

APPENDIX 3

ANALYSIS OF HRAZDAN RIVER BASIN STAKEHOLDER CONSULTATION QUESTIONNAIRES

EUWI+ “Communication Assistance to Support the Implementation of the Actions Plan for Participative RBM Planning In Armenia” Project

Within the frameworks of the “European Union Water Initiative Plus” Project since 2017 the process of development of Sevan and Hrazdan River Basin Management Plans has commenced.

The process of stakeholder consultations and discussions started end of 2018 and will continue until June 2020, as during that time period it is expected to develop the draft RBMPs for Sevan and Hrazdan RBMPs which will be submitted to public consultation at two stages: at midterm on the main issues and at the end of the process for the full management plan .

The stakeholder consultations commenced on March 12 this year and lasted until April 12. As an important tool for public discussion and consultation process, consultation checklists/questionnaires (The original version of the questionnaire is attached to the Report Package) have been applied through which expert opinions and information were collected for the purpose of making amendments in the river basin plans and developing the Project events schedule. These checklists were filled both during the stakeholder consultation meeting held on March 19 in Hrazdan town, and the consultation visits conducted by Project Public Outreach/Awareness Specialists (Team members who are responsible for increasing publicity of the Project. They provide a communication with stakeholders throughout the Project).The questionnaires were also disseminated online, through RA MNP official web-page, EUWI+ official web-page, social networks of CWP-Armenia, as well as different Civil Society Organization networks.

The public consultation questionnaire on Hrazan River Basin has been filled in by 120 stakeholders (63 printed and 57 electronic). Some of the printed questionnaires were filled out during Public Consultation meetings (23 questionnaires), and the other part (40 questionnaires) was a result of community visits. Communities were selected based on 2 main criteria - the population and the community's recreational or economic significance. The map below (Map 1) shows the communities where the team visited during public discussion and consultation process.

Almost all stakeholders responded to closed questions on the questionnaire, but not all stakeholders answered open questions which provide a qualitative part of the questionnaire.

For example, there were 19 stakeholders (16% of respondents) who answered to the qualitative part of the 1st question of the questionnaire: “Are there other significant pressures and impacts that are missing?” There were 25 stakeholders (21% of respondents) who answered to the last qualitative point of the Main issues of the questionnaire: “Are there other significant water issues that are missing?”

The part of the questionnaire where stakeholders expressed their opinion on measures and actions to be taken in the future, has a qualitative importance for the analysis process. These actions are respectively classified into the following main groups - health, quality, quantity, ecosystems, governance.

Not all respondents answered this group of questions. The results are as follows:

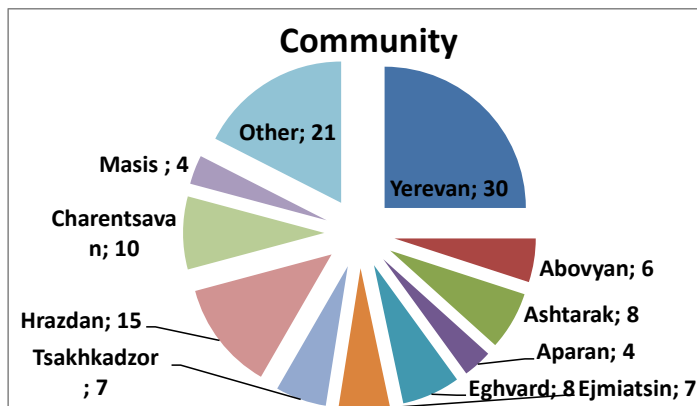
- Health- 61 stakeholders answered (51% of respondents),
- Quality- 61 stakeholders answered (51% of respondents)
- Quantity- 64 stakeholders answered (53% of respondents)
- Ecosystems- 54 stakeholders answered (45% of respondents)
- Governance- 51 stakeholders answered (42.5% of respondents)

