

Terms of Reference

for conducting willingness to pay study and collecting information for ability to pay (affordability) calculation for Rayon Leova

1. Background of the assignment

At the beginning of 2010, GIZ initiated the project "Modernization of Local Public Services in the Republic of Moldova", which is being implemented in collaboration with local, regional and central Government stakeholders. The main partner of GIZ in implementing this project is the Ministry of Regional Development and Construction (MRDC). Under its leadership, a National Fund for Regional Development was set up where Local Public Administration (level I and II, Primarias and Rayons) can submit their project proposals through Regional Development Agencies.

The selection of the investment projects is the responsibility of the Regional Development Councils and the National Council for Regional Development, in coordination with the Local Public Services project in case of financing by GIZ. These projects should aim at improving key sectors of the local public services, including in the fields of water supply and sanitation. The GIZ project currently supports the Regional Development Agencies in the improvement of appropriate project proposals and the preparation of the respective tender documents under IMC approaches as well in the establishment of relevant management and operational structures for an improved public service provision.

The implementation of the water supply projects requires a considerable budget, which will be provided from several sources such as the National Fund for Regional Development, the National Ecological Fund, and special funds from the German Federal Ministry for Economic Cooperation and Development. A justification of the required budget for the proposed regionalized water supply system is necessary. Thus, a pre-feasibility study has to be prepared. The key questions for the pre-feasibility are if population is willing to pay and if is able to pay for the improved services.

2. Sector information

a. General

The Republic of Moldova has registered significant achievements in economic development and poverty reduction. The country has been threatened by the current economic and financial crisis, which brings to light unsolved structural problems in the economy and the governmental structure. Disparities affecting rural development are increasing. Local infrastructure is poorly managed and its condition is deteriorating. Communes have limited financial means and very few qualified staff. Particularly, the provision of public services to rural populations is unsatisfactory. The main problem is: rural communes are not able to provide people with the necessary public utility services.

In recent years, a series of reforms has been introduced in the public sector. In 2006, the Parliament passed the Decentralization Law, which also aims to strengthen communal self-administration. The new Ministry of Construction and Regional Development was established to increase and advance the socio-economic development in different regions of the country. Responsibility for the decentralization policy was handed over to the State Chancellery. In this context, general conditions for the communes and their public services had been drastically changed. Yet, their implementation is complicated because the participants do not have enough specialized knowledge and they lack experience.

Despite the efforts at reform, the public administration in the Republic of Moldova suffers as before from poor effectiveness and efficiency, which reflects in the poor quality of public services. For example, 50% of the population does not have regular access to clean drinking water. First of all, more than 800 rural communes (of a total of 903) still have great deficits in the drinking water supply and sanitation. The situation is also precarious regarding the waste disposal, road infrastructure and social services provision. A central role in solving these tasks is held by the rural communities. These requirements / challenges, however, have had a limited increase in present conditions. Potential rural centers or inter-communal cooperation to provide better services have not been used so far. Once again, the basic development

problem in the country is that rural communes are not able to provide constituents with the necessary public services.

b. Specific

Rayon Leova is working to update a chapter on Water Supply and Sanitation of their Socio-Economic Development Strategies. In the same the feasibility study for water supply in the Rayon is under preparation.

3. Background of the studies

a. Willingness to Pay (WTP) for Improved Water Supplies and sanitation services

There are many benefits of providing improved water supply and sanitation services. Some benefits are not easy quantified; these include health benefits, improved environment etc. One of the methods used to valuate such benefits is to ask beneficiaries how much they would be willing to pay for improved services. Willingness-to-pay (WTP) is the maximum amount a customer would be willing to pay for a given number of units of a service of given quality. In addition, willingness-to-pay for improvement in quality can indicate the maximum amount a household would be prepared to pay for better quality. Willingness-to-pay analysis is based on subjective statements of households and their judgment about their income, the quality and the price of the service. Willingness to pay provides crucial information for designing water supply and sanitation projects. The willingness to pay concept generally refers to the economic value of a good to a household under given conditions.

