SYNOPSIS

REPORT ON CAPITALIZATION PROCESS

Jaroslav Černi Institute for the Development of Water Resources (FB 10)

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DRINK ADRIA

Adriatic IPA
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1. INTRODUCTION

Capitalization and sustainability of project activities is important for water resources management given the significance of safe drinking water supply around the globe. Within the scope of DRINKADRIA project area, these activities comprise of involvement of identified stakeholders in eight countries in addition to institutions involved in project implementation. Since the safe and stable drinking water supply is strategic goal in each country well planed activities that involve relevant stakeholders are added value to capitalization and sustainability. Further more, given the significance of the topic to human society, the majority of capitalization processes enlisted in this report attracted media attention. Thus, the main project objectives are spreader to a general public. Since the begging of the project, all activities on implementation of tasks that address capitalization and sustainability are coordinated and accomplished in line with other technical work packages (Cross border water resources management, Cross-border management of drinking water supply systems, Pilot actions) objectives and outputs.

This report summarizes the main outputs for all capitalization processes and includes relevant data and information extracted from national reports provided by all Final Beneficiaries, and other reports (Implementation Report on the Capitalization Plan Preparation for DRINKADRIA project, Report on methodology of project integration, Report on the First Stakeholders National Events, Report on the Second Stakeholders National Events, Report on the Third Stakeholders National Events) that address capitalization and sustainability of strategic project DRINKADRIA. All reports, outputs, relevant information and data collected during the project implementation are available at the DRINKADRIA shared platform (http://drinkadria.fgg.uni-lj.si/) and can be used by stakeholders, decision makers and general public.

2. METHODOLOGICAL FRAMEWORK and TOOLS

The methodology for knowledge and experience sharing and capitalization among the stakeholders within the project team and beyond is commonly agreed and flexible du to:

- Diversity of project partners;
- Diversity of issues specific for each pilot area;
- Diversity of issues/ problems with respect to Cross – Border and regional Drinking Water Supply Systems within DRINKADRIA project implementation area ;
- Diversity and complexity of legal framework of relevance for project implementation;
- Diverse issues, pressures and constrains linked to various drinking water sources within the Pilot Areas and beyond; and
- Other.

This methodological framework sustains establishment of logical relationships of data and information provided by all FBs of relevance for integration with respect to capitalization and sustainability of projects results and outputs. The first step in methodology development was to identify type of stakeholders within and beyond the project team. Figure 1 present project partners type and resulting specific expertise and skills.

Project partner type	Specific Expertise and Skills
AUTHORITY *(LB & FBs : 2, 6, 15)*	Inputs and skills regarding regional authorities hand on experience
WATER UTILITIES *(FBs: 1, 4, 7, 13, 14)*:	Identification of long term capitalization from their point of view, particularly inputs to processes that will be supported by networking
RESEARCH AND EDUCATION *(FBs: 3, 5, 8, 9, and 12)*	Integration of research institution know-how into capitalization methodology framework
ASSOCIATE	Verification of the capitalization methodology

Figure 1: Project Partners Skills and Expertise

Some of the main characteristics of methodology approach are:

- A permanent alignment with others DRINKADRIA work packages to capitalize project outputs and to capitalize tremendous skills and expertise by all participants – FBs and LP in implementation of similar projects ;
- Active involvement of LP and all FBs in activities of relevance for capitalization and sustainability of outputs from all WPs;
- Involvement of stakeholders, associations, etc. at the local, regional, national and cross-border level that do not participate in DRINKADRIA project but have valuable experience of significance for implementation of DRINAKADRIA project in line with defined objectives and results;
- Involvement of decision makers at the local, regional, national and cross-border level that do not participate in DRINKADRIA project but have valuable experience in decision making processes that might be significant for protocols advocating; Scalable and pragmatic approach for integration;
- Effectiveness; and
- Flexibility within the framework that guaranty fulfillment of objectives and results.

In the development of methodology 3 major steps are identified:

- Planning of the processes/ activities of relevance for implementation;
- Deliver of the processes/ activities; and
- Operation of the integration.

The capitalization of experience and knowledge is build up and generate a capital from information or knowledge and skills available in an organization, in order to make them available to other institutions or professionals. It is designed to ensure that every individual's experience is not confined to him or herself alone, but serves the community in a knowledge sharing movement, which imparts a participatory aspect to its conduct. The implementation of new projects or the conducts of new actions are facilitated by the preservation and transmission of acquired experience and knowledge. Application of the experience capitalization comprise of stakeholders individual and institutional experience and knowledge that is transformed into capital to be used in future.

Given that, the stakeholders' management is planed to generate as much as possible knowledge and experience, and to guarantee project sustainability. Figure 2 depicts schematically the main principles applied in stakeholders' management.

Figure 2: Schematic of Stakeholders management applied in DRINAKADRIA Project

Since the methodology addressed here is used for specific objectives and results that are quantifiable, e.g., national events, the separate reports (3) provide in details specific results and outputs collected during the 24 stakeholders events.

Coordination of the methodology (data and information collection process) framework development was done by FB 10 – lead organization for WP3, and all project partners have contributed and provided valuable inputs. In summary, the uniform questionnaires are developed and handed out during the stakeholders' national events, relevant projects with outputs and results that are added value to DRINKADRIA capitalization and sustainability are collected. The full list of the projects is available on: http://drinkadria.fgg.uni-lj.si/capitalization_sustainability/related-projects/.

3. DRINKADRIA shared platform

The tool that will sustain sustainability of project outputs and results, and capitalize all project outputs generated during the implementation process is DRINKADRIA project shared platform, available at the: http://drinkadria.fgg.uni-lj.si/.