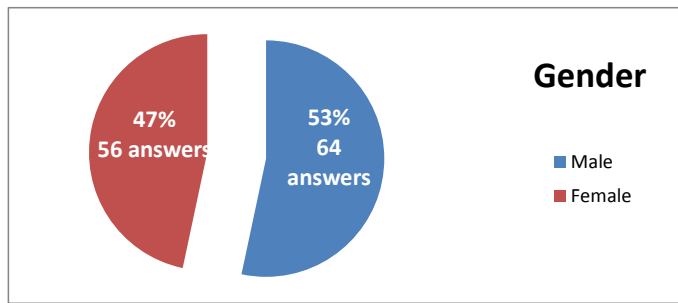
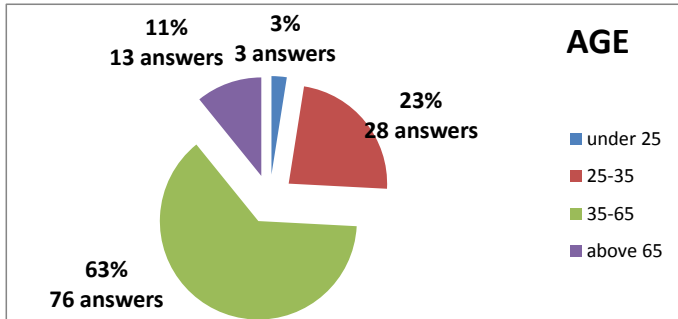
Map 1. Hrazdan River Basin Communities

HRAZDAN RIVER BASIN COMMUNITIES WHERE STAKEHOLDER CONSULTATION QUESTIONNAIRES WERE FILLED UP

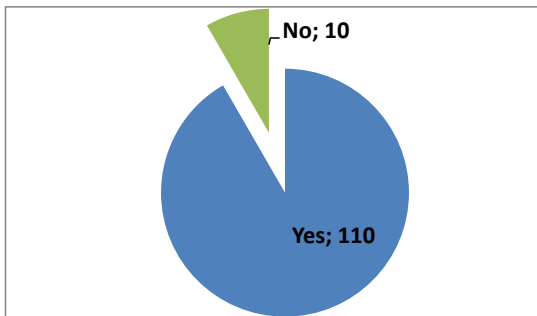


PERSONAL DATA

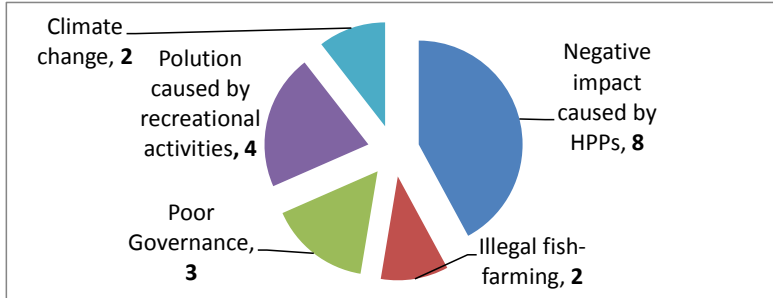




1. Do you agree that these are the key causes of water problems? (120 answers)



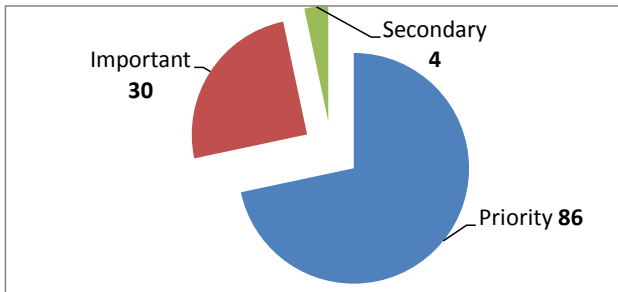
Are there other significant pressures and impacts that are missing? (19 answers) (This question was answered by 16% of the total 120 respondents, and their responses can be grouped as follows):



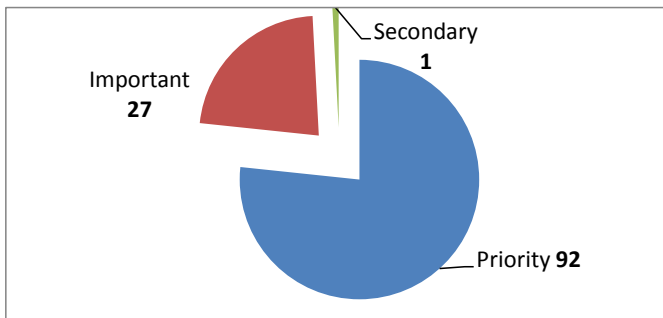
MAIN ISSUES

Some main issues have been identified on the river basin district; they are strategic for the future, for the human and aquatic life. How do you consider them personally? The above mentioned questions tried to clarify the stakeholders' opinion on those main issues.

