.md) There are different efforts to build up water related databases (e.g. TA-WSPSP http://watermis.gov.md , MCA GIS maps, Environmental Geoportal http://89.32.239.200, etc.), which are stand-alone limited editions with rather weak possibility to connection and access to the other databases. Creation of a common database through connection of all existing databases will contribute to sustainability of all recent stand-alone efforts. Needs a Memorandum of Understanding with other donors and Government authorities on data sharing and creation of a common data system Ministries might be reluctant to release data (as e.g. the case for groundwater related data not released for public use by the MoEn) Risk of improper use if not implemented correctly

Key feature	Considerations on drivers and restrainers of change (remarks)
2. Creation of State Water Cadaster Information System (SWCIS)	
Consolidate and maintain all water resources and water system related information in an official repository.	<ul style="list-style-type: none"> Initiate the construction of databases for each of stakeholder institutions, as well as provide a unified format for data sharing and information exchange according to the agreed upon technical solutions. The SWCIS facilitates data/information sharing between stakeholder organizations on a regular basis. Connection of regional centers to the system Integration of the established Management Information System for WSS Project Investment Planning and Programming, including for the new WIU under MoEn
3. Build up capacity for planning, implementation and evaluation	
Support the development of prototypes for projects and plans (e.g. prototype plan for socio-economic development and guidelines/manuals for master planning).	<ul style="list-style-type: none"> Support activities in planning of GIZ (contribution). Development of a regional socio-economic master plan (see model GiZ) Support activities to create Master plans on a regional or local level (or even national). This includes the support and continuation of present activities that are pursued by ApaSan (e.g. Ialoveni rayon master plan to be completed in 2013 and 5 more rayon that are started soon.) There is a risk of a potential overlapping with GIZ activities. GIZ intends to include WSS services in the context of regional development strategies, covering whole country. Therefore a proper coordination of activities between donors (SDC and GIZ) and ministries (MoEn and MoRDC) is required Creation of WIU (see above) and promotion of strategic planning principles and best practices in implementation and monitoring through it.

4.3. Infrastructure planning and implementation (continue and extend current activities of ApaSan)

ApaSan is a successful project that started in 2001 as a humanitarian intervention. SDC holds a strong ownership to ApaSan, which is run under SKAT and has substantially consolidated previous efforts in Moldova in the WSS domain.

While it will be important to work on the capacity and policies at the institutional level, it is indispensable to continuously involve in the creation of water related infrastructure and to further develop technology, concepts and methodologies.

One important objective of future activities in the construction of water and sanitation infrastructure should target scaling up of activities and outreach to new places and geographical areas.

Desired outcome: Scaling up and increasing the coverage of infrastructure for Water and Sanitation.

Key features of the desired outcome include but are not limited to:

Key feature	Considerations on drivers and restrainers of change (remarks)
1. Implement new WSS infrastructure and prototypes	
Continue building on expertise and partnerships established by SDC in the former phases through	<ul style="list-style-type: none"> Decentralized Water Supply - Scaling up of the decentralized water supply service delivery model and working on mobilization and empowerment of the public /private sector and civil society Ecosan Sanitation Facilities and Constructed Wetlands - Piloting,

Key feature	Considerations on drivers and restrainers of change (remarks)
continued activities of ApaSan.	<p>demonstrating and promoting innovative sanitation systems (wastewater treatment, institutional / domestic sanitation facilities)</p> <ul style="list-style-type: none"> Capacity Building and Institutionalization – strengthening of the WSS sector by developing the capacities of local government, support service providers, and civil society organizations
2. Increase geographical coverage for implementation projects and possibilities for co-financing	
Scaling up of infrastructure implementation by a geographical outreach of activities to the North, South, and potentially to Gagauzia and Transnistria.	<ul style="list-style-type: none"> Use signaling effect of new infrastructure built in a community that could serve as regional showcase and be contagious to other neighboring communities. In order to increase the sustainability of new rural WSS systems, covering of villages around municipalities/towns with efficient and sustainable WSS operators, which can extend their operation to the rural systems, can be a good opportunity. The EBRD MWUDP beneficiary WSS operators from 6 regions (Orhei, Soroca, Floresti in the North and Hincesti, Leova and Ceadir-Lunga in the South), as well as the World Bank NWSSP beneficiary towns (Balti in the North, Ungheni in the Center and Cahul, Stefan-Voda, Causeni – in the South) may be considered as companies with improved capacities and potential for future extension of WSS services to rural localities. Possible co-financing of the EBRD MWUDP in Hincesti – construction of new wellfield for the town of Hincesti and several villages¹³ this might be a great opportunity for SDC to contribute around 1 Mio € by simple direct co-financing. The whole project is ready for implementation and consultants/PIU are in place. Extension to Gagauzia and/or Transnistria could be an asset for the current activities and also extend the influence of SDC. The coverage of piped systems in South of Moldova is higher than country average (49%, as compared to 43% average, excluding Chisinau¹⁴), while the whole region features a very bad groundwater quality. Extension to the Roma villages (specifically in the North) is a very sensitive endeavor as some of the Roma villages are already far better off than others and considered to be “positively discriminated” As mentioned in the point 1.4.3 above, the projects can be implemented by the NRDF of the MoRDC and monitored by WIU of the MoEn
3. Establish models and manuals for scaling up of activities	
Extend efforts to establish models and manuals for consolidation and scaling up of activities	<ul style="list-style-type: none"> Model and manuals in development to outreach to other funds and donors and institutions. Promotion of decentralized small-size systems operated by WUAs as sustainable solution for isolated rural areas. Strengthen legal position of constructed WUA's by SDC. Improve capacity of local Apa Canals to consolidate WUAs.

¹³ The new water source was initially included in KFAED project. However, due to certain problems in project implementation, the town of Hincesti remained without investments. Currently EBRD project finances full reconstruction of town's and villages' distribution networks, while the works for the new water source are not covered by the Project and the funds haven't been identified yet. All design documentation is ready for implementation.

¹⁴ Source: TA-WSPSP supporting documents to the draft WSS Strategy, 2012

4.4. Health, human rights and gender

The future strategy of SCO-M might adhere to several topics of overriding importance. This includes a) more focused water related actions targeting health aspects, b) the aspect of human right for affordable water for all, and c) gender aspects related to all activities of SCO-M and SDC.

While all of these three aspects are of high importance and to be included as good as possible in the future strategy it is not foreseen to create specific larger activities with regard to the above mentioned three topics of health, human rights, and gender. However, there are several possibilities and entry points to take these aspects into account.

- Raising awareness and accounting through inclusion of these aspects in all programs when tendering or performing the programs. During the implementation of the programs, specific workshops or discussion groups could be built to sensitize people. For the aspect of gender one could also motivate implementing partners or partner institutions, to specifically promote and support suitable women and men to be more represented in key positions.
- Baseline assessment of all aspects at the beginning to have comparable numbers during evaluation and implementation of the programs for targeted actions.
- Adherence and inclusion of specific guidelines and tools. Such as the protocol of water and health, WHO-guidelines, collaboration with respective UN offices.
- Accountability through transparent communication and implementation of programs.
- Organization of specific workshops (or an annual conference) organized (or tendered) by SDC to address HRTWS topics.
- Sensitization for the topic through PR and advocacy measures (e.g. elaboration of a documentary video, hiring of an expert/journalist team familiar with water and societal/political issues).
- Consultation mission of a human rights organization to establish a profile of the current situation within Moldova.

4.5. Impact on poor and vulnerable and cost-effectiveness considerations

The following table summarizes some considerations on the impact on the poor and vulnerable population through the suggested main priority areas. It also shows some aspects related to cost-effectiveness of the suggested priority areas.

Impact on poor and vulnerable	Cost-effectiveness considerations
Priority Area 1: Interventions targeting the institutional setup	
<ul style="list-style-type: none"> • Policy development can be designed specifically to target poor and vulnerable populations. • WIU can identify and promote financing for the most vulnerable and distant regions of Moldova • Institutional development and the top-down approach can foster outreach to the grass root level. 	Interventions targeting governance and the institutional setup are usually very low cost but quite work intensive. This might require more involvement of qualified staff.
Priority Area 2: Improving Planning tools and mechanisms	
<ul style="list-style-type: none"> • Informed decision-making process enables decision makers to specifically focus on poor and vulnerable areas and to identify priorities of action. • Proper development of a data base increases information about marginalized groups and allows targeted intervention • Database can provide data on water quality from the available sources and contribute to identification of the most problematic regions 	<p>The establishment of a good water information system or water cadaster could involve a lot of costs especially with regard to software development, and hardware deployment.</p> <p>Investments in improved decision-making, however, are usually very cost-effective as they allow targeted investments.</p>
Priority Area 3: Infrastructure planning and implementation	
<ul style="list-style-type: none"> • Infrastructure deployment on a local level shows the most direct impact on poor and vulnerable. • Implementation of water infrastructure projects will considerably save time for fetching of water and will positively influence the hygiene of living conditions and overall public health • Implementation of wastewater infrastructure projects will have a positive impact on sanitary conditions of the localities 	Experiences have shown, that improvements in water and sanitation have an important impact on health and socio-economic conditions of targeted populations.