The most widely used method for willingness to pay estimation for water/wastewater services is contingent valuation method (a survey-based technique to estimate willingness to pay values). Typically the respondent is given the choice among scenarios, including the status quo and a scenario in which services are improved.

b. Ability to Pay (ATP) for Improved Water Supplies and sanitation services

At the current stage of pre-feasibility study, the future costs of improved water supplies and sanitation services are not known. Thus they key question will be to investigate the household disposable income. The household income is a sum of net income from different sources and depends on commotion of family. Sources of income may include:

- Salaries from employment;
- Pensions;
- Social aid;
- Unemployment aid;
- Income from business (entrepreneurship);
- Income from agriculture/farming, including ad hoc sale of agriculture goods;
- Other ad hoc income;
- Transfers from abroad (family members working abroad)
- Others (income from sale or interest).

All investigated income is net of taxes and other deductions.

c. Water consumption

Part of the WTP and ATP study is to understand what current water consumption is and if it is low, to investigate what is the reason. Thus important part of the study will be to analyse water bills and find what kind of equipment consuming water households have.

4. Scope of work, key tasks and activities of the NGO

a. Scope of work

The selected NGO will conduct a willingness to pay study and will collect information for ability to pay (affordability) calculation and current water consumption which will be used under the preparation of pre-feasibility study.

Specific scope includes:

- NGO will provide a group of pollsters to provide personal in-home surveys;

- Before pollsters start surveys, NGO will train them to fill the questionnaire and understanding the problem of WTP and ATP study;
- Each pollster will be equipped with printed questionnaires, calculator and pen;
- Each pollster will know how to introduce himself and will have ID and official letter (accreditation) from NGO;
- A group of pollsters will survey at least 350 households from villages provided in the attachment 1. The households for survey shall be randomly selected. The number of households actually surveyed from each village shall be no less than 90% and no more than 110% of stipulated in the attachment 1;
- Pollsters shall shortly visit respective Primaria before performing a survey in a village or town, thus the schedule of visits shall be organized in a way that two or more pollsters do not visits Primaria separately;
- The survey shall be completed in 4 weeks after signing the contract;
- The sample questionnaire is provided in annex 2; NGO may add additional questions to the questionnaire in order to better achieve goals of a survey;
- The survey shall answer following questions:
 - The composition of the household;
 - If the household have piped water supply;
 - What is the monthly household income in Lei;
 - For households having piped water supply;
 - How the water supply is organized and what kind of equipment household has (a tap outside or inside house, a tap and sink in the kitchen, dishwasher, bathroom, toilet flushed with water, shower, bathtub, washstand, washing machine, others);
 - How much households spends for water services monthly;
 - What is average consumption of water by household;
 - If consumption is low (below 90 litter per person per day), what is the reason;
 - If the household uses other than piped water supply sources of water;
 - What is the water quality;
 - The pollster shall present the scenario of improved quality of water services and the survey shall answer if household will be willing to pay more for it and how much;
- For households not having piped water supply:
 - How water is delivered to the household;
 - What the household think about quality of water;
 - Are they willing to have piped water supply;
 - The pollster shall present the scenario of building a piped water supply in the village with clean - treated – water and the survey shall answer if household will be willing to pay for connection pipe and for a water consumed;
 - If the household are going to use other than piped water supply sources of water, in case they are connected to piped water;
 - What kind of equipment are they willing to install at home (a tap outside or inside house, a tap and sink in the kitchen, dishwasher, bathroom, toilet flushed with water, shower, bathtub, washstand, washing machine, others);
- After surveying households, the NGO shall collect information from questionnaires and enter all answers into the Excel matrix presenting each question in rows and each surveyed household in columns;
- A basic statistical summary of answers shall be provided for each question:
 - Number of answers yes and no;
 - Average, standard deviation, median for numerical answers (water consumption, willingness to pay, households income);
- NGO will prepare a short report describing methodology and problems and providing comments to the survey;
- NGO shall prepare a demographic forecast for each locality, based on actual population and recent development in Moldova. Forecast shall cover period of next 30 years and forecast population and number of households per locality. NGO may use the demographic studies prepared for entire country (rural areas) – like World Bank report WB web site <http://go.worldbank.org/KZHE1CQFA0> – but adjusted to the actual economic situation of the locality.