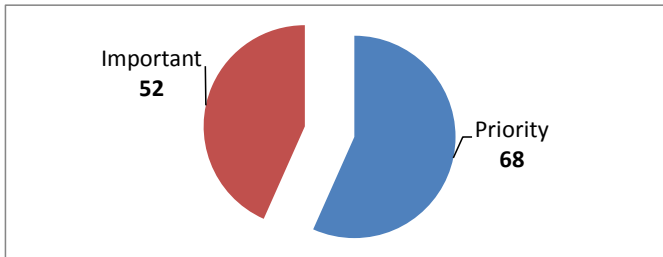
- 2. **Health issues**, that occur due to improper condition of water supply and water drainage systems (consider the importance) (120 answers)



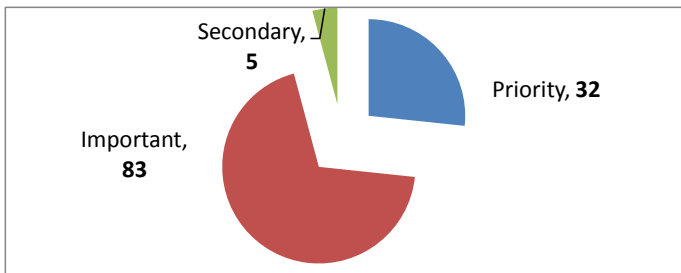
- 3. **Deterioration of Water quality**, due to which eco-systems, food safety and human health are endangered. Do you consider that prevent surface and ground waters pollution by domestic wastewater discharge and diffuse pollutions from agriculture and the abandoned mines, are (120 answers)



4. **Deterioration of water quantity**, which causes river shortages hampers the water users' economic activities; do you consider that protect and ensure efficient use of water resources by management & control are **(120 answers)**

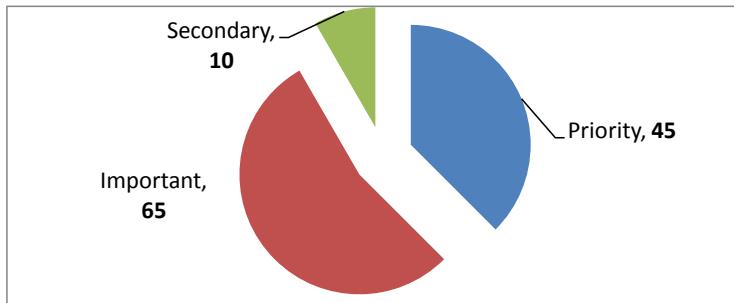


5. **Deterioration of natural ecosystems** due to human activities and climate change; do you consider that assess the ecosystem ecological status with monitoring development, is **(120 answers)**

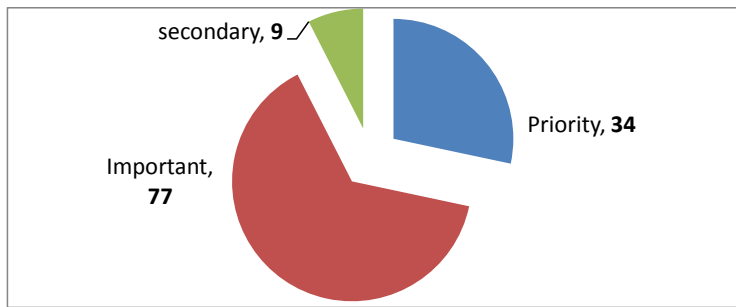


6. **Governance.** The legislative regulations and the government's institutional capacities are essential for the effective management of water resources and solution of the detected problems, do you consider that improve