4.6. Availability of Swiss and local expertise

The implementation of all projects will require input from various actors and partners who contribute to the design, implementation, operation, and monitoring to turn the proposed priority areas into tangible outputs. The following table provides an overview on the most important aspects with regard to Swiss expertise as well as required local expertise including consultants.

For a more detailed description please view Annex 8.

Swiss Expertise	Local/Consultants Expertise
Priority Area 1: Interventions targeting the institutional setup	
<ul style="list-style-type: none"> Coordination and monitoring by SDC. Facilitation of inter-ministerial communication through either WSCC or Inter-Ministerial Working Group. Procurement of local experts is required. Local consultants to support SDC's activities necessary. 	<ul style="list-style-type: none"> Some additional staff necessary within MoEn and MoRDC Hiring of a group of local and international consultants necessary. Based on ToR for TA and scope of work of WIU.
Priority Area 2: Improving Planning tools and mechanisms	
<ul style="list-style-type: none"> General coordination and monitoring by SDC is required. External Swiss Consultants will be required for conceptual design of water information system and water cadaster. Swiss expertise (through ApaSan or external) needed for support in the design of master plans. 	<ul style="list-style-type: none"> Establishment of databases and water information system/cadaster through local software company. Participation of WIU under MoEn and RDA under MoRDC necessary for strategic planning and master plan development.
Priority Area 3: Infrastructure planning and implementation	
<ul style="list-style-type: none"> Coordination and monitoring by SDC Project implemented by SKAT Hiring of international consultants to produce manuals (possibly extend ApaSan ToR to this activity) 	<ul style="list-style-type: none"> SKAT will continue to rely on local expertise WIU can recommend the future areas for extension

5. Summary of options and recommendations

The Swiss involvement in the Moldovan water sector is at an important crossroads today. During more than ten years, SDC proved to be an important player through their cooperation office in Moldova. At the beginning, activities concentrated on humanitarian action with the construction of small-scale water supply and sanitation systems. A continuous professionalization of efforts resulted two years ago in the creation of the Water Sector Coordination Council and makes Switzerland a strong player not only at the local, but at the national level as well.

In the future, the role of SDC might be even more important, depending on the strategy and options chosen for the new strategy for SCO-M. In this report we outlined three main priority lines:

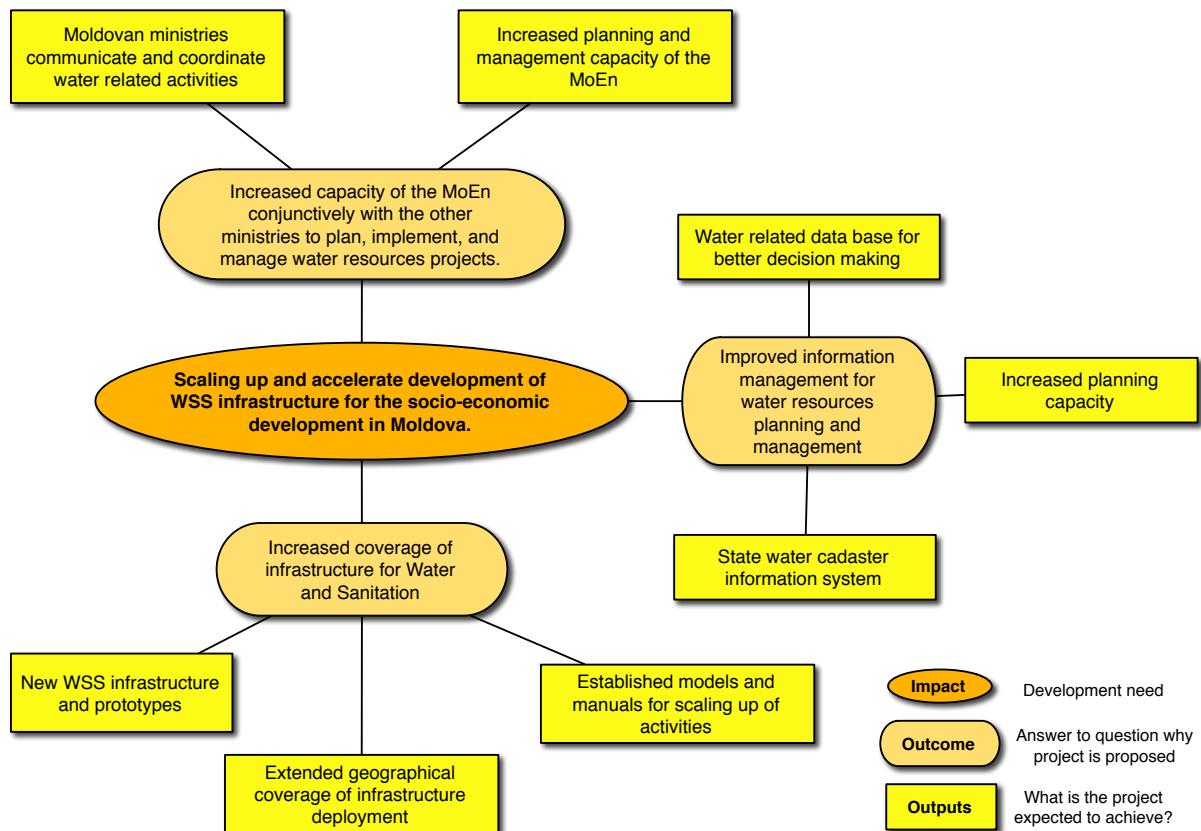
- 1) Interventions at the national level enhancing the capacity of the MoEn conjunctively with the other ministries to plan, implement, and manage water resource projects. This priority line targets directly the administration of Moldova at the highest level and with a potential important impact. While all associated actions will be rather inexpensive, they require a high potential workload.
- 2) The second priority line intends specifically to improve information availability and management as a sound base for water resources planning and management. Improved information flows and data management is indispensable at all levels and for all stakeholders involved. If SDC decides to engage in this field, it will involve some important financial contribution to the establishment of such an information management system
- 3) A continuation and consolidation of the previous efforts to implement infrastructure is the third priority line, which happens at the local level. While SDC gained a lot of experience in the past years, it will be important to scale up the activities and to replicate the SDC way of constructing WSS infrastructure in other geographical locations.

The ideas presented here can be understood as guiding principles that need to be fleshed out with individual stakeholders and agencies working in Moldova. Given the complexity of the situation, it is fair to say that there can be no single approach for improving the WSS situation in the region. In this sense, the presented priority lines are complementary but can be developed independently, depending on how much SDC is willing to invest in the individual objectives.

While the latter two priority lines potentially involve a high financial contribution of SDC to the programs, it is the first priority line that essentially will involve more personal investment of the SDC staff but will also be less costly.

A first idea of a possible results framework for the main priorities and objectives as described in this report is given below. It will be part of the elaboration of the strategy

during the next couple of month to refine this results framework and to discuss about specific activities that lead to outputs and outcomes.



In the table on the following page we present a rough estimate of what the different components might involve in terms of finances. The funding range, however, depends on a much more detailed assessment of the different projects and components.

Today, SDC has a unique window of opportunity for addressing the grand challenges in the water sector of the Republic of Moldova in a concentrated effort. It will be necessary to refine the ideas as outlined in this report and to plan specific programs and activities in more detail. But given the current situation in Moldova's water sector, the possibilities of SDC in financial and strategic terms, and their position in Moldova's donor community, this opportunity should not be wasted.