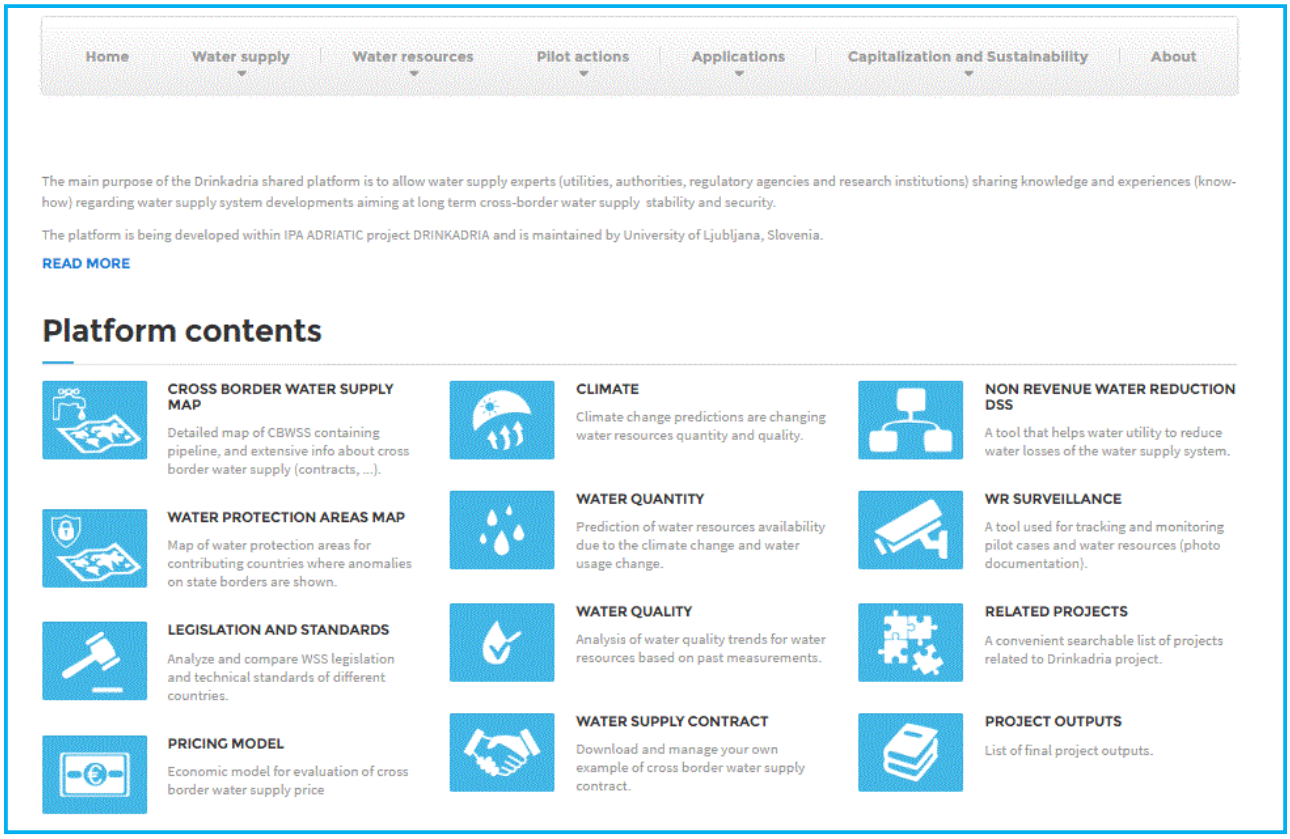

Figure 3: DRINKADRIA shared platform content

The main purpose of the DRINKADRIA shared platform is to allow water supply experts (utilities, authorities, regulatory agencies and research institutions) sharing knowledge and experiences (know-how) regarding water supply system developments aiming at long term cross-border water supply stability and security. Further, its purpose is to improve water supply services, to provide support in risks reduction (Figure 4) with respect to existing cross border water supply systems.

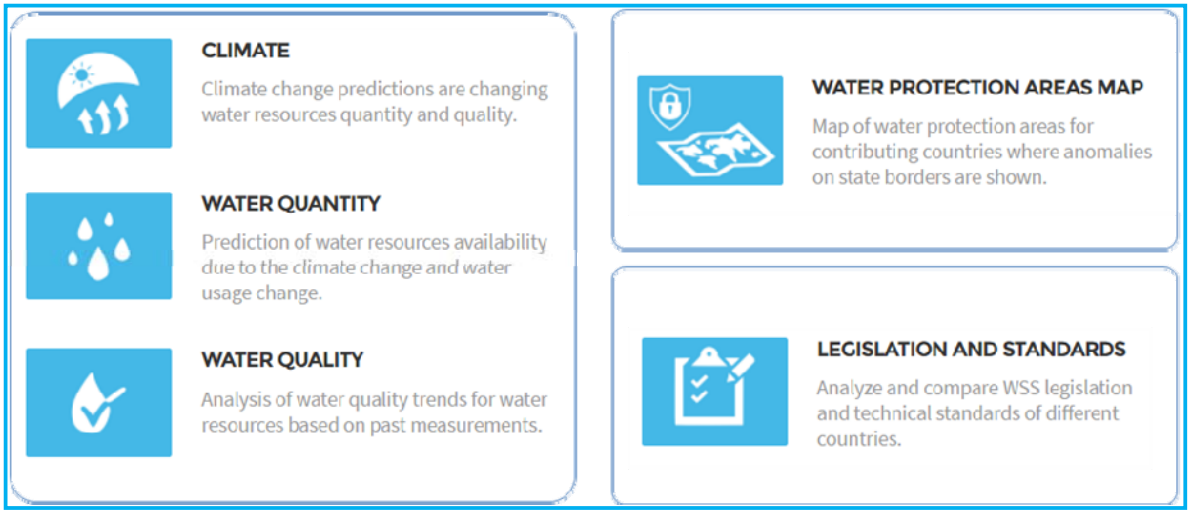

Figure 4: Risk Assessment approach available at the DRINKADRIA shared platform content

Moreover, the platform provides comprehensive maps on water quality and quantity maps, and water exploitation index that results from climate, land use and other relevant changes. Additionally, comprehensive comparison of standards and legislation among countries within the scope of the project area are available at the shared platform. Utilization of the shared platform data, information and tools helps in establishment of the new cross –border/ regional water supply system (Figure 5). For platform users, the CB water delivery cost estimation is available, together with Non Revenue Water Reduction DSS, and other modules significant for cross- border/ regional drinking water supply systems.