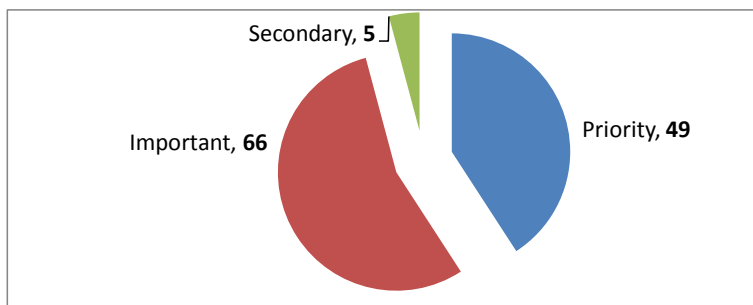
- **the water legislation (120 answers)**



- **institutional capacity (120 answers)**

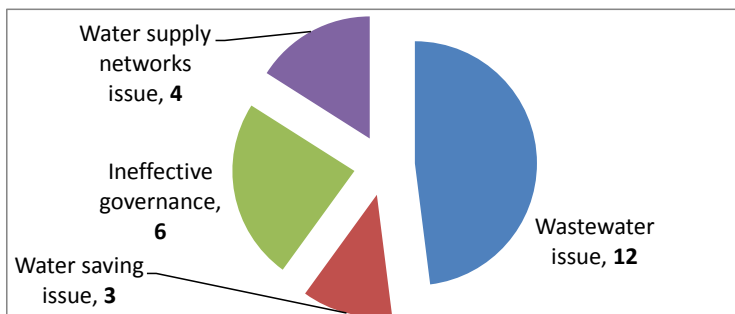


- **The awareness and information for people to accelerate the improvement of water quality (120 answers)**



7. Are there other significant water issues that are missing? (25 answers)

(In addition to the abovementioned problems related to water, 21% of the respondents mentioned other issues as well, which can be classified as follows:



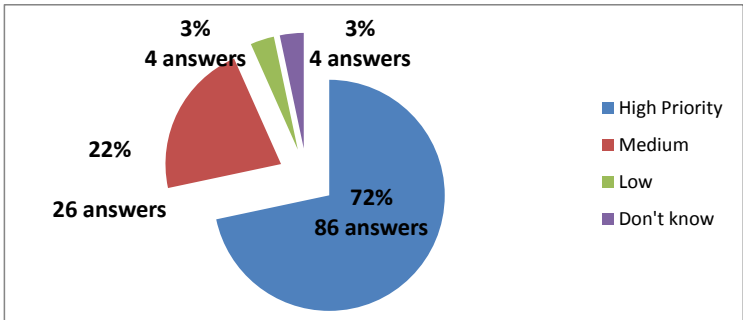
As seen from the received answers, for the majority of respondents all the mentioned main issues are primary or important, and only a small per cent of the respondents think that those issues are secondary. For the stakeholders, of particular importance are the issues related to water quality and healthcare.

POLLUTION/SOURCES OF POLLUTION

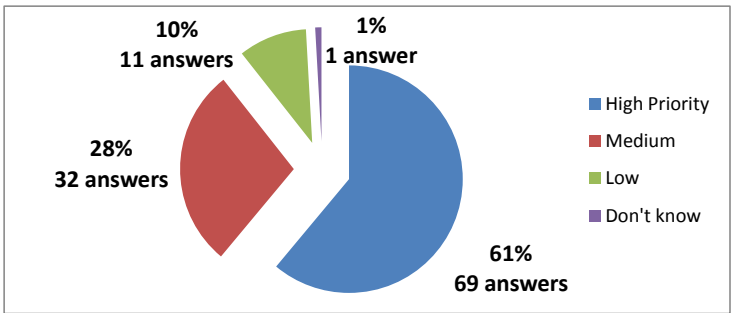
The next questionnaire group relates to the functions and use of water. The stakeholders have tried to state the pollution sources as per priority, where 1 is high priority, 2-medium, 3-low priority and 4: don't know).