5. Implementation of the assignment and contact persons

a. Expected work results, deliverables, formats, language

No.	Work result description	Formats	Language
1	Preparation of the questionnaire	Electronic: doc	Romanian
2	Results of survey	Electronic: xls	Romanian
3	Copy of filled questionnaires	Paper copy	Romanian
3	Report	Electronic: doc	Romanian

b. Time frame and acceptance procedures

Start of the assignment	April 2014
End of the assignment	June 2014
Meeting with project experts	May 2014
Conducting survey	April - May 2014
Analysis of questionnaires and writing a report	June 2014

c. Principal contact persons

Responsible GIZ advisor/focal person	Mr Sergiu Plesca, Focal Point Leova, e-mail: sergiu.plesca@giz.de
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Annex 1. List of villages to conduct a survey

Rayon Leova

No	Name of village/town	Number of households to be surveyed
1	Leova	31
2	Iargara	20
3	Baiuş	7
4	Bestemac	7
5	Borogani	15
6	Cazangic	7
7	Ceadir	7
8	Cimpu Drept	7
9	Cizlar	7
10	Cneazevca	7
11	Cociula Noua	7
12	Colibabovca	7
13	Coporani	7
14	Covurlui	9
15	Cupcui	9
16	Filipeni	15
17	Frumusica	7
18	Hanasenii Noi	7
19	Hirtop	7
20	Meseni	7
21	Nicolaevca	7
22	Orac	7
23	Pitesti	7
24	Romanovca	7
25	Sarata Noua	9
26	Sarata Rezesi	7
27	Sarateni	7
28	Saratica Noua	7
29	Saratica Veche	8
30	Seliste	7
31	Sirma	7
32	Tigheni	14
33	Tochila Raducan	9
34	Tomai	15
35	Tomaiul Nou	7
36	Troian	7
37	Troita	7

38	Victoria	7
39	Vozneseni	7
	Total	350

Annex 2. Sample questionnaire

First, please visit Primaria and explain the purpose of the survey. Ask them for help in approaching people in the village. Tell them that you need to survey different households, not only wealthy people but also poor. The reason is that if results are too optimistic, one may think that people are able to pay very high fees for water, if results are pessimistic, one may decide that project is not sustainable and resign the project.

Try to collect following data from Primaria which will help you for surveying households. It will also help you to explain the importance of good quality drinking water and sanitation (sewage) and to connect with the current situation.

Questionnaire for Primaria

1	Rayon	
2	Primaria / Commune	
3	Number and names of villages in the Commune	
4	Population of villages [total in the Commune]	
-	Village 1	
-	Village 2	
-	...	
5	Number of households in villages [total in the Commune]	
6	Do you have piped water supply in your Commune?	Yes/no
7	If yes, how many households are connected?	#
	[Calculate a share of households connected (7/5) in % and ask to confirm]	%
8	What is a source of the water: shallow well, artesian well, river?	
9	Do you perform a laboratory test of the water in your source against pollutions?	Yes/no
10	If yes, how often	

Questionnaire for households

Please introduce yourself and explain that there are plans to expand piped water supply network in the rayon, including Commune where surveyed family lives. The potential investment is still in planning stage and thus we want to understand households opinion regarding such a big investment and also if households will be able to pay for services for water supply and sewage collection and treatment.

Explain that your NGO was selected to conduct this survey as you have relevant experience.

Explain that you will ask several questions, including a question about you income. The survey is anonymous thus we appreciate honest answers.

A	Investigation Number (three digits)	000
1	Rayon	
2	Primaria / Commune	
3	Household Size: Members:	
4	Number of people doing business in the Family	
5	Number of Employees (administration workers) in the Family:	
6	Number of Employees (Teacher, Kindergarten staff) in the Family:	
7	Number of Retired in the Family:	
8	Number of Children:	
9	Number of unemployed in your family:	
10	Other members of family not included in the types of employment above [please summarize A.5-A.10 and compare with A.4]	
11	Do you have piped water at you house If answer is Yes, please go to part B, if No please go to part C	Yes / No
B	Part for the households having piped water supply	
1	Do you have:	
a)	A tap outside your house and on your plot from which you take a water	Yes/no