Expected outputs	Indicative budget range for 2014 – 2017 (total for whole period)
Priority area 1: Increase the capacity of the MoEn conjunctively with the other ministries to plan, implement, and manage water resources projects.	
Improving inter-ministerial communication	200'000 - 500'000 CHF.
Increase planning and management capacity of the MoEn. Adopt TA-WSPSP.	2-5 Mio CHF
Increase planning and management capacity of the MoEn. Support to the Water Investment Unit (WIU) of the MoEn:	1 - 3 Mio CHF
Priority area 2: Improved information management for water resources planning and management.	
Improve water related data base for informed decision making:	0.5-2 Mio CHF
Creation of a Water cadaster, including deployment at district and rayon level:	3-5 Mio CHF
Capacity building:	200'000 - 500'000 CHF
Priority area 3: Increased coverage of infrastructure for water supply and sanitation	
Implementation of new WSS infrastructure and prototypes. Continuation of ApaSan, contribution to GiZ or similar.	4 - 7 Mio CHF
Increase geographical coverage for infrastructure projects and possibilities for co-financing. (e.g. contribution to EBRD)	2 Mio CHF – unlimited
Establish models and manuals for scaling up of activities.	0.5 Mio CHF - 1 Mio.
Overarching activities with regard to HRTWS	
Human rights to water and sanitation issues (documentary, PR measures, consultations)	300'000 – 500'000

6. Annexes

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ANNEX 1: LIST OF PERSONS INTERVIEWED. DECEMBER 10-14, 2012

Date	Organization	Persons Interviewed
10.12.2012	SDC Office in Moldova	Georgette Bruchez - Country Director, Andrei Cantemir - National Programme Officer in Water
	ApaSan Moldova	Jonathan Hecke - Project Coordinator, Corina Andronic - Mobilization and Communication Specialist
	Ministry of Environment	Elena Breahna - Water Management Department Consultant, Elena Creanga - National Environmental Fund
	Technical Assistance for Water Sector Policy Support Programme	Philippe Bergeron - WSPSP TA Team Leader, Herrie Heckman - Institutional Expert
	World Bank	Sandu Ghidirim - Operations Officer, Sustainable Development Department Europe and Central Asia
11.12.2012	"Regia Apa-Canal Orhei" JSC Water Company	Mihai Chiperi - manager, Viorica Rosca - PIU financial expert
	Moldova Social Investment Fund	Gheorghe Munteanu - Deputy Director
12.12.2012	Iurceni Water Users Association	Director, Accountant, Corina Andronic - Mobilization and Communication Specialist
	Apele Moldovei	Marin Adam - Director, Mihail Pencov - Deputy Director, Valeriu Cojocaru - Head of Water Supply and Sanitation Department
13.12.2012	Meeting GiZ Project "Modernizing of Local Public Services in Moldova"	Philipp Johannsen - Country Representative and Project Manager, Sergiu Plesca - Project Advisor MLPS Moldova
	Millennium Challenge Account Moldova	Sergiu Budesteanu - Environmental and Social Director
	Center of Public Health	Ion Salaru - First Deputy Director
	Ministry of Regional Development and Construction	Veaceslav Gututui - Deputy Minister, Valerian Binzaru - Head of Regional Development Department, Svetlana Rogov - Head of International Relations Department
14.12.2012	EU High Policy Advice Mission	Stuart Brown - High Policy Advisor to the Ministry of Environment
	SDC Office in Moldova	Georgette Bruchez - Country Director, Andrei Cantemir - National Programme Officer in Water
	Austrian Development Agency	Constantin Mihailescu - Water and Sanitation Expert

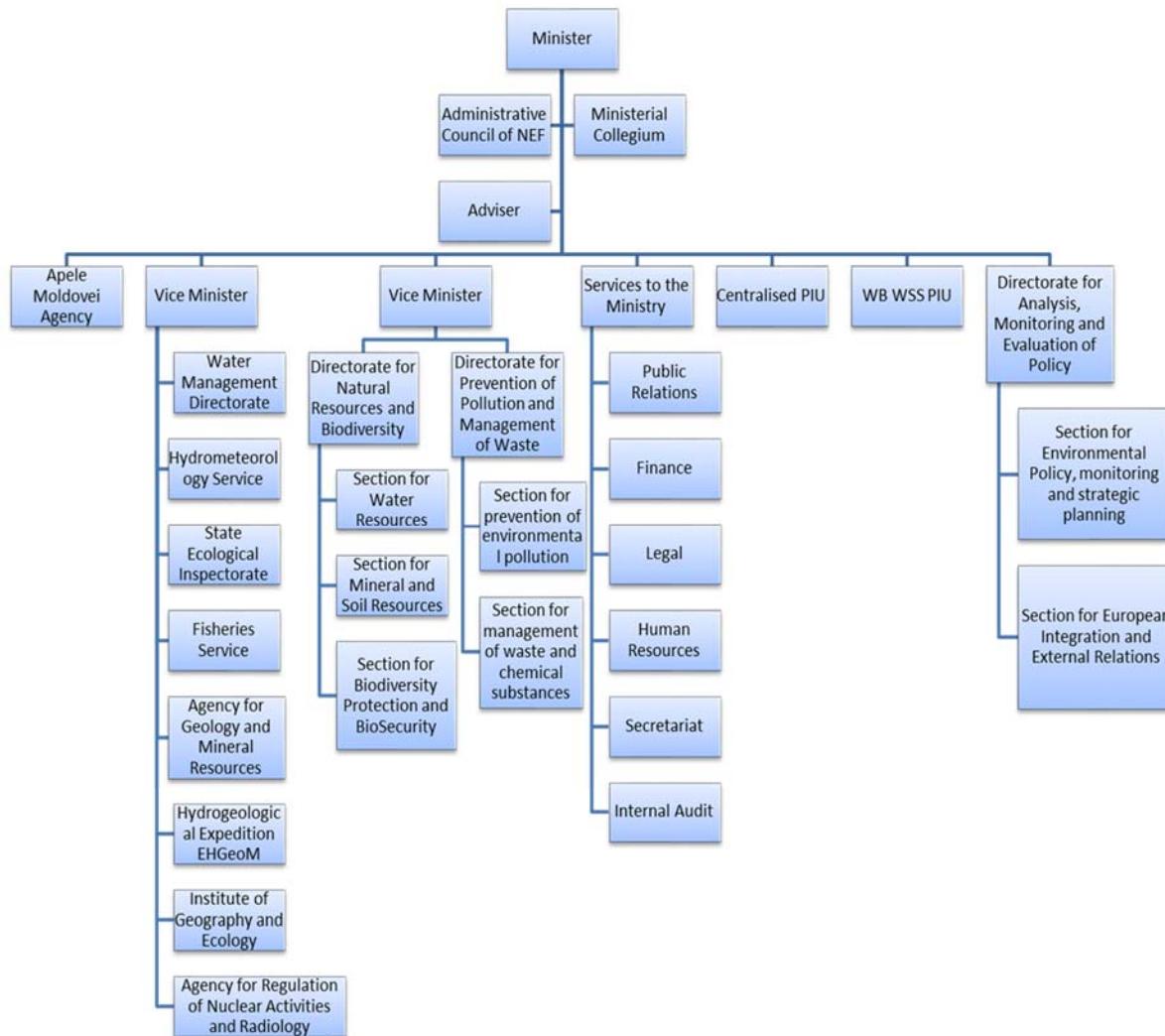
ANNEX 2: ORGANIZATIONAL CHART OF WATER SUPPLY AND SANITATION SECTOR

STAKEHOLDER	ROLES AND RESPONSIBILITIES
1. MINISTRY OF ENVIRONMENT (MoEn)	Lead ministry in the water sector. Responsible for policy, planning and monitoring of various aspects of environment, including whole water sector. The following specific responsibilities for WSS sector may be outlined:
- Water Management Department (WMD)	Responsible for policy and regulation of water sector, including water supply and sanitation sector.
- National Environmental Fund (NEF)	A mechanism for financing of different environmental projects, including WSS projects.
- Projects Implementation/Management Units (PIU/PMU)	A number of donor financed WSS projects is implemented through several Projects Implementation Units subordinated to the MoEn - World Bank PIU (2 WB projects, 1 EC project); Centralized MoEn PIU (various environmental projects, including WSS); Project Management Unit - responsible for overall implementation of 1 WSS project financed by EBRD, EIB and NIF
- State Environmental Inspectorate (SEI)	Institution responsible for authorization, monitoring and enforcement in environmental sector, including WSS. Responsible for Environmental Impact Assessment
- Hydrogeological Expedition (EHGeom)	Responsible for exploration of groundwater sources
- Agency Apel Moldovei (AAM)	Agency, currently subordinated to the MoEn. Responsible for water resources management (including River Basin Management), planning, implementation, operation and monitoring of irrigation and WSS infrastructure. The Agency is responsible for authorization of water use.
o Drinking water supply and irrigation service providers	As service operator, AAM runs 11 technological stations for irrigation and 1 regional water pipeline (Soroca-Balti - State Company Acva-Nord). AAM also provides services for rehabilitation/drilling of deep wells (specialized department).
o Design Institutes	AAM also manages 2 design institutes - Iprocom and Acvaproject, focusing their activities mainly on preparation of feasibility studies and detailed designs for flood protection, irrigation, water supply and sanitation projects
2. MINISTRY OF REGIONAL DEVELOPMENT AND CONSTRUCTION (MoRDC)	Responsible for policy, planning and monitoring on various aspects of regional development and construction sector. The following specific responsibilities for WSS sector may be outlined:
- National Regional Development Fund (NDRF)	Development of WSS sector is also funded through this ministry. MoRDC manages the National Regional Development Fund (NDRF).
- Regional Development Agencies (RDA)	3 Subordinated agencies to MoRDC, covering regions of Moldova (North, Central, South). Responsible for developing regional economy, providing assistance to the local governments and implementation of Regional