Prioritize the most important sources of pollution

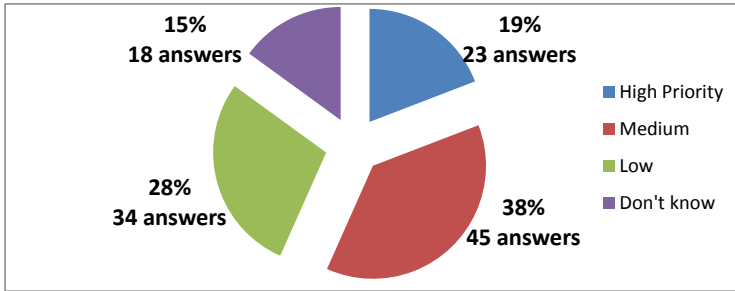
- Domestic wastewater (120 answers)



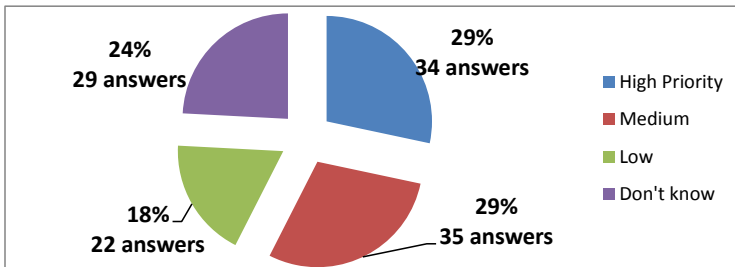
- Industrial wastewater (113 answers)



- Agricultural pollution (120 answers)



- Abandoned mines (120 answers)



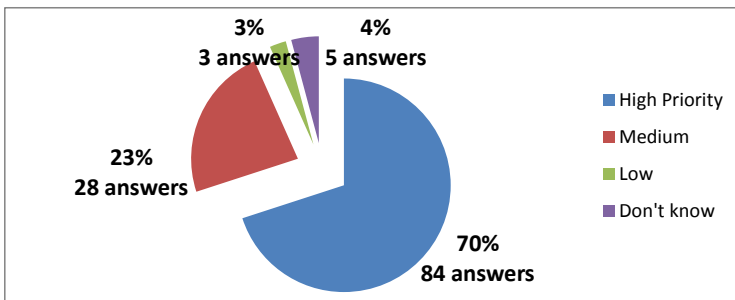
The result of the analysis of this section shows, that according to the Hrazdan RBD stakeholders, the most important source of pollution is domestic wastewater (86 answers) and then industrial wastewater (69 answers).

POLLUTION/ EFFORTS FOR POLLUTION REDUCTION

These question groups are also related to the water use and functions, The stakeholders in this case have mentioned the effort to reduce the pollution as per priority, where 1 is high priority, 2-medium, 3-low priority and 4: don't know).

prioritize the efforts to do to reduce pollution

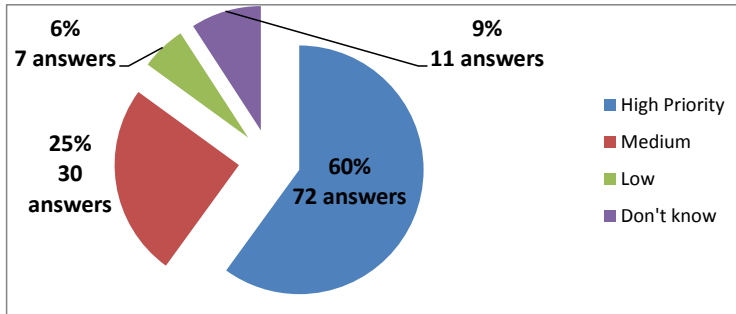
- domestic wastewater (120 answers)



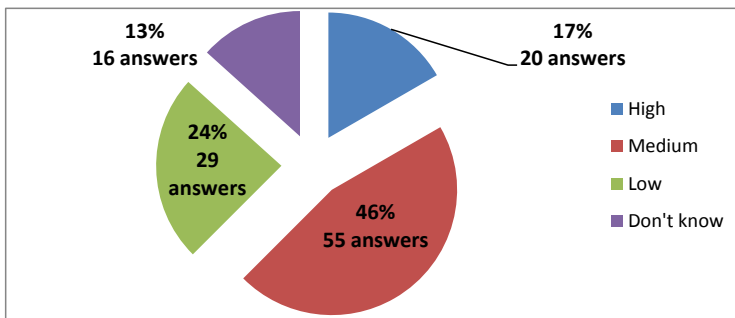
Commenté [FP1]: Why is there no mention of fish farming and solid waste, whereas it is the case in the questionnaire for sevan ?