Figure 5: Framework for new cross -border water supply (http://drinkadria.fgg.uni-lj.si/water-supply/)

The increase in content upload, information and data significantly contributed in shared platform visiting (Figure 6).

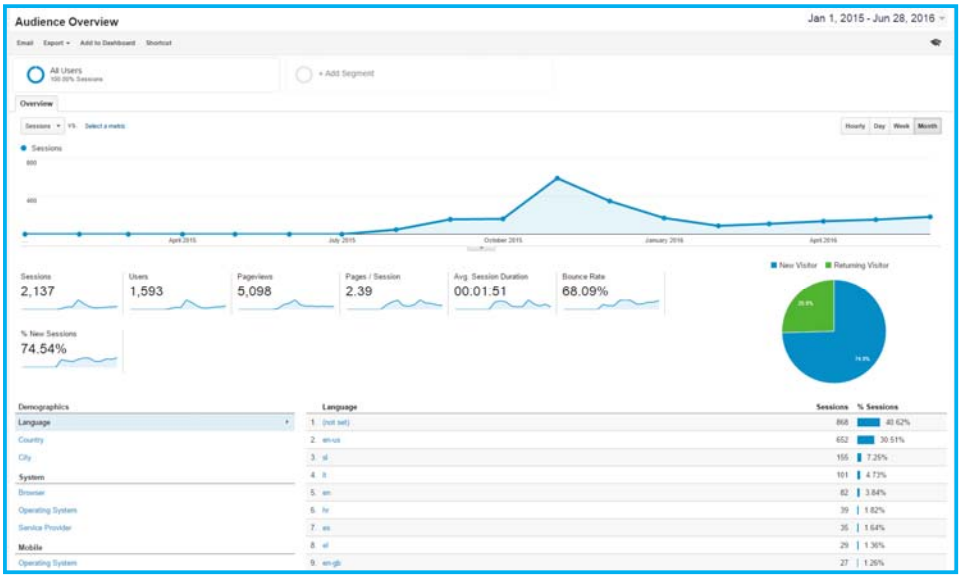

Figure 6: Shared platform Audience Overview

Finally on, the shared platform provides comprehensive exercise for Pricing Model (http://drinkadria.fgg.uni-lj.si/water-supply/pricing-model/), and generates all project outputs as presented in Figure 7.

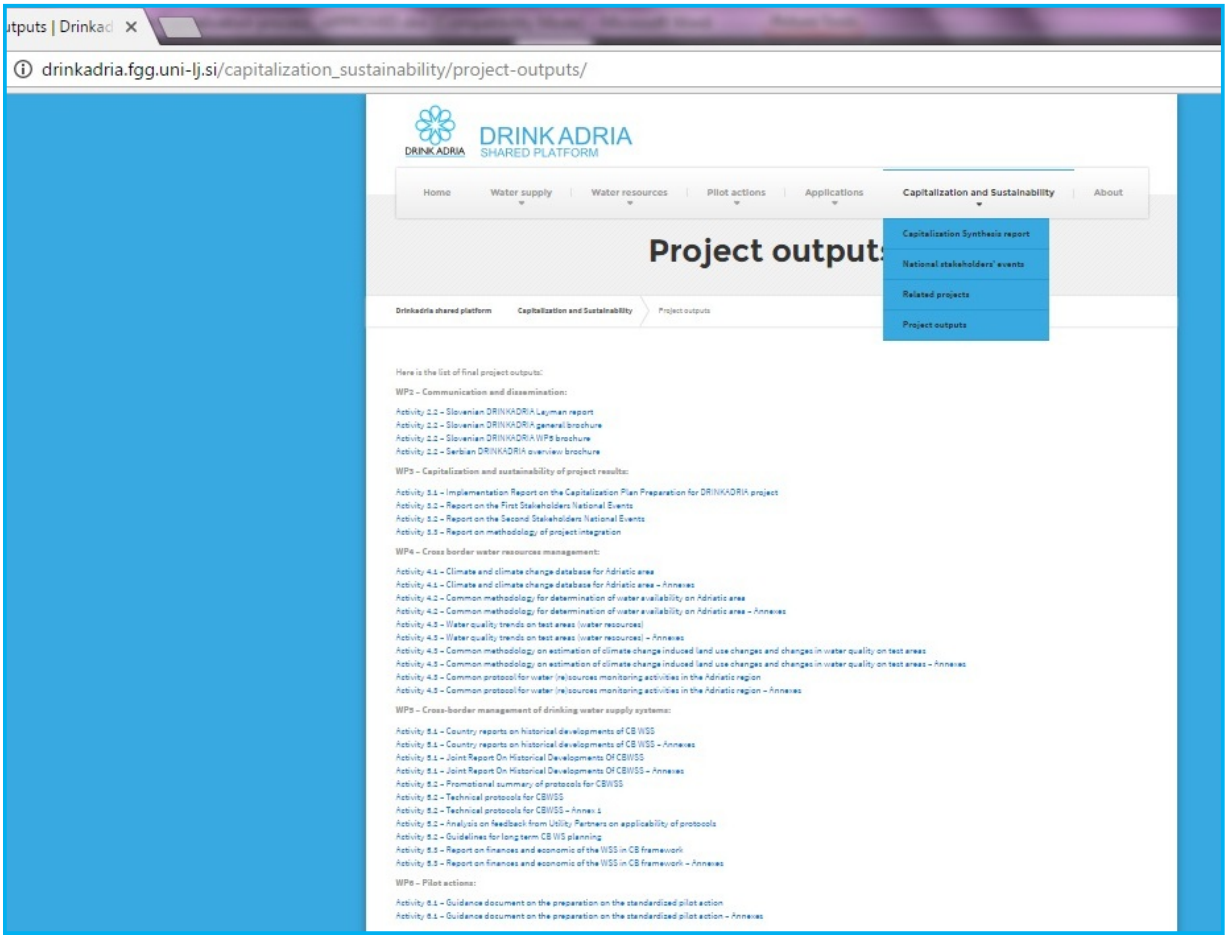

Figure 7: Screenshot of all DRINKADRIA project outputs on project shared platform (http://drinkadria.fgg.uni-lj.si/capitalization_sustainability/project-outputs/)