	Development Strategies, including WSS-related projects.
- Scientific Research Institute INCERCOM	Responsible for development of technical rules and norms for construction projects (including WSS)
- State Service for Verification and Expertize of Construction Projects	Responsible for verification of feasibility studies and designs for construction projects (including WSS)
- State Construction Inspection	Enforcement institution responsible for implementation of construction legislation, including quality of construction projects (including WSS projects)
- Design Institutes	MoRDC also runs 3 design institutes - Industrialproject, Ruralproject and Urbanproject, which deal also with WSS projects
3. MINISTRY OF HEALTH (MoH)	Responsible for policy, planning and monitoring on various aspects of health sector, including drinking water quality. Main counterpart of the MoEn for implementation of Protocol on Water and Health.
- National Centre of Public Health (NCPH)	MoH through its National Centre of Public Health is responsible for public health aspects of WSS sector, including monitoring of water quality
4. MINISTRY OF FINANCE (MoF)	Responsible for allocation of national budgets, also for WSS sector
5. NATIONAL AGENCY FOR REGULATION OF ENERGY SECTOR (ANRE)	National Regulator for the energy sector (electricity, gas, heating) Responsible for advice and approval on energy tariffs but final tariff decisions are approved at the local level. Issued a methodology on drinking water and wastewater tariffs (2004). Is included in the draft WSS Strategy (2012) and draft Law on Public WSS Services as national tariff and license regulator of WSS sector.
6. NATIONAL BUREAU OF STATISTICS (NBS)	Statistical data on population, services etc. Collects and publishes data on WSS facilities and coverage
7. RAYON, DISTRICT ADMINISTRATION	Second tier of government Moldova has 32 Rayons. Responsible for guidance to and coordinating the Local Government Units in its rayon, including coordination of the development of WSS sector. In Gagauzia, Rayon administration owns WSS infrastructure in selected localities and is responsible for management and operations of water supply and wastewater services at the local level.
8. LOCAL PUBLIC ADMINISTRATION (LPA)	Lowest level of public administration. Responsible for the provision of water supply and sanitation services to their inhabitants. All WSS infrastructure is owned by LPA (except for Gagauzia autonomous region). Also currently responsible for approval of WSS tariffs at the local level.
9. WSS OPERATORS (APA CANALS)	WSS service providers/operators responsible for management and operations of water supply and wastewater services at local or regional level. The operators can be organized as water users associations (WUA), municipal enterprises, joint-stock companies or other private operators.

10. INTERNATIONAL FINANCIAL INSTITUTIONS (IFIS), AGENCIES,	Notably active in the WSS sector: SDC, European Union, EBRD, IBRD, ADA, GIZ, MCA, CzDA, OECD, EIB, KFAED, TIKA, USAID etc. Various modalities of support: sector budget support, loans, grants. Play important role in whole water sector development at all levels - from policy setting (EU WSPSP-TA, SDC, MCA) to direct infrastructure investments (IBRD, EBRD, ADA etc.). Since 2010, WSS donors meet regularly in Sector Coordination Council and donors meeting to coordinate activities and share experience.
11. NGO's	A yet hardly mapped or developed landscape of e.g. customer organizations, environmental NGOs. Some NGOs (e.g. EcoTiras) actively participate in policy development. Some small-scale WSS projects are implemented through NGOs.
- <i>Association of Moldovan Apa Canals (AMAC)</i>	Privately organized association of water utilities in Moldova. All city Apa Canals are members, while rural operators are not members. Represents interests of Apa Canals. Provides technical and non-technical support and guidance to its members Responsible for collecting and reporting data on member associations and their performance. Maintains database on members associations with data covering more than 10 years but these data are not readily available to the MoEn

ANNEX 3: CHART OF THE MINISTRY OF ENVIRONMENT



ANNEX 4: PUBLIC FINANCING OF WATER SUPPLY AND SANITATION SECTOR

Table: State Budget Allocation in WSS Sector in 2012¹

Beneficiary/project	Total Amount, thou. MDL	Including, thou. MDL	
	State contribution	External loans and grants	
STATE BUDGET ALLOCATIONS TO GOVERNMENTAL INSTITUTIONS			
Ministry of Regional Development and Construction - Drilling of water wells, building of water supply and sewerage systems	200.0	200.0	-
Moldova Social Investment Fund	140 333.6	2 386.0	137 947.6
Ministry of Environment , including <i>Improvement of Water Supply Systems in Six Regions Project</i>	230 609.5	4 050.2	226 559.3
<i>National Water Supply and Sanitation Project</i>	20 959.5	4 050.2	16 909.3
<i>Moldova Water Utilities Development Programme</i>	59 650.0	-	59 650.0
Millennium Challenge Account - Transition to High Value Agriculture Project	150 000.0	-	150 000.0
Sub-Total 1	159 650.3	-	159 650.3
including WSS sector:	761 402.9	10 686.4	750 716.5
STATE BUDGET ALLOCATIONS TO LOCAL PUBLIC AUTHORITIES			
Renovation of Water Supply System in Causeni	860.0	860.0	-
Renovation of WWTP and sewerage system in Cimislia Town	3 000.0	3 000.0	-
Renovation of Water Supply system in Donduseni	1 000.0	1 000.0	-
Rehabilitation of WWTP in Donduseni Town	1 000.0	1 000.0	-
Water supply and sewerage networks in Baraboi Village, Donduseni	1 000.0	1 000.0	-
Water main pipelines in Volodeni and Blesteni, Edinet	2 500.0	2 500.0	-
Water supply and sewerage networks in Floresti District	3 100.0	3 100.0	-
Water supply and sewerage networks in Ialoveni District	3 500.0	3 500.0	-
Implementation of pilot drinking water treatment plant in Nisporeni	520.0	520.0	-
Water supply system in Coscodeni, Singerei	1 630.0	1 630.0	-
Water Supply and Sewerage networks in Straseni Town	3 300.0	3 300.0	-
Water main Ungheni - Pirlita	3 500.0	3 500.0	-
Sub-Total 2	24 910.0	24 910.0	-

Table: List of on-going WSS infrastructure projects financed from the National Regional Development Fund²

¹ Source: State Budget of Moldova for 2012

² Source: Agencies for Regional Development

Beneficiary/project	Total Project Cost, thou MDL	From NFRD	From LPA	From other sources - public/ external donors
NORTHERN REGIONAL DEVELOPMENT AGENCY (ADR NORD)				
Water supply of Falesti Town from the Prut River	18 736.97	11 336.97	2 000.00	5 400.00
Connection to water of Free Economic Zone in Balti	15 951.75	12 998.00	1 363.70	1 590.10
Renovation of water system in Otaci	21 319.50	21 319.50	-	-
Construction of Balti-Singerei water transmission main	24 473.20	24 473.20	-	-
Construction of WSS systems in Duruitoarea Veche, Riscani	2 166.50	-	120.00	1 556.60
CENTRAL REGIONAL DEVELOPMENT AGENCY (ADR CENTRU)				
Construction of WWTP, renovation of water and sewerage networks in Calarasi	27 711.28	25 473.05	2 238.23	-
Construction of water supply system in Manolesti, Ungheni	23 128.90	19 628.91	3 500.00	-
Construction of sewerage network and WWTP in Inesti, Telenesti	4 455.80	4 000.00	455.80	-
SOUTHERN REGIONAL DEVELOPMENT AGENCY (ADR SUD)				
Rehabilitation of sewerage system and WWTP in Cimislia, construction of WSS systems in Ecaterinovca, Cimislia	21 647.69	21 647.69	-	-
TOTAL, Thou MDL	159 591.59	140 877.32	9 677.73	8 546.70
TOTAL, mln Euro	10.0	8.8	0.6	0.5

Table: Budgeted WSS Investments from the National Environmental Fund for 2012³

Name	2009 real, thou. MDL	2010 real, thou. MDL	2011 real, thou. MDL	2012 estimated, thou. MDL	2013 estimated, thou. MDL
Financing of projects for implementation of strategies, programmes and national plans for environmental protection, including financing of protection works and implementation of water supply and sanitation projects ; financing of solid waste management projects and supporting agents in waste recycling; financing of improvement works for air quality	90 385.3	113 474.4	120 285.4	141 500.0 (64 000.0 In WSS Sector) ⁴	146 500.0
Budget in million Euro	5.67	7.12	7.55	8.88 (4.0)	9.19