b)	Just a tap inside your house from which you take a water but without further water network in your house	Yes/no
c)	A tap and sink in your kitchen	Yes/no
d)	Dishwasher	Yes/no
e)	Bathroom	Yes/no
f)	Toilet flushed with water	Yes/no
g)	Shower	Yes/no
h)	Bathtub	Yes/no
i)	Washstand	Yes/no
j)	Washing machine	Yes/no
k)	Others (please describe)	Yes/no
l)	How the wastewater (sewage) is discharged (please describe)	
2	Do you, concurrently to the piped water, have and use a water from your private or from a public well or collect rain water?	Yes/no
3	If yes, for what purposes you use such a water: Could you estimate a volume of these water you use per day	
a)	[I they have a problem to estimate in litres, please help them to estimate asking for example how many buckets]	I
b)	Do you have cistern for water storage?	
c)	If yes, how do you fill the cistern? [from rain water, from well]	
d)	What is the cistern capacity?	m3
5	Do you buy a bottled water	Yes/no
a)	If yes, why?	
b)	If yes, how many litters per day ? [People may have difficulties to say how many litres, thus ask how many bottles and what size of the bottle]	
6	Could you please show us your latest bill for a water (if the latest is not available, maybe they have earlier one). Better if they show more than one bill so we can calculate average	
a)	Amount of the bill (LEI)	
b)	Volume of water consumed (m3)	
c)	Period of billing (months)	
d)	Unit cost of water (Lei/m3)	
	[Please quickly calculate an average water consumption $1000 * B.6.b / (A3 * B.6.c * 30)$ and write results. If you got more than one bill, please roughly calculate an average. If result is below 90 lcd (litters per capita per day) go to B.6.e, otherwise skip the question B.6.e]	
e)	Average water consumption in Central Europe varies from 90 to 120 lcd and is even higher in countries like Ukraine. Your consumption, based on data from your bill is ... lcd. What you think, what is the reason? I have no money to consume more water and to pay more. The price for water is already very high. I have no money to invest in bathroom/kitchen/equipment, if I have proper equipment I would consume more water Other explanation (please write)	
f)	Do you know what is the source of a water you drink? (shallow well, artesian well, surface water from the river) [please confront answer with information you have from Primaria]	

g)	Are you satisfied with quality of water and services? [If Yes, skip next question]	Yes/No
h)	What is not satisfying you?	
-	Water supply is often interrupted,	Yes/No
-	If yes, could you please estimate how many days in year you are without water supply	
-	Water pressure is not satisfying me	Yes/No
-	Water has bad taste	Yes/No
-	Water has bad smell	Yes/No
-	Water has bad colour (it looks dirty)	Yes/No
	Are you aware about quality of water delivered to your home?	Yes/No
i)	Do you think it is tested against different pollutions?	Yes/No
	Does Primaria provide information about water quality and pollutions in drinking water?	Yes/No
	Water in artesian and shallow wells in Moldova is often polluted and exceeding norms. On the other hand piped water supply from water treatment plant which treats the water from the river Prut is also very expensive. Anyway, in order to provide clean water either a long network shall be built or water from local artesian wells shall be treated.	
7		
	Please, imagine that water is treated and delivered to your household. The good quality of water (not polluted, good taste, smell and colour, pressure and continuity (no breaks)) costs thus it is obvious the new fee will be higher than the current one.	
a)	Are you willing to pay more for better quality of water?	
-	Yes, I'll pay more;	
-	No, I like to have good water but I'm not able to pay more;	
-	No, I'm satisfied with a current water quality;	
b)	If answer to 7a was yes, ask how much more they are willing to pay for a good water quality. Remind them the latest bill (B.6.a). The answer should be an increase in a latest bill (if you have more bills, please state to which bill you refer to).	LEI
c)	Do you agree to pay about 15 Lei / m3 for water if water has good quality?	
e)	[ask this question only after a) and b), if they have a problem to understand what price for m3 means try to calculate what would be the latest bill if price is 15 lei/m3]	Yes/no
e)	Do you agree to pay for sewage collection and treatment so the environment is not polluted with sewage?	Yes, no
	We want to ask you about the income of your household. This information is important for us to understand and calculate if households are able to pay for water. This will help in developing the project of piped water supply. We want to remind that this is an anonymous survey, thus this information will be used only to calculate average numbers. We are interested in real data, thus we appreciate frank answers. If we got wrong data we may think there will be no problem with payment or we may found that project cannot be implemented because people will not be able to pay for their bills.	
8		
	We cannot use statistical information about average salaries because it is not the same as household's income.	
	[Please ensure that there are no other people during the survey, like neighbours or representatives from Primaria]	
	What is your monthly household income in LEI. Household income means a sum of net salaries, pensions, social aid, and others like sell of agriculture goods. Try to summarize all sources.	LEI
a)		
b)	Do you have other income, like transfers from abroad. Could you estimate what is monthly average.	LEI
9		
	Thank you very much for cooperation. Once again we want to ensure that it is	