4. OUTLINE OF STAKEHOLDERS NATIONAL EVENTS

The capitalization of experience and knowledge is build up and generate a capital from information or knowledge and skills available in an organization, in order to make them available to other institutions or professionals. It is designed to ensure that every individual's experience is not confined to him or herself alone, but serves the community in a knowledge sharing movement, which imparts a participatory aspect to its conduct. The implementation of new projects or the conducts of new actions are facilitated by the preservation and transmission of acquired experience and knowledge. Application of the experience capitalization comprise of stakeholders individual and institutional experience and knowledge that is transformed into capital to be used in future.

During the DRINKADRIA project implementation 24 stakeholders' events are organized in eight countries. Generally speaking, in all countries ***the First Stakeholders National events*** are finalized during the first year. The main objectives to be addressed are defined at the project level:

- Collect feedbacks from stakeholders in eight countries by uniform questionnaire;
- Introduce the main DRINKADRIA project objectives and goals to relevant stakeholders at the national levels;
- Address the topic and issues that are country specific with respect to cross- border/ regional water resources and drinking water supply management.

Total number of participants during the First National Events in eight countries is 330, while only 156 of them provided their feedbacks on questionnaire (comprehensive report is available at : http://drinkadria.fgg.uni-lj.si/externalapp/content/outputs/WP3/FB10_Report%20on%20the%20First%20Stakeholders%20National%20Events_3.2.pdf)

The Figure 8 bellow represents summary of stakeholders' feedbacks provideded during the first national events.

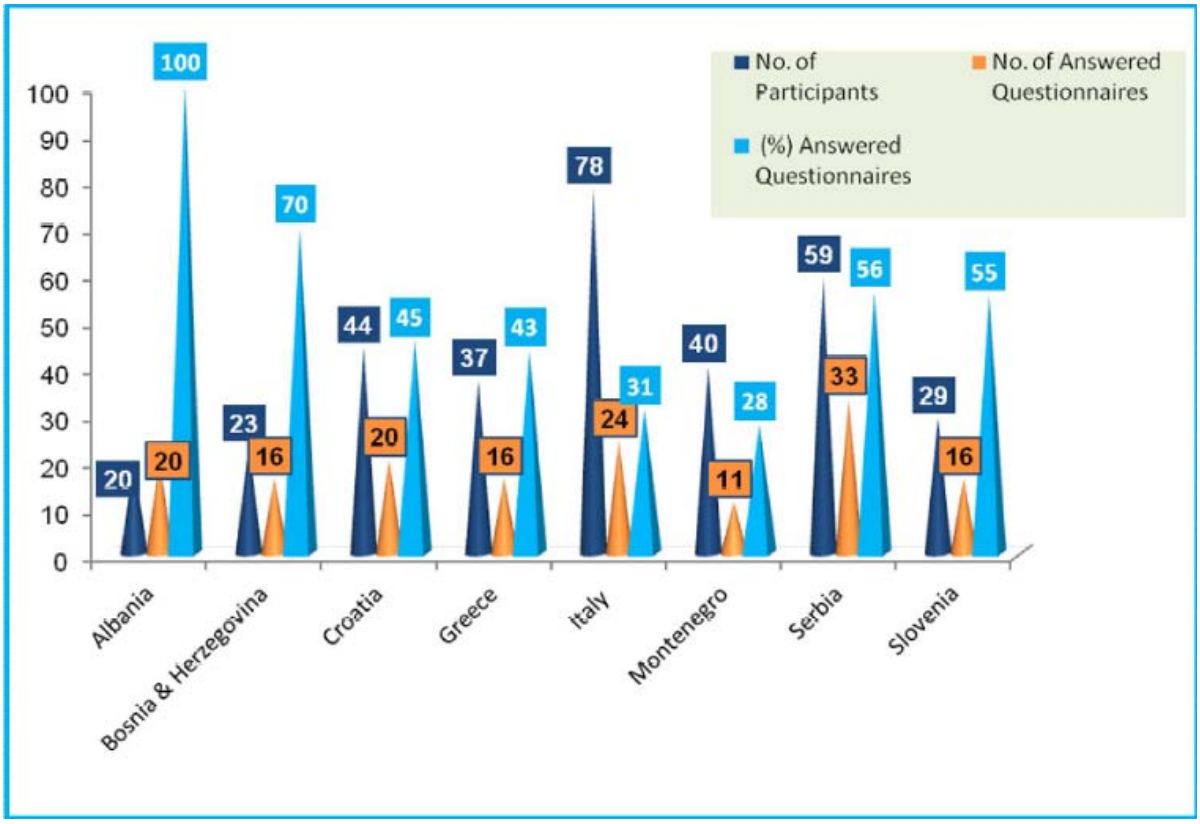

Figure 8: Outputs of the First Stakeholders National events with respect to number of stakeholders and uniform questionnaire

As presented in Figure above, only in Albania all participants provide answers to questions listed in questionnaire, followed by Bosnia and Herzegovina with 70 % of stakeholders provide feedbacks. In Serbia and Slovenia over 50 % participants answered to questions, 56 and 55, respectively. Less that 50 % filled questionnaires is reported for Croatia (45%), Greece (43%), Italy (31 %), and Montenegro (28 %).With respect to professional background, majority of stakeholders that participate on events in eight countries are from Water Supply Utilities. General conclusion is that workshops successfully implemented priorities listed in agendas and invitation letters. Firstly, all stakeholders that participated are well informed on DRINKAKDRIA objectives and main goals.