³ Source: State Budget of Moldova for 2012

⁴ TA Water SPSP Estimate, Technical Report No 6 (TR6-C3), June 2012

Table: Investments Planned under the Medium Term Budgetary Framework 2013-2015⁵, thou. MDL

	2013	2014	2015
<u>Water Management</u>			
WSS infrastructure development projects	133 285	90 806	95 477
Construction of main pipeline and renovation of WS systems in Nisporeni, Varzaresti and Grozesti	8 293	8 107	7 979
Construction/reconstruction of flood protection dams	20 000	20 000	20 000
Sub-Total	161 578	118 913	123 456
<u>Water Supply and Sanitation</u>			
Implementation of the WB National WSSP in 6 towns	25 749	-	-
Implementation of the EBRD-EIB-NIF MWUDP in 6 regional operating companies	50 000	152 407	-
Implementation of the WSPSP Policy Matrix Action Plan	-	47 111	52 911
Construction and renovation of WSS systems in localities through National Regional Development Fund	52 956	78 001	81 091
Renovation of WSS systems in localities planned by the local public authorities	37 730	37 730	37 730
Sub-Total, including	166 435	315 248	171 732
<i>State budget contribution</i>	90 685	162 841	171 732
<i>External donor contribution</i>	75 749	152 406	0
TOTAL EXPENDITURES PLANNED, MDL	328 013	434 161	295 188
In million Euro	20.41	27.02	18.37

⁵ Ministry of Finance of Moldova - Medium term budgetary framework 2013-2015

ANNEX 5: DONOR MAPPING

Agency / Contact Person	Active in Moldova	Strategic Objectives/Focal Points	Recent WSS Projects / Budget Lines	Investment
<p>SDC The Swiss Agency for Development and Cooperation</p> <p><i>Embassy of Switzerland Mateevici Str. 23 B MD-2009 Chisinau – Republic of Moldova +373 22 79 69 38 +373 22 79 69 44 +373 22 79 69 35 chisinau@sdc.net www.swiss-cooperation.admin.ch/moldova/</i></p>	2000 - present	<p>Switzerland supports Moldova in its process of transition, thereby fostering stability, security, rule of law, prosperity and solidarity in Europe. The programme priorities for 2010-2013 are the following:</p> <ul style="list-style-type: none"> • Health • Water and Sanitation <p>SDC's focuses on the following aspects:</p> <ul style="list-style-type: none"> • Understanding of sector dynamics and interdependence of actors and their roles at all levels, local, regional and national. • Building local capacities through further education and training. • Promoting policy dialog with the line ministries of the Government of Moldova in coordination with multilateral and bilateral donors. This dialog involves the civil society organizations, the private sector, and national and international experts. • SDC brings in and uses Swiss expertise. 	<ul style="list-style-type: none"> • ApaSan Project Period: Phase I – 2009-2011, Phase II – 2011-2015 Implemented by: SKAT Consulting Ltd, Switzerland Description: While continuing to invest in infrastructure development, the project is focused on documenting the processes and supporting the nationwide replication of decentralized rural water supply and on-site sanitation services delivery and management models. In addition, the project envisions testing other innovative water supply and sanitation solutions. • Protocol on Water and Health Project Period: 2009-2010 Implemented by: UNECE Description: The project provides the Government of Moldova with a clear integrated strategy on water and health, endorsed by all main stakeholders, with prioritized activities and measures. • Rehabilitation of the Water Supply System in the Rayon of Nisporeni: Municipalities of Nisporeni, Varzaresti and Grozesti (See ADA projects below) 	<ul style="list-style-type: none"> • Phase I: 5,410,907 CHF (Co-funding Austrian Development Agency: 1,560,907 CHF) • Phase II: Budget: 10,500,000 CHF (Co-funding Austrian Development Agency: 2,200,000 CHF) • 240,000 CHF • 800,000 €

Agency / Contact Person	Active in Moldova	Strategic Objectives/Focal Points	Recent WSS Projects / Budget Lines	Investment
EU The European Union Delegation to the Republic of Moldova <i>12, Cogalniceanu Str. MD 2001 Chisinau, Republic of Moldova</i> <i>Tel : +373 22 50 52 10 Fax: +373 22 27 26 22 Delegation-Moldova@ec.europa.eu</i>	1991 - present EU cooperation focuses on democracy, governance, human rights, judicial reform, environment, gender, conflict prevention, economic development, growth and employment, sustainable regional and rural development, and poverty reduction (see EU Moldova Action Plan).	<ul style="list-style-type: none"> • European Union High Level Policy Advice Mission to the Republic of Moldova (EUHLPAM) <ul style="list-style-type: none"> Period: 01.2010 – 10.2013 Implemented by: United Nations Development Programme in Moldova (UNDP) Description: Support the democratic and sustainable development of Moldova through provision of high level policy advice in the overall implementation of the Government Program "European Integration: Freedom, Democracy, Welfare" 2009-2013, and "Moldova 2020" with particular focus on the EU integration process, economic recovery and democratic reforms. High-level policy advisers to different Moldovan Government institutions, including the Ministry of Environment, have been assigned. • Water Sector Policy Support Programme (WSPSP) <ul style="list-style-type: none"> Period: 07.08.2009 – 2016 Implemented by: Government of Moldova (budget support), Eptisa (TA-WSPSP) and ADA (Nisporeni Project). Description: The main objective of this Sector Policy Support Programme is to support Moldova in the implementation of reforms in its drinking water and sanitation sector, by providing finance, technical assistance and policy dialogue for priority activities of high-relevance for the Moldovan population and environment. The Programme consists of direct Sector Budget Support, technical assistance (http://ta-waterspssp.eu) and delegated cooperation with the Austrian development Agency (Nisporeni Project). 	<ul style="list-style-type: none"> • 6,600,000 € 	<ul style="list-style-type: none"> • 50,000,000 €, that consists of Sector Budget Support (42,000,000 €), technical assistance (3,000,000 €) and delegated cooperation with the Austrian development Agency (5,000,000 €)

Agency / Contact Person	Active in Moldova	Strategic Objectives/Focal Points	Recent WSS Projects / Budget Lines	Investment
		<ul style="list-style-type: none"> Improving the Environmental Quality of the Black Sea through Better Waste Water Treatment & Climate Change Adaptation of the Water Sector in Moldova 	<p>Period: 02.2012 – 12.2012</p> <p>Implemented by: Kommunal Kredit (Austria)</p> <p>Description: The ultimate objective of the project is to improve the water quality of the Black Sea basin, and health situation in Moldova and downstream. The more immediate objectives of the project are:</p> <ul style="list-style-type: none"> to strengthen Moldova's capacity to adapt its water policies and infrastructures to climate change, with a focus on water quality; and to propose a business model which will make sanitation sustainable in rural areas, villages and small urban settlements in Moldova. <p>Moldova Regional Development and Social Protection Project</p> <p>Period: 08.2008 – 09.2012</p> <p>Implemented by: World Bank PIU</p> <p>Description: WSS Sector relevant is part D of the Project - Provision of goods, works and technical assistance by strengthening the capacity of Orhei waterworks and extending the water coverage area and client base. Project includes plant design, construction of the wastewater treatment facility and training for Orhei Apa Canal staff</p>	<ul style="list-style-type: none"> Co-funded by the European Commission and OECD EAP Task Force <ul style="list-style-type: none"> 2,898,133 € (EC contribution for part D of the project). The Project is also co-financed by the National Environmental Fund (NEF)

Agency / Contact Person	Active in Moldova	Strategic Objectives/Focal Points	Recent WSS Projects / Budget Lines	Investment
GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit <i>Philipp Johannsen</i> <i>31a Bulgara str., Chisinau, MD-2001, Republic of Moldova,</i> <i>Tel.: +373 22 22 59 04</i> <i>Fax: +373 22 00 02 38</i> <i>Email: philipp.johannsen@giz.de</i>	1994 - present	<p>The overarching objective of German assistance to Moldova is to tangibly improve the political, social, economic and ecological situation, with a mutual commitment to sustainable development. German international cooperation with Moldova focuses on promoting modernization in the agricultural sector and the food processing industries, as well as on improving vocational training and municipal services.</p> <p>Priority areas related to development of WSS Sector:</p> <ul style="list-style-type: none"> • Modernization of Local Public Services • Fund for Regional Development 	<ul style="list-style-type: none"> • Modernization of Municipal Services in the Republic of Moldova 	<ul style="list-style-type: none"> • 14,900,000 € in total, including 10,900,000 € from German Government (BMZ) and co-financing of 700,000 € from Romanian Government and 3,300,000 € from Swedish Government (SIDA)
MCC Millennium Challenge Corporation <i>Valentina Badrajan</i> <i>21, N. Iorga street,</i> <i>MD-2012;</i> <i>Chisinau, Republic of Moldova;</i> <i>phone +373 22 85 22 99;</i> <i>fax: +373 22 85 22 94;</i> <i>office@mca.gov.md</i> <i>www.mca.gov.md</i>	US Government assistance 1994 – present, MCC 2010 - present	<p>MCC goal is to reduce poverty in the Republic of Moldova through economic growth by increasing incomes through increased agricultural productivity and expanded access to markets and services through improved roads. Assistance focuses on irrigation reconstruction, access to agricultural finance, and the rehabilitation of an integral section of the country's national road network.</p>	<ul style="list-style-type: none"> • Transition to High Value Agriculture Project 	<ul style="list-style-type: none"> • 101,770,000 USD

