



European Regional Development Fund

respect water

**Project title: Best Water Use**  
**Project acronym: BestU**

**Deliverable D3.5.1.: Short presentation in English language**  
**Work Package 3: Research on current situation**

**Contracting authority:**

**ECONOMIC DEVELOPMENT AGENCY HIGH WEST RHODOPE**

*The Project is co-funded by the European Regional Development Fund (ERDF) and national funds of the countries participating in the Cooperation Programme INTERREG V-A "Greece-Bulgaria 2014-2020"*



# ATTITUDE TOWARDS WATER RESOURCES, THEIR PROTECTION, EFFICIENT USE AND MANAGEMENT



Quantitative survey within

## “Best water Use” project

Prepared for:

**АИР ВИСОКИ ЗАПАДНИ РОДОПИ**  
**4800 гр. Девин, ул. „Явор“ №3**

October, 2018

# SURVEY OF THE ATTITUDE OF THE TARGET GROUPS TOWARDS WATER RESOURCES, THEIR PROTECTION, EFFICIENT USE AND MANAGEMENT



АИР ВИСОКИ ЗАПАДНИ РОДОПИ  
4800 гр. Девин, ул. „Явор“ №3  
Project „Best water Use“  
Acronym: BestU  
Project number: 1854

Agency for Economic Development High Western Rodopi, in partnership with the Agency for Development Anatoliki - Thessaloniki (Greece), Serres Anesser Development Agency (Greece), Economic Development Agency Bansko (Bulgaria) and Agency for Economic Development High Western Rodopi - Devin (Bulgaria) implements the Project Best Water Use with BEST-U acronym under contract B2.6f.05 of 02.10.2017. The Best Water Use project aims to promote innovative technologies to improve environmental protection and efficient use of water resources as well as soil protection

The project is aimed at improving water management by organizing campaigns to promote "green behavior" in the following areas:

- Water management;
- Implementation of pilot activities involving existing innovative methods / technologies;
- Forming a comprehensive educational policy in local self-government.

The specific objectives of the project are:

- Build capacity for all stakeholders as well as water resource management;
- To improve knowledge and raise awareness of water users, aiming at more effective participation in environmental actions;
- Develop educational processes that promote a comprehensive, systematic and interdisciplinary approach to environmental issues and optimal water management in particular;
- To create a sense of responsibility among learners and teachers in terms of environmental protection and sustainable lifestyles.

This study is carried out by BALKANCERT LTD, under a contract for "Studying the attitude of the target groups towards water resources, their protection, efficient use and management" with the contractor Agency for Economic Development High Western Rodopi.

*The project is co-funded by the European Regional Development Fund (ERDF) and by the national funds of the countries participating in the "Greece - Bulgaria 2014-2020" Cooperation Program INTERREG V-A*

# 1. METHODOLOGY

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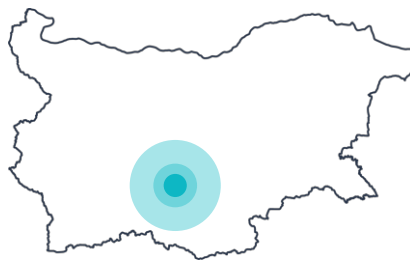
## Research objectives:

- The target groups' attitude towards:
  - protection and efficient usage of the water resources;
  - local and European legal framework;
  - awareness on the subject;
  - available public information;
  - assessment of the activity of the responsible bodies.

## Research methodology:

- quantitative research;
- self-completed paper questionnaire/ self-completed online questionnaire;
- coverage: 10 municipalities in the region of Smolyan;
- sample size N=263, of which:
  - n=158 households;
  - n=105 local business;
- fieldwork period: September 10 – October 15, 2018

# SAMPLE PROFILE



village 13% 18%  
 municipal center 70% 34%  
 municipal city 17% 46%  
 out of populated area 2%