Answer. There were no section on fisheries and solid waste in the questionnaire, because there are no industrial fisheries in Hrazdan RBD. There is no point on solid waste, as it was a technical omission, but in the section "What measures and actions to take in the future?" the issues on solid waste were discussed and the results are on page 14.

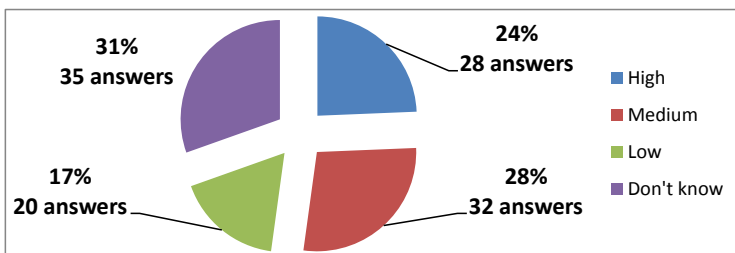
- industrial wastewater (120 answers)



- agricultural pollution (120 answers)



- Abandoned mines (115 answers)



The analysis of the responses shows that the most important sources for the reduction of pollution in Hrazdan RBD are domestic and industrial wastewater.

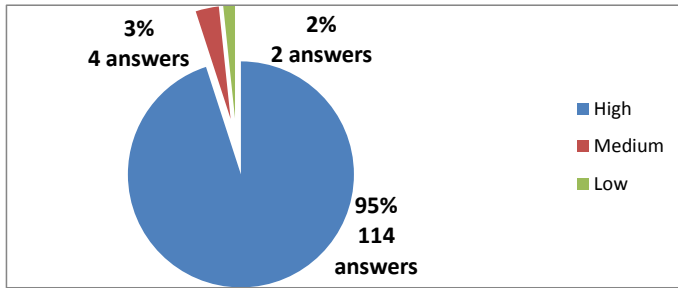
MAKE AVAILABLE WATER IN QUALITY AND SUFFICIENT QUANTITY FOR THE USES

The questions raised here are related to the insurance of water quantity and quality availability for sufficient use. The stakeholders tried to mention the most important purposes of water use, and in case of the the

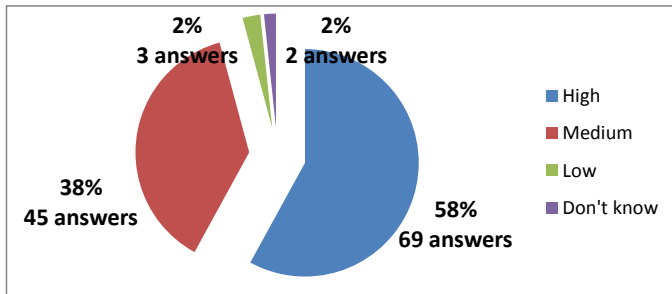
availability of water resources, the sources for pollution reduction, as per priority (where 1 is high priority, 2-medium, 3-low priority and 4- don't know).

What are the most important uses?

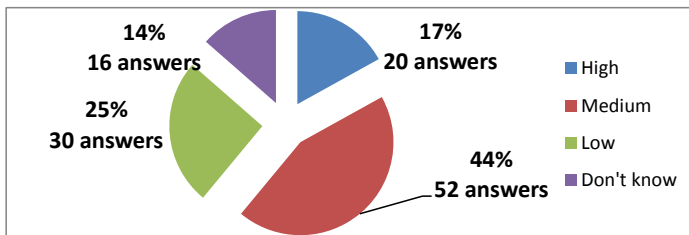
- **drinking water and water for domestic use (120 answers)**



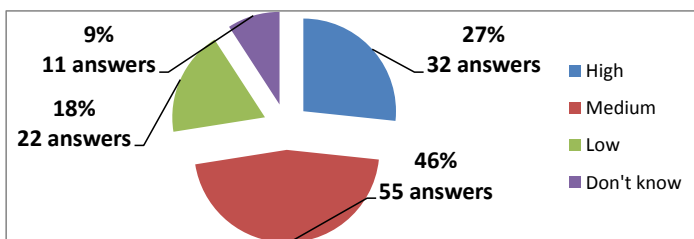
- **irrigation in agriculture (119 answers)**