Agency / Contact Person	Active in Moldova	Strategic Objectives/Focal Points	Recent WSS Projects / Budget Lines	Investment
WB World Bank <i>Pushkin Street, 20/1, MD-2012, Chisinau, Republic of Moldova. Fax: +373 22 237-053</i>	1993 - present The WB focuses on three strategic priorities: <ul style="list-style-type: none"> • Improving economic competitiveness to support sustainable economic growth; • Minimizing social and environmental risks, building human capital, promoting social inclusion; • Improving public sector governance. 	<ul style="list-style-type: none"> • National Water Supply and Sanitation Project Period: 13.05.2008 –30.06.2013 Implemented by: World Bank PIU Description: The objectives of the National Water Supply and Sanitation Project Project for Moldova are: (i) to improve the coverage, quality, efficiency, and sustainability of water and sanitation services in selected urban and rural communities; and (ii) enhance the capacity of the Ministry of Environment to prepare and supervise the implementation of investment program and to provide technical assistance to the operating Apa-canals. The project covers 4 components: <ul style="list-style-type: none"> ◦ Water and wastewater management in selected Apa-Canals; ◦ Rehabilitation of rural water supply systems in selected villages; ◦ Capacity building and project management; ◦ Energy Efficiency Program. <ul style="list-style-type: none"> • Moldova Social Investment Fund Period: Phase I - 07.1999 –11.2004; Phase II - 11.2004 - 2013 Implemented by: Moldova Social Investment Fund Description: The objective of Moldova Social Investment Fund is to contribute to the implementation of the National Development Strategy (NDS) by empowering poor communities and their institutions to manage their priority development needs. MSIF represents for communities a tool for learning new principles of good governance for local governments. The project covers different municipal services, including WSS.	<ul style="list-style-type: none"> • 14,000,000 USD <ul style="list-style-type: none"> • Phase II – IDA and EBRD 20,000,000 USD (Additionally co-financed by different donors, including EU 1,500,000 €, KfW 5,000,000 €, Governments of Netherlands, Japan, Sweden, UKAID, USAID, UNICEF) 	

Agency / Contact Person	Active in Moldova	Strategic Objectives/Focal Points	Recent WSS Projects / Budget Lines	Investment
KFAED Kuwait Fund For Arab Economic Development <i>Mirqab</i> <i>Mubarak Al-Kabeer St.</i> <i>Kuwait City</i> <i>P.O. Box 2921 Safat 13030 Kuwait</i> <i>State of Kuwait</i>	2004 - present	<p>The Kuwait Fund extends Loans on concessionary term to finance development projects in the developing countries.</p> <p>Period: 2004 -undetermined Implemented by: Apele Moldovei Agency Description: Technical investments in WSS infrastructure of 6 localities from Moldova – 3 towns and 3 villages.</p>	<ul style="list-style-type: none"> • Improvement of Water Supply Systems in Six Regions in the Republic of Moldova 	<ul style="list-style-type: none"> • 6,500,000 USD
EBRD European Bank for Reconstruction and Development <i>Julia Otto</i> <i>10th floor,</i> <i>63 Vlaicu Pircalab Str.</i> <i>Sky Tower building</i> <i>Chisinau MD-2012</i> <i>Moldova</i> <i>Tel: +373 22 21 00 00</i> <i>Fax: +373 22 21 00 11</i>	1994 - present	<p>The EBRD supports a reinvigorated reform process in Moldova by financing the modernization of transport and municipal infrastructure and investing in the private sector. Priorities also include engagement with the financial sector, promotion of energy efficiency, and improvements to corporate governance and transparency.</p>	<ul style="list-style-type: none"> • Moldova Water Utilities Development Programme <p>Period: 16.06.2010 – 31.12.2013 Implemented by: Ministry of Environment (PMU), assisted by Eptisa (Spain) and Sweco International AB (Sweden) Description: The programme comprises the regionalization of water companies by expanding their operations into neighboring localities and is structured as priority investments focusing on the water utilities from Floresti, Soroca, Hincesti, Orhei, Leova and Ceadir-Lunga, municipalities committed to adjust the tariffs and introduce cost recovery of their water companies to ensure financial viability. The programme also aims at strengthening these municipal utilities to ensure provision of adequate supply of drinking water and improve wastewater treatment systems.</p> <ul style="list-style-type: none"> • Feasibility Study for the Improvement of Water and Sanitation Systems in Chisinau <p>Period: 11.2010 – 31.12.2012 Implemented by: Seureca (France) Description: The study is the basis for a large investment programme aimed at the improvement of water supply and sewage collection and treatment in Chisinau. Herewith, the living conditions of the Chisinau's population will be improved and environmental impacts reduced</p>	<ul style="list-style-type: none"> • 10,000,000 € (out of total project cost of 30,000,000 € - co-financers EIB and EU NIF). Additional 2,000,000 € invested in Technical Cooperation (TC) for project preparation and implementation • 3,000,000 € (financed by NIF grant) The total cost of future investments is estimated at 59,000,000 € (Co-funded by EBRD, EIB and KfW)

Agency / Contact Person	Active in Moldova	Strategic Objectives/Focal Points	Recent WSS Projects / Budget Lines	Investment
			<ul style="list-style-type: none"> • Development and Implementation of a Public-Private Partnership for the Improvement of the Water Supply in the Northern Region Of The Republic Of Moldova <p>Period: 22.12.2011 – 2013 Implemented by: Ministry of Environment (PMU), Consultant TBD Description: The project envisages that six northern towns will cooperate with a view to developing and implementing a Public Private Partnership ("PPP") relating to water supply and wastewater treatment. The PPP shall be designed to (i) finance investments in the water distribution pipeline "Soroca-Balti" and the connections to six Rayons and Balti Municipality in the Northern part of Moldova, and (ii) select a private operator responsible for water and wastewater services in the whole region</p>	<ul style="list-style-type: none"> • 1,200,000 € (TC)
Austrian Development Agency (ADC) <i>Gerhard Schaumberger Mateevici 23B, 2009 Chisinau Tel: +373 22 739 370 Fax: +373 22 796 940 chisinau@ada.gv.at</i>	2001 - present	<ul style="list-style-type: none"> • Poverty reduction, peace and security, and environmentally and socially sustainable development • The ADC in Moldova priority sectors are: <ul style="list-style-type: none"> ○ Water/sanitation in rural areas with a geographical focus on the Southern and Western parts of the Republic of Moldova ○ Vocational education and training, including continuous training with a view to creating and improving job opportunities that ensure decent and 	<ul style="list-style-type: none"> • Water and Sanitation (ApaSan) Programme in the Republic of Moldova - 3rd phase <p>Period: 01.12.2009 – 31.12.2012 Implemented by: SDC Overall goal: Improve the quality of life and public health of the rural population in 15 municipalities of Moldova with a beneficiary population of approx. 30,000) by increasing sustainable access to safe drinking water and environmental sanitation (see SDC project above)</p> <ul style="list-style-type: none"> • Rehabilitation of Water Supply and Sanitation in the Town of Cantemir – 2nd Phase (Capacity Building) <p>Period:01.12.2009-30.09.2010 Implemented by: Posch & Partners Phase goal: Strengthening of capacities, including</p>	<ul style="list-style-type: none"> • 1,200,000 € • 82,000 €