32% men : 68% women



working full time 71%



average age 41,1 years



Education: 47% college, 45% high,  
 8% middle and lower



services 18%



production 23%



crafts 1%



agriculture/ stock-raising 40%

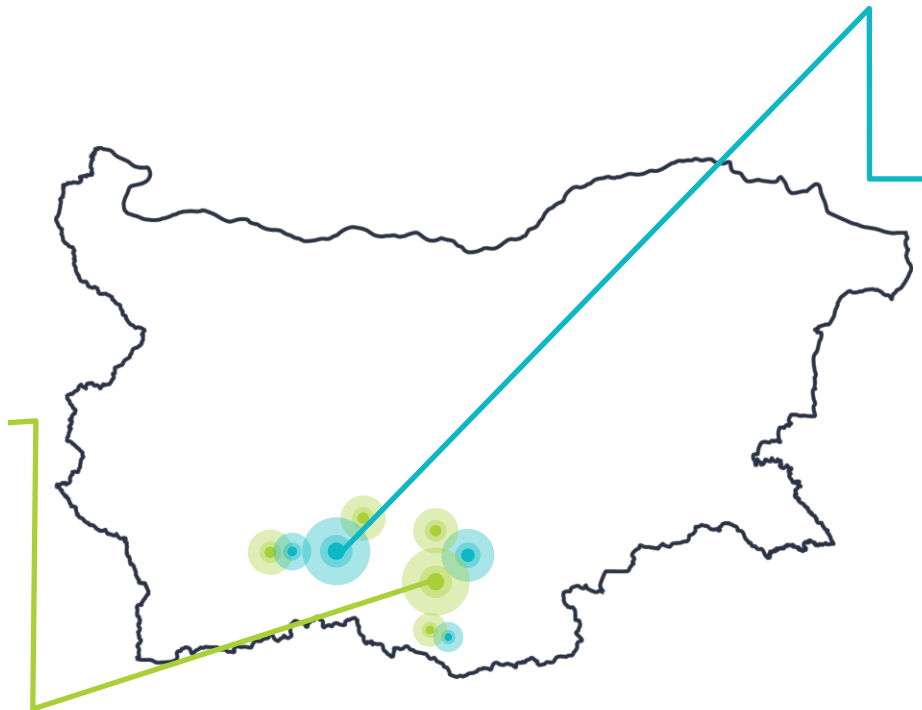


trade 14%

# COVERAGE

## BUSINESS

Smolyan 52%  
Devin 13%  
Chepelare 10%  
Dospat 9%  
Zlatograd 8%  
Borino 3%  
Rudozem 3%  
Banite 2%  
Nedelino 1%  
Madan 1%



## POPULATION

Devin 44%  
Smolyan 22%  
Borino 9%  
Dospat 6%  
Zlatograd 6%  
Madan 5%  
Chepelare 4%  
Rudozem 2%  
Banite 2%  
Nedelino 1%

## 2. WATER USAGE

sources, purposes, ways of usage, saving water

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## WATER USAGE: SUMMARY [1]

- ▶ Half of the population perceives water as “fortune”, while the others think of it as a part of the everyday cycle. People use more water for their utility need than their other activities.
- ▶ The share of households using alternative water sources, different than bottled water and tap water, is low.
- ▶ No water deficit troubling the population’s daily activities is being observed.
- ▶ The main water-connected issue that concerns the population is the high price of water. Other issues like lack of water supply, pollutions or frequent damage rarely happen.
- ▶ 66% of households believe they are rather economical in their daily usage of water – the average quantity saved per month is 47 liters of water and 20 BGN off of the monthly expenses.