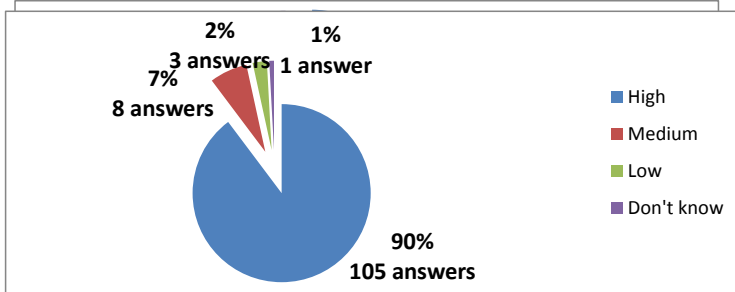
- **water in industry (118 answers)**



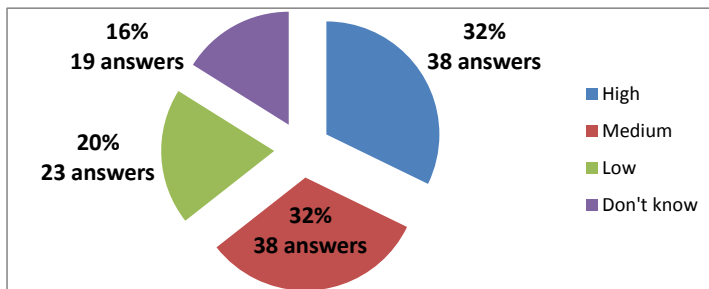
- **water for recreation (120 answers)**



- water for energy production (116 answers)



- water for aquatic life and biodiversity (118 answers)



As per the received answers, the most important purposes in Hrazdan RBD are for drinking and domestic use.

INSURANCE OF NECESSARY WATER QUALITY AND QUANTITY FOR USE/ EFFORTS (MEASURES) TO SHARE THE WATER RESOURCE AVAILABLE?

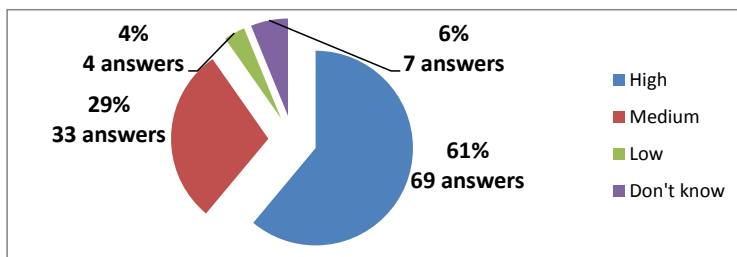
This group of questions relates to the measures taken for the insurance of water resources availability. The stakeholders prioritized those efforts for the Hrazdan RBD, where 1 is high priority, 2-medium, 3-low priority and 4 - don't know).

Prioritize the most important efforts to do to share the water resource available

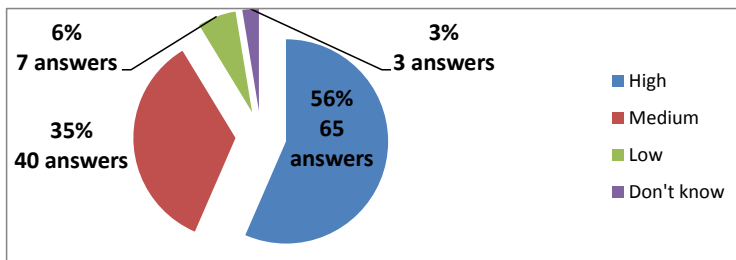
- **Protect drinking water (117 answers)**

- **Protect aquatic life (113 answers)**

- **Ensure water for irrigation (115 answers)**

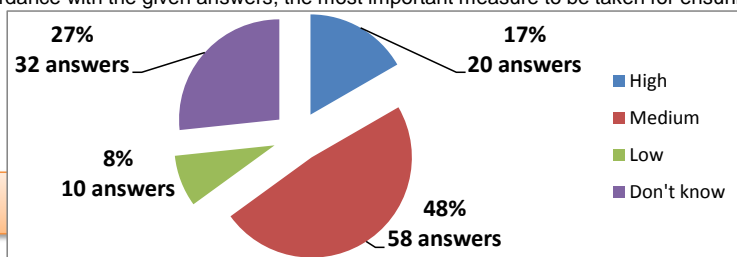


water for economic activities (120 answers)