Secondly, in some countries specific problems are addressed and discussed, e.g., efficiency of water supply systems, protection zones, water tariffs, water quality, etc.

With respect to answers provided in questionnaires, despite that the main identified issues differ from country to country (8 national summary reports on stakeholders event and questionnaires are received) they indicate that all relevant issues and key processes for cross – border/ regional water supply and water resources management are included in DRINKADRIA project application form. Given the specific questions, majority of the stakeholders recognized water losses as a one of the main problems in water supply management, followed by the water tariffs (water pricing mechanisms) that are still social category in some countries. Figure 9 present answers provided by participants in Italian stakeholders' national events.

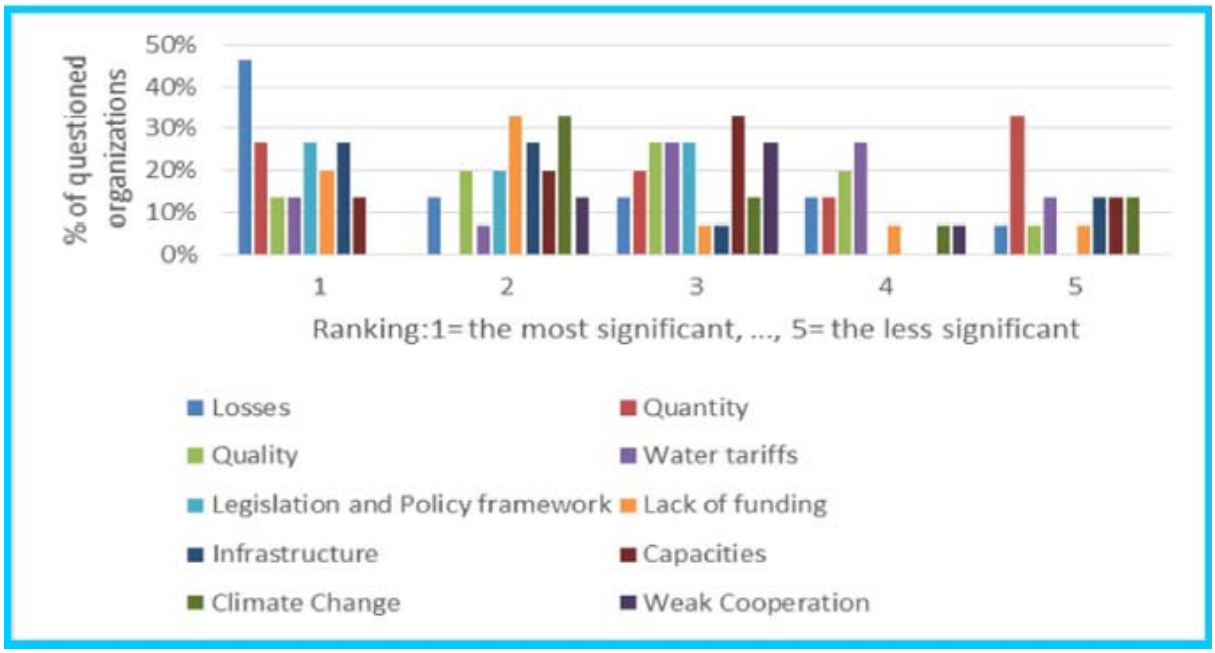

Figure 9: Italian stakeholders' answers on main water management issues at the present during the workshop organized in Castelfidardo (AN) (Source: Final Report on First Stakeholders National Events)

In comparison to results presented above with respect to water management issues, the answers provided by majority of stakeholders are in agreement with results exhibited schematically.

Moreover, it is quite important for implementation of the project since the key issues are identified as problems are well defined for cross – border/ regional water management and in particular drinking water supply systems. In addition, water quantity is recognized as an issue due to climate change, losses, etc. Majority of participants ate the national workshops recognized an infrastructure ageing and luck of funding as a problem for sustainable management of the cross-border/ regional water supply systems. Respondents think that policy and legal framework for the cross – border water supply management should be enforced and sometimes the political will ate the state level is insufficient. Quantity has driven significant attention by stakeholders that provide their inputs. Although the state level institutions are indicated as a main player in water supply management, the significant number of answers indicates that stakeholders recognized the important role of their institutions for sustainable water supply management. With respect to cross cutting issues of relevance for DRINKADRIA project implementation answers provided by Albanian stakeholders are as presented in Figure 10