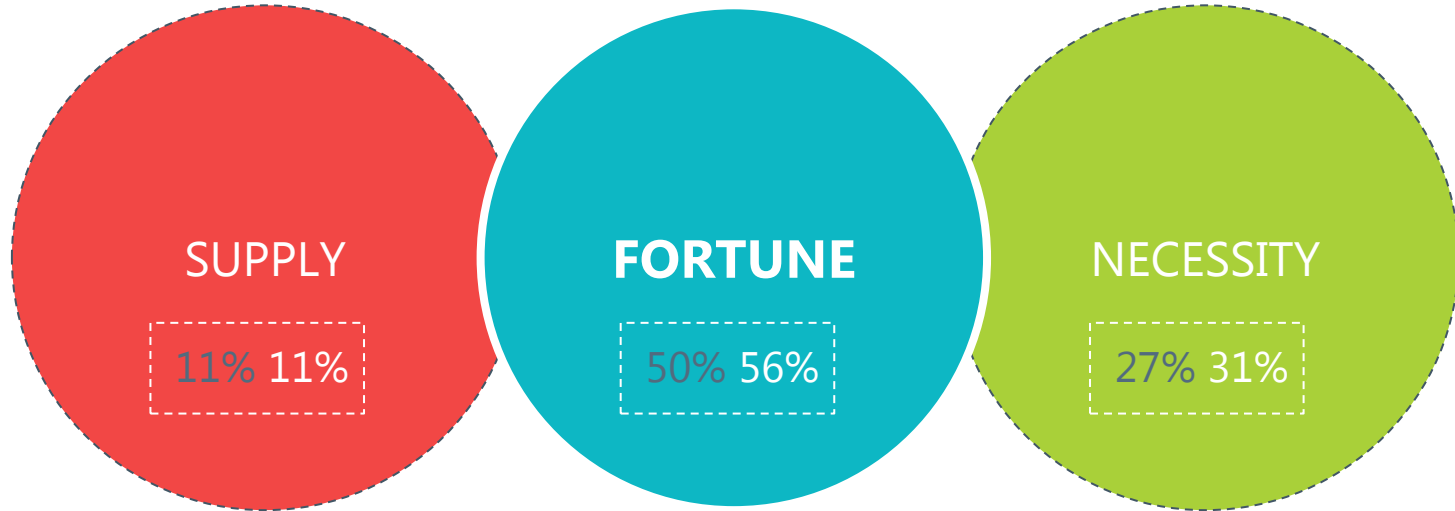
## WATER USAGE: SUMMARY [2]

- ▶ The most common practice for reducing water pollution is lowering the amount of chemicals being thrown in the sewage system. Rather high is the share of households (around one third) that reduce the usage of detergents and replace them with harmless products.
- ▶ Every fifth household practices secondary water usage.
- ▶ 11% of firms share that to them water is a supply and then over a half of them (56%) consider it a fortune which shows a special attitude.
- ▶ Half the business representatives use water for the maintenance of decorative water features/ lawns and one third – for technological processes. Practically, all firms use water for utility needs.
- ▶ There is seasonal usage of water in the practice of every fifth firm – the average continuity of the busier season is between 5 and 6 months.
- ▶ Water for industrial use is a source for 29% of firms. The other “alternative” sources are not preferred by many.

## WATER USAGE: SUMMARY [3]

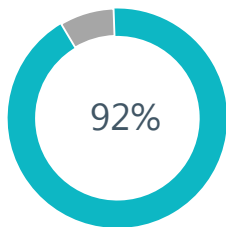
- ▶ A third of the firms do not practice storing water – for those who do, it is typical to store water small amounts without using any special containers for the purpose.
- ▶ The business' complaints are similar to the households' – they are mainly focused on the high prices of water. Damages and low pressure are the other problems that often occur to the respondents.
- ▶ 25% of the firm representatives state that their organizations are very economical when using water.
- ▶ Fixing damaged pipes and water supply elements is a must for the firms when it comes to water sparing practices. Relatively common are the automatic dosing devices (39%).
- ▶ Firms share that they need some support to start using water more efficiently.