- **Ensure**

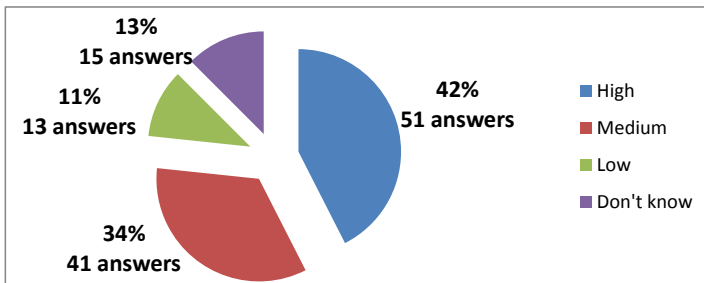
In accordance with the given answers, the most important measure to be taken for ensuring the availability of water in Hrazdan RBD is the protection of drinking water.



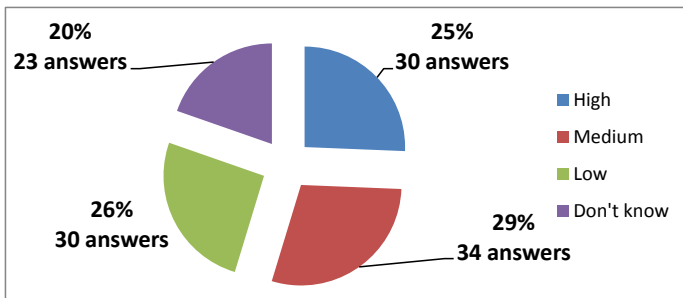
This question relates to Hrazdan RBD stakeholders' attitude towards the prevention and protection from floods and droughts.

The stakeholders have prioritized those measures, for the Hrazdan RBD, where 1 is high priority, 2-medium, 3-low priority and 4 - don't know).

- **Prevention and protection from droughts (120 answers)**



- **Prevention and protection from floods (117 answers)**



WHAT MEASURES AND ACTIONS TO TAKE IN THE FUTURE? PLEASE GIVE YOUR OPINION

In this section of the questionnaire the stakeholders expressed their opinion on the measures to be taken in the future. These actions are respectively classified into the following main groups -health, quality, quantity, ecosystems, governance. As the questions included in this section are open, then during the analysis the received answers have been grouped in accordance with the logical similarity, being listed as per the order of priority.

1. Health (61 answers)

- Construction of wastewater treatment stations, making it mandatory in the recreational areas **(29 answers)**
- Continuous water quality supervision for the prevention of diseases **(18 answers)**
- Repair of water supply pipelines and networks **(14 answers)**

2. Quality (61 answers)

- Wastewater treatment, waste management preventing contamination of surface and underground waters **(31 answers)**
- Regular water quality testing **(23 answers)**
- Maintenance of sanitation and hygiene norms **(5 answers)**
- Development of irrigation water standards **(2 answers)**

3. Quantity (64 answers)

- Prevention and reduction of water losses, **(18 answers)**
- Review of water use permit issuance procedure **(17 answers)**
- Additional storage of water, construction of reservoirs, **(12 answers)**
- Installation of water management equipment **(9 answers)**
- Rational water use with water saving technologies, **(5 answers)**
- 24-hour water supply insurance **(3 answers)**

4. Ecosystems (54 answers)

- Development of mechanisms for ecosystem assessment **(27 answers)**
- Reduction of human impact on ecosystems **(16 answers)**
- Climate change adaptation/mitigation measures **(7 answers)**
- Regular ecosystem cleaning **(3 answers)**
- Creation of artificial ecosystems **(1 answer)**

5. Governance (51 answers)

- Transparent and accountable governance, **(35 answers)**
- Clarification of legislative regulations **(7 answers)**
- Involvement of CSOs in the governance procedure **(4 answers)**
- Fair distribution of water **(3 answers)**
- Eco-education, measures aimed at awareness raising **(2 answers)**