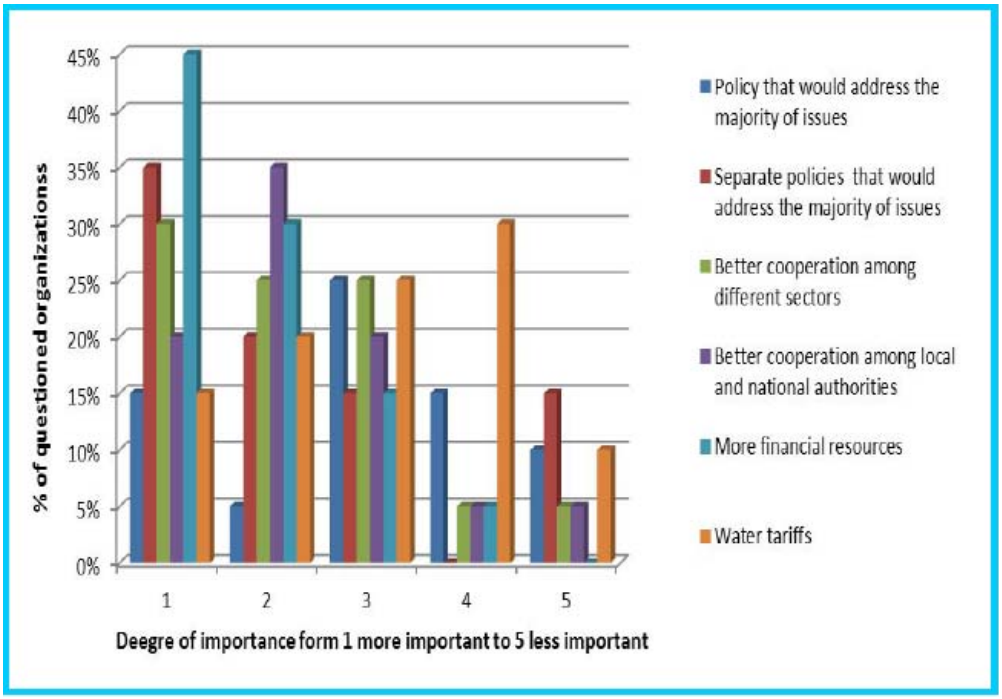

Figure 10: Albanian stakeholders answers on cross – cutting issues solutions (Source: Final Report on First Stakeholder s National Events)

It is in agreement with great majority of answers provided by stakeholders in other countries, e.g. cross – cutting issues should be addressed by better cooperation among the sectors, more political will and strategic frameworks ate the national levels.

In Serbia, the discussion highlighted the need for a gradual, permanent increase of efficiency of waterworks enterprises in a sustainable manner. This will require changes to both the organization and activities of waterworks companies, as well as establishing appropriate organizational and regulatory framework in which these companies operate. A special role in this process will be played by consulting firms, institutes and universities, which should provide the knowledge and skills needed to increase the efficiency of waterworks enterprises in a technically correct, sustainable and cost-effective manner. With respect to the main water supply management constrains in the next 25 - 30 years, participants in Greece ranked them as depicted in Figure 11.

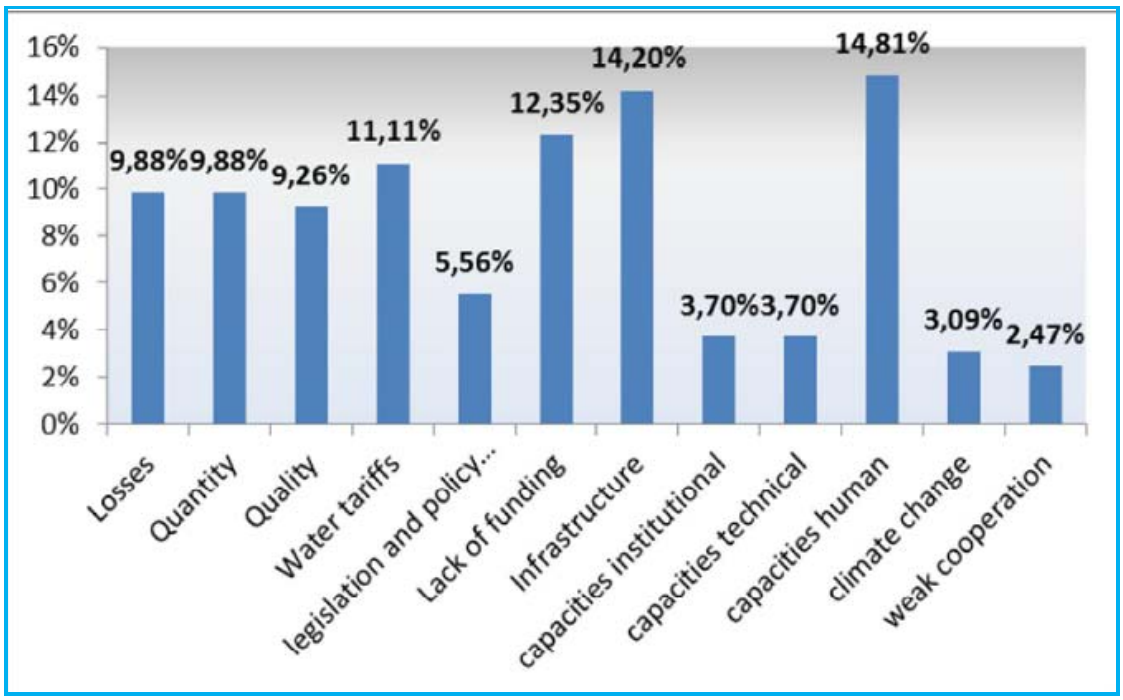

Figure 11: The main water supply management constrains in the near future (next 25 -30 years) ranked by stakeholders in Greece. (Source: Final Report on First Stakeholders National Events)

Based on data provided by stakeholders from Bosnia and Herzegovina, the issues in the field of water quality showed that problems were regarding source protection issues and point source pollution while question regarding water supply distribution constrains show that persistent problems were equally distributed among different answers with emphasis on ageing of the distribution network and poor maintenance of water supply distribution system. According to Croatian national report, respondents think that some cross-border issues could be resolved primarily with better cooperation between local and state governments, as well as with better cooperation between different sectors and with more financial resources. They also consider that the separation of politics from solving most of the problems is somewhat a better solution then politics solving most of the problems. 75% of respondents consider that the state activity is not the only one that contributes to improvement of water supply system, but also local and regional self-government, utility companies, Croatian waters, universities and scientific-research institutions, and individuals. About half of the respondents are moderately familiar with the role and activities of bilateral commissions for cross-border management of water supply systems and water resources, and the rest are poorly familiar. On the other side, 65% of respondents are moderately familiar with the role and activities of local governments for cross-border management of water supply systems, and the rest are poorly familiar. Majority of stakeholders in Montenegro ranked their knowledge on local authorities' role, cross – cutting issues and river basin management plans as moderate. The water pricing issue was stressed as very important by Slovenian stakeholders'. Even the national legislation provides some framework for the water pricing mechanism the water supply economics foreseen for the development in the DRINKADRIA project seems important for the participants.

For the ***Second Stakeholders' National Events*** (II SNE) within the scope of DRINKADRIA project the uniform questionnaire was developed. The goal of this questionnaire was to collect stakeholders' feedbacks on protocols development, their opinion and knowledge on DRINKADRIA web platform, interest to participate in development of methodologies that will evaluate:

- Water availability;
- Estimation of climate change – induced land use changes;
- Water resources vulnerability;
- Risks and hazards; and
- Delineation of water protection areas.