# ATTITUDES TOWARDS WATER

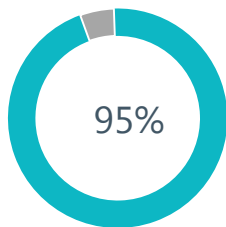


2% don't know/ haven't thought about it

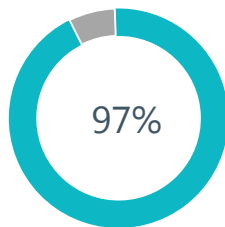
## MAIN PURPOSES: POPULATION



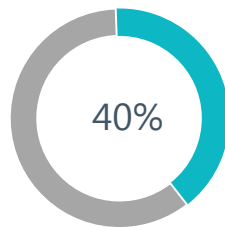
direct consumption



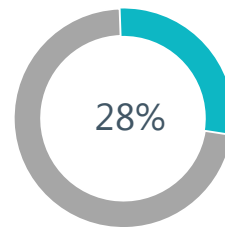
food and drinks  
preparation



hygiene/ utility needs



watering, stock-raising

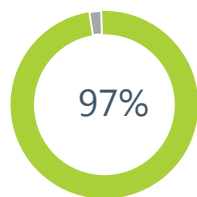


decorative water  
features

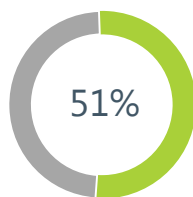


other: *fish tank*

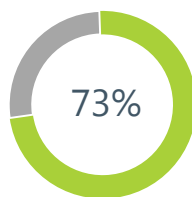
## MAIN PURPOSES: BUSINESS



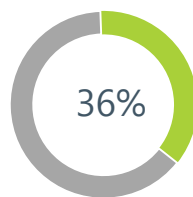
utility needs



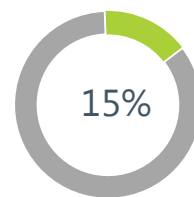
in production



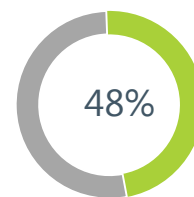
cleaning (machines,  
materials etc.)



cooling and other  
technological  
processes



in agriculture



maintenance of  
decorative water  
features/ lawns

**19%** of the firms use water seasonally

**5,5** months avg. season duration

# MONTHLY USAGE

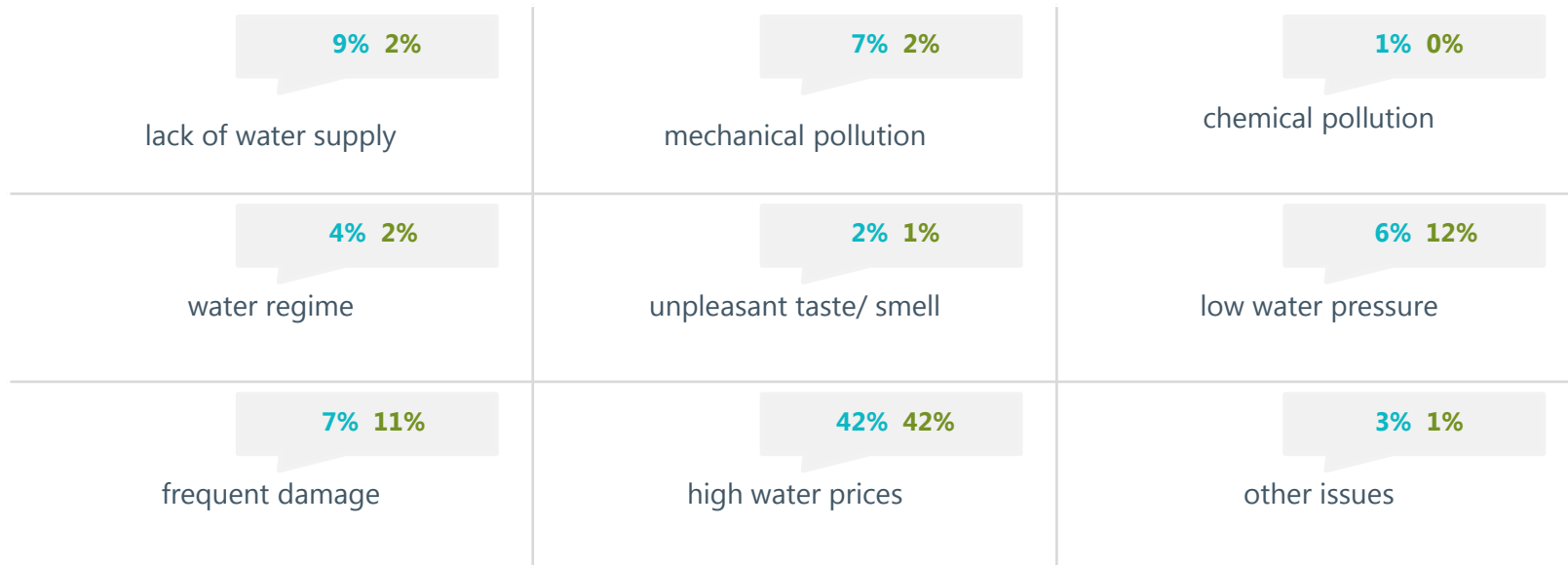
	% users		monthly quantity	
Bottled water	54%	86%	34 l	185 l
Tap water	97%	99%	18 m <sup>3</sup>	64 m <sup>3</sup>
Well, drilling	3%	12%	42 m <sup>3</sup>	323 m <sup>3</sup>
Water for industrial use	-	28%	-	373 m <sup>3</sup>
Natural water source	1%	6%	10 m <sup>3</sup>	212 m <sup>3</sup>
Other	3%	1%	46 m <sup>3</sup>	50 m <sup>3</sup>