| **very helpful and that the data will be used anonymously.** |

C	Part for households do not having a piped water supply	000
1	How currently the water is delivered to your house (could be more than one answer)?	
a)	I have a shallow well at my plot How many buckets per day you use?	yes/no
b)	I go to a public well or well at my neighbour's plot. How many buckets per day?	yes/no
c)	I have cistern for water storage?	yes/no
	- If yes, how do you fill the cistern?	
	- [from rain water, from well, from river]	
	- What is a cistern capacity?	m3
d)	I buy a bottled water How many litters per day ? [People may have difficulties to say how many litres, thus ask how many bottles and what size of the bottle]	yes/no
e)	Are you satisfied with a quality of water you have at your home?	Yes/No
h)	What is not satisfying you?	
	- I prefer to have a piped water at my home	Yes/No
	- Water has bad taste	Yes/No
	- Water has bad smell	Yes/No
	- Water has bad colour (it looks dirty)	Yes/No
	Are you aware about quality of water delivered to your home?	Yes/No
i)	Do you think well is tested against different pollutions?	Yes/No
	Does Primaria provide information about water quality and pollutions in wells?	Yes/No
4	Water in artesian and shallow wells in Moldova is often polluted and exceeding norms. On the other hand piped water supply from water treatment plant which treats the water from the river Prut is also very expensive. Anyway, in order to provide clean water either a long network shall be built or water from local artesian wells shall be treated.	
	Please, imagine that water is treated and delivered to your household. The good quality of water (not polluted, good taste, smell and colour, pressure and continuity (no breaks)) costs thus it is obvious the new fee will be higher than the current one.	
a)	Are you willing to pay a piped, good quality water?	
	- Yes, I'll pay;	
	- No, I like to have good water but I'm not able to pay;;	... LEI
	- No, I'm satisfied with a current situation;	Yes/no
b)	If answer was yes, ask how much your family will be able to pay monthly for a water?	... LEI
c)	Do you agree to pay about 15 Lei / m3 for water if water has good quality?	Yes/no
d)	Do you agree to pay for sewage collection and treatment so the environment is not polluted with sewage?	Yes/no
e)	If piped water network is built in you village, close to your house, will you be able to finance a connection to the network?	Yes/no
f)	If piped water network is built in you village and you are connect to the network, will you still use other sources of water?	
	- Private well	Yes/no
	Why?	
	Public well	Yes/no
	Why?	
	- Cistern (for rain water)	Yes/no
	Why?	
g)	If piped water network is built in you village and you are connect to the network, will you install at your home?	
	- Only a tap outside your house (on your plot) from which you take a water to your house	Yes/no

	Only a tap inside your house from which you take a water but without further water network in your house	Yes/no
	A tap and sink in your kitchen	Yes/no
	Dishwasher	Yes/no
	Bathroom	Yes/no
	Toilet flashed with water	Yes/no
	Shower	Yes/no
	Bathtub	Yes/no
	Washstand	Yes/no
	Washing machine	Yes/no
	Others (please describe)	Yes/no
4	<p>We want to ask you about the income of your household. This information is important for us to understand and calculate if households are able to pay for a water. This will help in developing the project of piped water supply. We want to remind that this is anonymous survey, thus this information will be used only to calculate average numbers. We are interested in real data, thus we appreciate frank answers. If we got wrong data we may think there will be no problem with payment or we may found that project cannot be implemented because people will not be able to pay for their bills.</p> <p>We cannot use a statistical information about average salaries because it is not the same as households income.</p> <p>[Please ensure that there are no other people during the survey, like neighbours or representatives from Primaria]</p>	
a)	What is your monthly household income in LEI. Household income means a sum of net salaries, pensions, social aid, and others like sell of agriculture goods. Try to summarize all sources.	LEI
b)	Do you have other income, like transfers from abroad. Could you estimate what is monthly average.	LEI
5	<p>Thank you very much for cooperation. Once again we want to ensure that it is very helpful and that the data will be used anonymously.</p>	