Moreover, they provided feedbacks regarding the topics of the Third Stakeholders National Event. In summary, almost 300 stakeholders participated in eight countries. With respect to answered questionnaires over 50 percent of participants provided their feedbacks in Albania, Bosnia and Herzegovina, Croatia, Montenegro, Serbia and Slovenia, while for Greece and Italy the number of answered questionnaires is bellow 30 percent, namely 30 and 26, in a given order. The Figure 12 exhibits summary of answered questionnaires ratio with respect to number of participants.

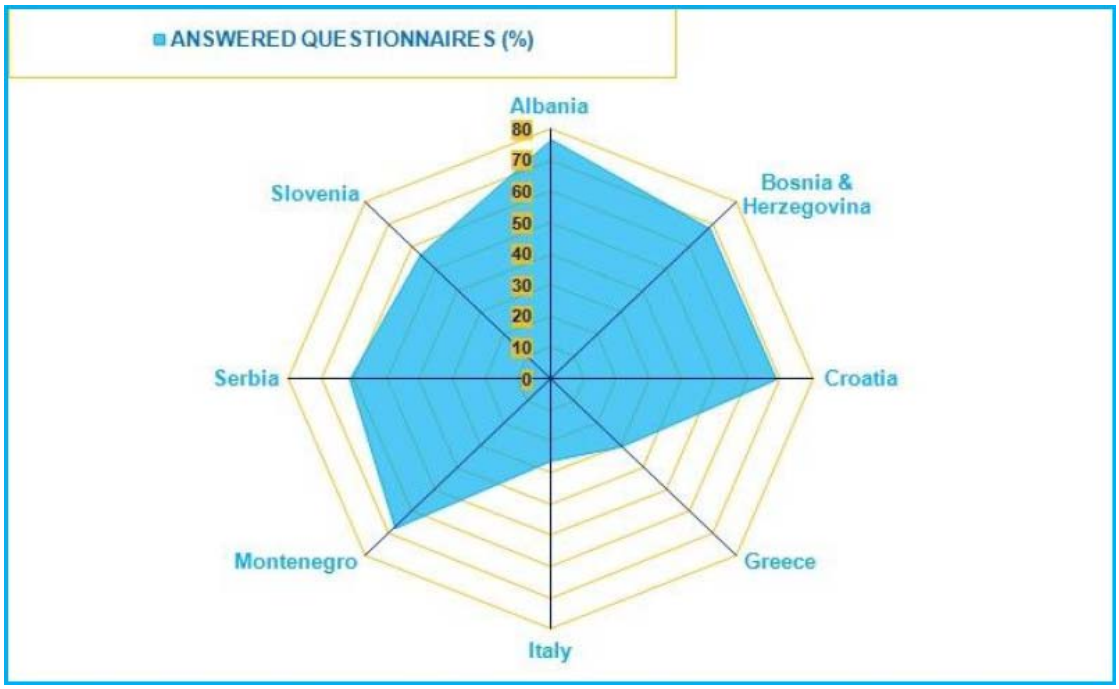

Figure 12: Percentage of answered questionnaires per country (Source: Final Report on Second Stakeholders National Events)

During the II SNE in **Albania**, the participants were familiarized with information and data that will improve their understanding of the **water losses** origin, nature and impacts on drinking water supply systems, Furthermore, the participants were involved in **water**

balance exercise on site. In Bosnia and Herzegovina Cross border water supply- Issues and challenges were addressed. The main objective of II SNE organized in a form of round table was to entirely engage all relevant stakeholders into group discussion and exchange of knowledge and experience in cross border water supply in terms of legal frameworks, pricing polices, technical aspects of supply, etc. According to evaluated questionnaires, participants in Bosnia and Herzegovina consider the organizational – administrative issue as the most important for water supply (38 %), followed by technical and financial issues – 31%. The summary on feedbacks on this question is presented in Figure 13.

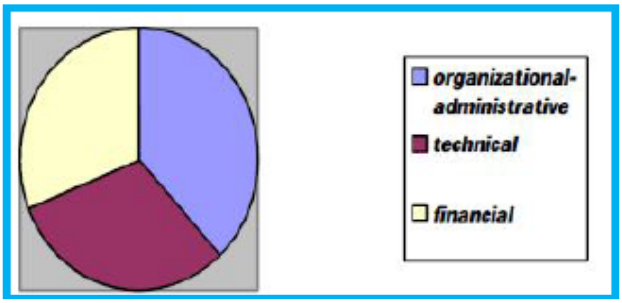

Figure 13: Answers on question: What issues do you consider the most important in your water supply system? (Source: Final Report on Second Stakeholders National Events)

The SNE in Croatia underlined Protection of Cross-Border water resources Workshop was organized by Croatian Geological Survey, Water utility of Istria, Region of Istria and Faculty of Civil Engineering, University of Rijeka. The goal of the workshop was to present project DRINKADRIA to the participants who were not present on the first national workshop and to include them in the project activities with the aim of contributing with their knowledge and experience to development of planned goals and project sustainability. Figure 14 presents summary of evaluated questionnaires with respect to protocols significance for cross-border drinking water supply management.