Agency / Contact Person	Active in Moldova	Strategic Objectives/Focal Points	Recent WSS Projects / Budget Lines	Investment
		<p>sustainable livelihoods</p> <ul style="list-style-type: none"> ○ Other important areas of intervention are governance (capacity building in public administration), conflict prevention and reintegration of returning migrants. 	<p>technical and management know-how, but also efficient tariff setting and collection in the municipal Apa Canal to ensure sustainable, professional operation of the water supply infrastructure</p> <ul style="list-style-type: none"> ● Investment and Action Plan for the Implementation of the Moldovan National Water Strategy <p>Period: 01.03.2009 - 30.11.2010 Implemented by: OECD / Komunal Kredit (Austria) The objective is to provide support to the Government of Moldova in developing an Action/Investment plan for the water supply and sanitation sector and to effectively link it into the medium-term expenditure framework in the Ministry of Finance</p> <ul style="list-style-type: none"> ● Rehabilitation of the Water Supply System in the Rayon of Nisporeni: Municipalities of Nisporeni, Varzaresti and Grozesti <p>Period: 11.2010 - 2014 Implemented by: ADA Description: The project covers the following three components: <ul style="list-style-type: none"> ○ establishment of the water supply infrastructure, ○ creation of an institution capable to sustainably operate, manage and maintain the water supply infrastructure ○ implementation of priority sanitation measures comprising also the elaboration of studies to further develop sanitation solutions for the project area. </p>	<ul style="list-style-type: none"> ● 234,900 € (co-financed by the governments of Austria (ADA), the Czech Republic (Czech Republic Development Cooperation), the EU Water Initiative (EUWI)) ● 3,500,000 € (ADA Contribution). Co-financed by EU 5,000,000€, Local authorities 2,000,000 €, SDC 800,000€

ANNEX 6: ACCESS TO WATER AND MAIN WSS SECTOR INDICATORS

Table: Data on access to water and sanitation services in communities by size (excluding Chisinau)⁶

INDICATORS	Total Rayons	Rayon Capital	More 7001 inhab	Large Communes 5001 - 7000 inhab	Medium Communes 2501 - 5000 inhab	Small Communes 1501 - 2500 inhab	Small Villages 450 - 1500 inhab
No. of cities/communes in the range	1089	35	13	27	193	250	571
No. of existing WS systems (centralized & decentralized)	345	35	8	23	79	77	123
No. of existing WW systems	46	35	3	3	5	0	0
Total no of inhabitants	2 539 321	633 383	111 106	149 836	648 890	469 652	526 454
Total no of inhabitants connected to WS	1 083 255	546 572	39 981	67 650	200 749	117 788	110 515
Total no of inhabitants connected to WW	524 927	462 599	5 387	9 167	18 716	17 187	11 871
Total no inhab. not connected to WS	1 456 066	86 811	71 125	82 187	448 141	351 864	415 939
Total no inhab. not connected to WW	2 014 394	170 784	105 720	140 669	630 174	452 465	514 583
Current WS connection rate	43%	86%	36%	45%	31%	25%	21%
Current WW connection rate	21%	73%	5%	6%	3%	4%	2%

Table: Data on access to water and sanitation services in Moldova¹

Areas Concerned	2012
Access to water services	
Chisinau	84%
Rest of the Country	43%
Overall Country	54%
Access to Sanitation	
Chisinau	75%
Rest of the Country	21%
Overall Country	35%

Table: Water use in Moldova⁷

Indicator		2008	2009	2010	2011
Number of water consumers	units	2 519	2 505	2 495	2 460
Water abstraction from natural bodies - total, including	mln m³	861	865	851	847
water abstracted from underground sources	mln m ³	127	129	130	130
Water consumption (use) (without recirculated water)-total, including	mln m³	794	795	785	785
for production needs	mln m ³	581	580	581	580
drinking purposes	mln m ³	17	17	17	17
water supply for agriculture	mln m ³	37	38	39	39
water supply for households needs and for drinking	mln m ³	124	120	118	119
other	mln m ³	35	40	30	30
Centralized Wastewater Discharge	mln m ³	109	107	106	108

⁶ Republic of Moldova's Water Supply & Sanitation Strategy (Revised Version 2012) – 2nd Draft October 2012, Technical Assistance for the Implementation of Sector Policy Support Programme in the Water Sector

⁷ National Bureau of Statistics of the Republic of Moldova

Table: Water quality compliance statistics⁸

	2006	2007	2008	2009	2010
Centralized sources of water supply					
Number of samples investigated	1 709	1 519	1 655	1 465	1 571
Number of samples with deviations from sanitary norms	975	920	952	991	1 023
The percentage of samples with deviations from sanitary norms	57	61	58	68	65
Decentralized sources of water supply					
Number of samples investigated	8 244	8 160	8 319	5 157	6 000
Number of samples with deviations from sanitary norms	7 111	6 702	7 053	4 165	5 054
The percentage of samples with deviations from sanitary norms	86	82	85	81	84
Surface water basins used by population					
Number of samples investigated	979	1 248	1 231	1 253	1 248
Number of samples with deviations from sanitary norms	409	478	426	455	502
The percentage of samples with deviations from sanitary norms	42	38	35	36	40

⁸ National Bureau of Statistics of the Republic of Moldova

ANNEX 7: EXISTING WSS DEVELOPMENT PROGRAMS

The following table summarizes the main WSS development programs as outlined in the different documents:

Document/program	Objectives	Remarks
Current National Water Supply and Sanitation Strategy (2007, Ministry of Environment)	<ul style="list-style-type: none"> • Decentralization of Public Water Supply and Sewage Services in the Republic of Moldova • Promotion of Market Economy Principles • Extension of Centralized Water Supply and Sewage Systems and Increase of Degree of Access for Population to these Services • Promotion of Sustainable Development and Environment Protection Measures • Promotion of Social Partnership 	Mid-Term Objectives cover period of 2008-2012
Revised Draft Water Supply and Sanitation Strategy (2012, Ministry of Environment, coordinated by TA-WSPSP)	<ul style="list-style-type: none"> • Professionalization of public WSS services • Promotion of market economy principles • Extension of WSS systems and increase of the coverage WSS infrastructure • Promotion of efficient and cost covering WSS service providers • Promotion of social partnership. 	Mid-Term Objectives cover period of 2012-2017
Plan for Water Supply and Sewerage in Localities of the Republic of Moldova up to year 2015, GD No.1406 dated 30.12.2005	<ul style="list-style-type: none"> • Improvement of wealth and health protection of the population; • Rational use of water • Protection of environment; • Protection against pollution and depletion of sources of water supply; • Reasonable management of capital investments. • Rehabilitation of the quality of services provided to consumers • Increase of economic efficiency of water supply and sewage collection utilities operation • Reducing by 2015, by 50% of the number of population (about 1 mio. inhabitants) which have not access to safe water supply 	
Investment and Action Plan for the Implementation of the Moldovan National Water Strategy (OECD, EUWI, 2010)	<ul style="list-style-type: none"> • Create a favourable legal and institutional network in the WSS Sector, based on market principles • Increase efficiency and cost-effectiveness of WSS Sector, as well as improve its environmental performance and health indicators • Increase the capacity of the WSS Sector to absorb financial and technical assistance • Mobilize wide domestic and international support for implementing WSS sector policy and development strategy • Implement medium-term investment plans for WSS Sector to extend water supply and sewerage systems in order to increase access of population to these services 	
Draft Law on Public Services for WSS (2012, Ministry of Environment, coordinated by TA-WSPSP)	<ul style="list-style-type: none"> • gradual provision to the population drinking water services which are quantitatively and qualitatively satisfactory, accessible and affordable • Regionalization of services • Licensing of operators • National regulation of tariffs 	
Water Law of No 272 of 23.12.2011	<ul style="list-style-type: none"> • Setting rights on water use • Setting mechanisms for protection of water bodies • Protection of eco-systems of water bodies • Assuring provision of ground and surface water of good quality for a sustainable and equitable use • Provision of legal framework for protection of transboundary rivers 	

Document/program	Objectives	Remarks
National Strategy on Regional Development GD No 158 of 04.03.2010 Law on Regional Development No 438 of 28.12.2006	<ul style="list-style-type: none"> Creation of 3 main development regions – North, South and Center; and 3 additional regions – Chisinau municipality, Gagauzia and Transnistria Development and implementation of Regional Development Strategies Development and modernization of regional infrastructure and promotion of private public partnership Prevention of environmental pollution and increasing of efficiency of natural resources use 	MoRDC is the main responsible institution for promotion and implementation of the Strategy
Protocol on Water and Health in the Republic of Moldova (April 2011)	<ul style="list-style-type: none"> Access of each person to water Provision of access to sanitation to each person, in the framework of the integrated sustainable use of water resources Setting, implementing and monitoring National Goals, including improvement of drinking water quality, reduction of water-borne deceases, improvement of access to water; improvement of operational performance of operators; water sources protection; improvement of treated wastewater quality; dissemination of information. 	Steering committee: MoEn, MoH, Apele Moldovei, Project institute Acvaproiect, NGO ECO-Tiras, and SDC
EU water initiative with UNECE	<ul style="list-style-type: none"> UNECE is responsible for the implementation of the W&H protocol EU water initiative with UNECE is the strategic partner of the Republic of Moldova with regard to Integrated Water Resources Management. 	