3. What is the approximate quantity of water that you use per month?

# WATER-CONNECTED ISSUES

rather often + very often

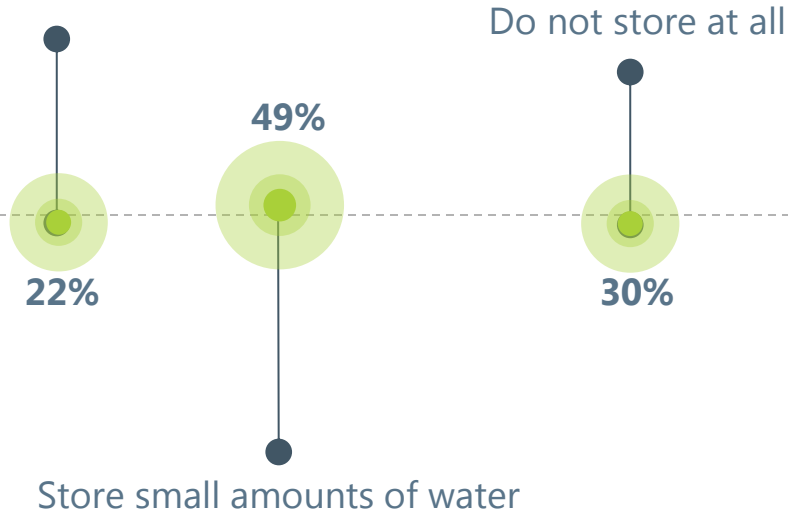


5. 7. How often does your household/ firm experiences those issues?



## STORING WATER: BUSINESS

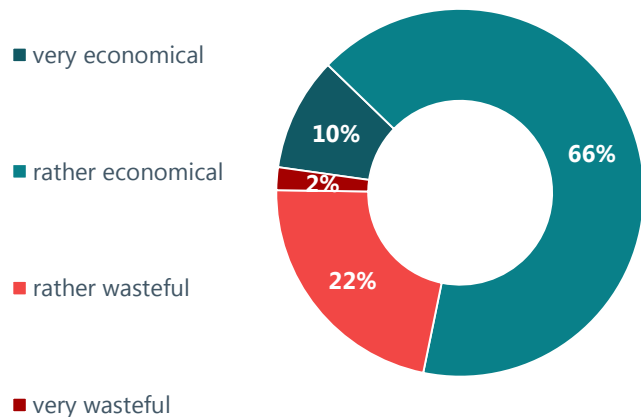
Store considerable amounts of water



97%

of firms do not lack water

# ECONOMICAL USAGE AND WATER SAVING



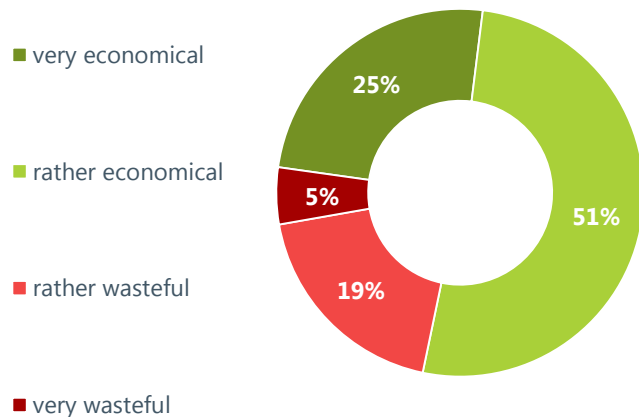
avg. monthly quantity saved:

**46,8 l**  
**21,3 BGN**

98%

of households do not lack water

# ECONOMICAL USAGE AND NEED FOR SUPPORT



avg. monthly quantity saved:

**1776 l**

**87,6 BGN**



# SAVING WATER AND REDUCING POLLUTION [POPULATION]

Fixing damaged pipes/ water supply elements	92%	Avoid disposal of chemicals in the sewers	74%
Use a washing machine / dishwasher only when it is full	64%	Less cleaning products	41%
Stopping water in household activities (bathing, washing)	46%	Harmful substances instead of preparations (salt, vinegar)	38%
Automatic dosing devices	30%	Innocuous preparations (bio-detergents)	28%
Reusing water	22%	Secondary use of water	20%
Water from natural sources	14%	Using filters	16%
Rainwater collecting	13%		
Own water drilling	8%		

# SAVING WATER AND REDUCING POLLUTION [BUSINESS]

Fixing damaged pipes/ water supply elements	98%	Use of harmless / less harmful raw materials	17%
Automatic dosing devices	39%	Technologies with less waste products	16%
Technologies requiring less water	19%	Sewage treatment	11%
Own water drilling	16%	Reduction of waste products (by waste disposal or re-use)	8%
Rainwater collecting	15%	Recycling / wastewater treatment	2%
Secondary water usage	9%		
Water from natural sources	9%		

# PRACTICES FROM THE PAST

## [SUMMARY]

- 
- Rainwater collecting
  - Own water source (well, drilling etc.)
  - Wastewater treatment plants
  - Economical use in households
  - Use of nature water sources
  - Reuse
  - Alternative sources
  - Technologies that do not waste water
  - Rainwater collecting
  - Own water source (well, drilling etc.)
  - Economical behavior
  - Nature water sources
  - Independent water sources

## ACTUAL PROPOSALS [SUMMARY]

- Replacement of the water supply network
- Faster responses from troublesome organs in case of a problem
- Rainwater collection
- Adjustment of water from public fountains
- Information campaigns
- Prudent use
- Seminars, advertising
- Stimulating people not to pollute the environment
- Replacement of the water supply network
- Rainwater collection
- Protect forests from felling
- Minimized waste
- Prudent use
- Lower cost of water
- Ecology
- Own water source (well, drilling etc.)
- Educational events among young people/ children

# 3. INFORMATION SOURCES AND AWARENESS

legal framework, information events, assessment of institutions

Prepared for:

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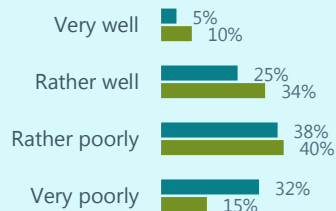


# INFORMATION SOURCES AND AWARENESS: SUMMARY

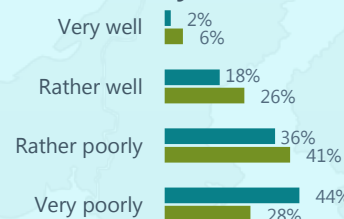
- ▶ The information about local regulations and laws concerning water use reaches the respondents most easily. In comparison to the population, firms feel more informed on the subject.
- ▶ The sources that fulfill their potential to inform the population and businesses are printed and electronic media, online media and water and sewerage companies.
- ▶ High is the share of people participating in information events among the population. 100% of those who participated at least once said that these events were useful to them, and more than a half of those who did not participate state that such events would be useful for their household.
- ▶ Unlike the population, among business representatives who attended an information event at least once, some (17%) did not find it useful. More than half of those who haven't been to such event think it would be useful for their company if they attend one in the future.
- ▶ The institutions that deal best with their duties according to the two target groups are municipalities and water supply and sewerage companies.