ANNEX 8: AVAILABILITY OF SWISS AND LOCAL EXPERTISE

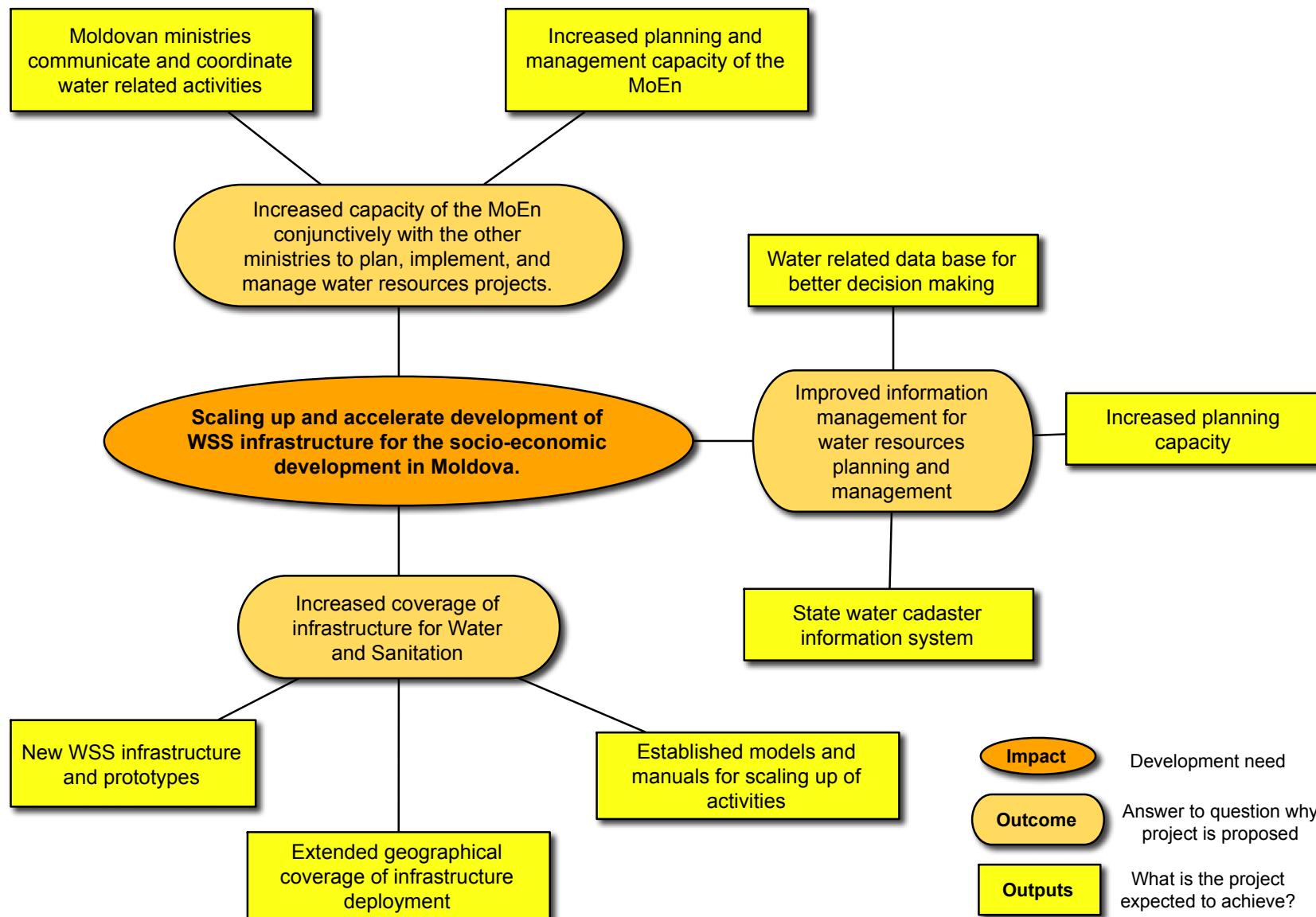
Priority Area 1: Interventions targeting the institutional setup		
Main Activity	Swiss Expertise	Local/Consultants Expertise
<ul style="list-style-type: none"> 1.1.1 Improving inter-ministerial communication 1.1.2. Adopt activities of TA-WSPSP as support to the MoEn 1.1.3 Support to the Water Investment Unit (WIU) of the MoEn 	<ul style="list-style-type: none"> 1.1.1 SDC will facilitate inter-ministerial communication through either WSCC or Inter-Ministerial Working Group. Procurement of local experts is required. 1.1.2. General coordination and monitoring by SDC is required. Necessary to procure/contract group of consultants. 1.1.3 General coordination and monitoring by SDC is required. Necessary to procure/contract group of consultants. 	<ul style="list-style-type: none"> 1.1.1 One existing and (possibly) one additional National assistant/facilitator will be hired within MoEn and (possibly) MoRDC 1.1.2 A group of international and local consultants will be hired, basing on the updated ToR for the TA 1.1.3 A group of local (and possibly international) consultants will be hired, basing on the Scope of Work of WIU

Priority Area 2: Improving Planning tools and mechanisms		
Main Activity	Swiss Expertise	Local/Consultants Expertise
<ul style="list-style-type: none"> 1.2.1 Improve data base for informed decision making 1.2.2 Creation of State Water Cadaster Information System (SWCIS) 1.2.3 Build up capacity for planning, implementation and evaluation 	<ul style="list-style-type: none"> 1.2.1 General coordination and monitoring by SDC is required. External Swiss Consultants will be required to assess the current databases and GIS maps available and draft a Project description. 1.2.2 See p.1.2.1 1.2.3 General coordination and monitoring by SDC is required. External Swiss Consultants will be required to produce Master Planning documents 	<ul style="list-style-type: none"> 1.2.1 A local IT company will be hired to work in close cooperation with relevant Ministries and stakeholders to collect data and produce a database. Possible cooperation with Ingeocad Institute shall be noted (http://www.ingeocad.md). 1.2.2 See p. 1.2.1 1.2.3 WIU under the MoEn and RDA under MoRDC will actively participate in process. Local consultant companies will assist the international consultants.

Priority Area 3: Infrastructure planning and implementation		
Main Activity	Swiss Expertise	Local/Consultants Expertise
<ul style="list-style-type: none"> 1.3.1 Continue activities of ApaSan 1.3.2 Strengthen legal position of constructed WUA's 	<ul style="list-style-type: none"> 1.3.1 General coordination by SDC. Project implemented by SKAT 1.3.2 Include WUA in the Draft WSSP as recommendation for sustainable solution for distant marginalized localities. General dialog with TA-WSPSP can be carried out by SDC 	<ul style="list-style-type: none"> SKAT will continue to rely on local expertise Not needed

Priority Area 3: Infrastructure planning and implementation		
Main Activity	Swiss Expertise	Local/Consultants Expertise
<ul style="list-style-type: none"> • 1.3.3 Increase geographical coverage for implementation projects • 1.3.4 Extend dissemination of information 	<ul style="list-style-type: none"> • 1.3.3 General coordination by SDC • 1.3.4 Hiring of international consultants to produce manuals (possibly extend ApaSan ToR to this activity) 	<ul style="list-style-type: none"> • 1.3.3 WIU can recommend the future areas for extension • 1.3.4 Local Consultants will assist the internationals

ANNEX 9: POSSIBLE RESULTS FRAMEWORK FOR THE WATER DOMAIN IN THE NEW COOPERATION STRATEGY



ANNEX 10: INDICATIVE BUDGET FOR SUGGESTED PRIORITY LINES AND OUTPUTS

Expected outputs	Indicative budget range for 2014 – 2017 (total for whole period)
Improving inter-ministerial communication	200'000 - 500'000 CHF.
Increase planning and management capacity of the MoEn. Adopt TA-WSPSP.	2-5 Mio CHF
Increase planning and management capacity of the MoEn. Support to the Water Investment Unit (WIU) of the MoEn:	1 - 3 Mio CHF
Improve water related data base for informed decision making:	0.5-2 Mio CHF
Creation of a Water cadaster, including deployment at district and rayon level:	3-5 Mio CHF
Capacity building:	200'000 - 500'000 CHF
Implementation of new WSS infrastructure and prototypes. Continuation of ApaSan, contribution to GiZ or similar.	4 - 7 Mio CHF
Increase geographical coverage for infrastructure projects and possibilities for co-financing. (e.g. also contribution to EBRD)	2 Mio CHF – unlimited
Establish models and manuals for scaling up of activities.	0.5 Mio CHF - 1 Mio.