# INFORMATION ABOUT REGULATIONS

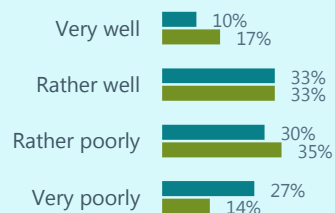
## On the territory of Bulgaria



## At EU territory



## At municipal territory



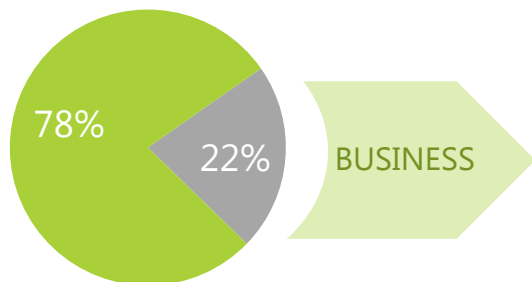
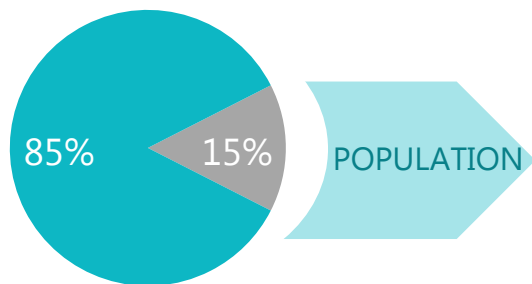
11. How well are you informed about the legal requirements concerning water on the territory of:

# INFORMATION SOURCES

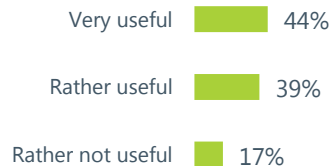
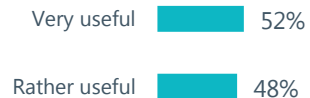
	potential to inform		provide useful information		do not provide useful information		not sure	
Print and electronic media (radio, television, local and national press)	90%	85%	78%	75%	10%	15%	12%	10%
Online media (social networks, online newspapers, blogs, etc.)	80%	81%	70%	76%	11%	11%	19%	12%
Water and sewerage companies	78%	85%	71%	74%	18%	19%	11%	7%
Municipal and state institutions	61%	75%	52%	67%	20%	22%	27%	11%
NGOs	52%	75%	48%	72%	17%	12%	35%	15%
Public events, projects, seminars, meetings	61%	76%	56%	71%	18%	10%	26%	18%

12. Which of the following can provide information about laws/ rules ...? 13. And how useful is it?

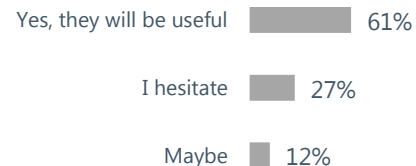
# INFORMATION EVENTS



## YES, I HAVE PARTICIPATED

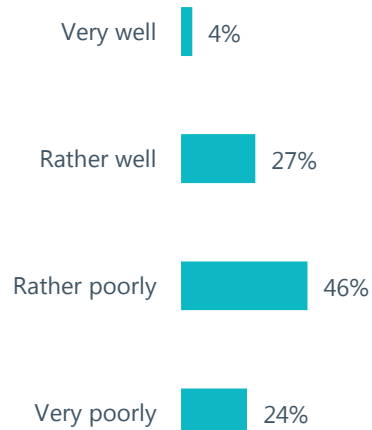


## NO, I HAVE NOT PARTICIPATED

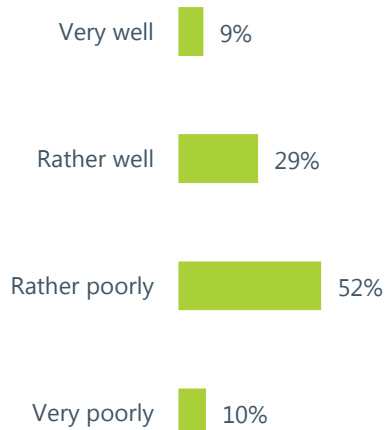


# INFORMATION ABOUT INSTITUTIONS

## BUSINESS



## POPULATION



# ASSESSMENT OF INSTITUTIONS

very well + rather well

The Municipality **56%** **36%**

The Energy and Water Regulatory Commission **24%** **14%**

The Ministry of Agriculture, Food and Forestry **20%** **15%**

The Ministry of Environment and Water **28%** **16%**

The Parliament **11%** **8%**

Municipal/ regional water supply companies **56%** **41%**

Regional administration **35%** **27%**

Agricultural land commissions **25%** **15%**

Regional Forestry Agency Smolyan **25%** **20%**

the Regional Inspectorate for Environment and Water Smolyan **29%** **25%**

East Aegean River Basin Directorate Smolyan **22%** **16%**

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