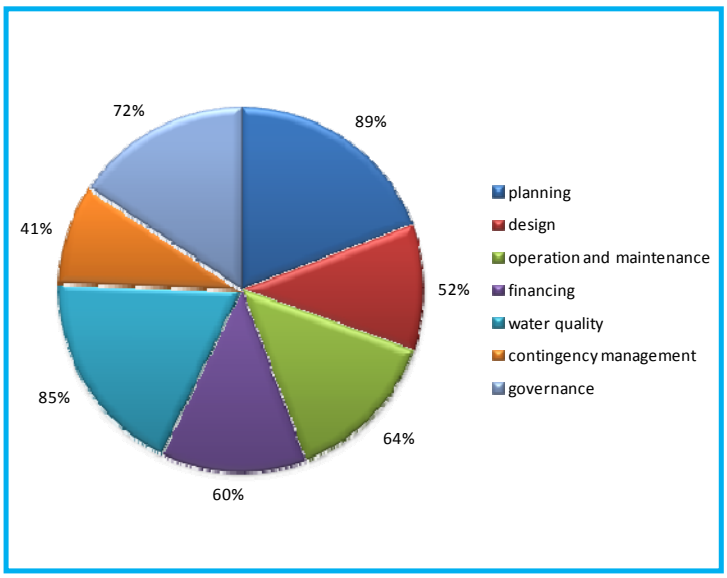

Figure 14: Significance of protocols by their topics based on feedbacks provided by II SNE participants in Croatia (Source: Final Report on Second Stakeholders National Events)

The II SNE in Greece was organized as the two day event and addressed Single Application of the Water Balance and Implementation of new technologies in water supply networks of the Municipal Water Supply and Sewerage Companies and Efficient and Reciprocal Use of Urban Water with over 46 participants e.g., relevant stakeholders, and organizations at the national level such as decentralized administrations, water utilities, local government of Crete and several municipalities. A two-day event co-organized by the Hellenic Union of the Municipal Enterprises for Water Supply and Sewerage (EDEYA), the Municipal Water Supply and Sewerage Company (DEYA) of Larissa with the contribution of University of Thessaly (Civil Engineering Department) on April 7&8, 2016. The event was extremely important as the most of the Greek Municipal Water Supply and Sewerage Companies were present. This is the most important national event where the Municipal Water Supply and Sewerage Companies took active part. Based on feedbacks provided by participants, over 20% consider better cooperation among different sectors as a solution for cross-cutting issues in drinking water supply management. The summarized answers are depicted in Figure 15.

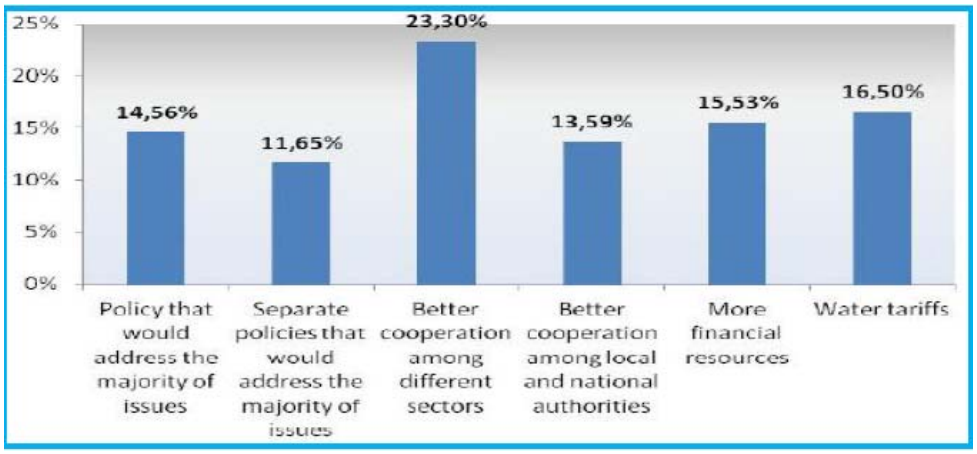

Figure 15: Opinion on Solutions for cross cutting issues provided during the II SNE in Greece (Source: Final Report on Second Stakeholders National Events)

In Italy the II SNE was organized by all Italian DRINKADRIA beneficiaries (CATO OT, VERITAS, CNR – IRSA and ATO3 Marche) as the side event of **"Festival dell'acqua"** in Milan. The goal of the workshop was to present project DRINKADRIA to the participants as a project that aims to implement some of sustainable and integrated drinking water supplies systems management within the Adriatic region. Moreover, some of the countries involved in NGO WAREG (the Network of European Water Service Regulators) activities have final beneficiaries involved in DRINKADRIA project implementation (Italy, Montenegro and Albania) so the transferability of DRINKADRIA objectives, outputs and deliverables beyond the project's area is feasible through the WAREG network. The summary of stakeholders' answers regarding the main water supply systems management (WSSM) issues /problems are presented in Figure 16.

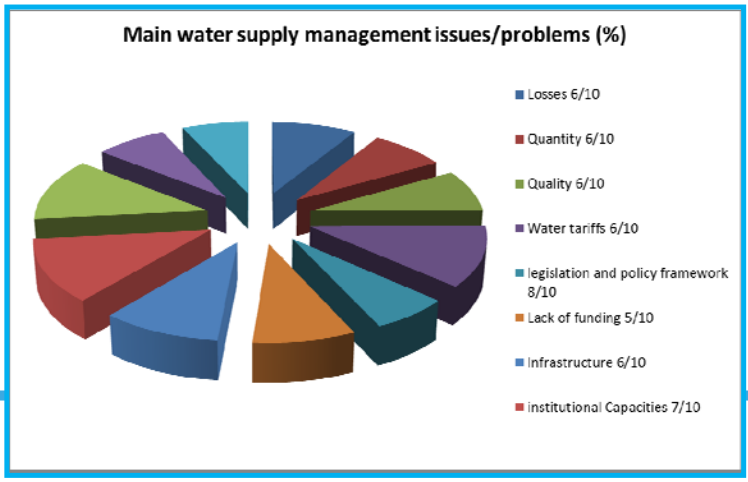

Figure 16: Italian stakeholders Feedbacks on main WSSM Issues / problems (Source: Final Report on Second Stakeholders National Events)

The reduction of losses in water supply systems and the conservation of water resources in Montenegro was the topic of the II SNE in Montenegro. The great number of water works utilities and governmental institutions and NGO (Association of Water Utilities of Montenegro) representatives participated. Figure 17 depicts familiarity of participants with DRINKADRIA shared platform.

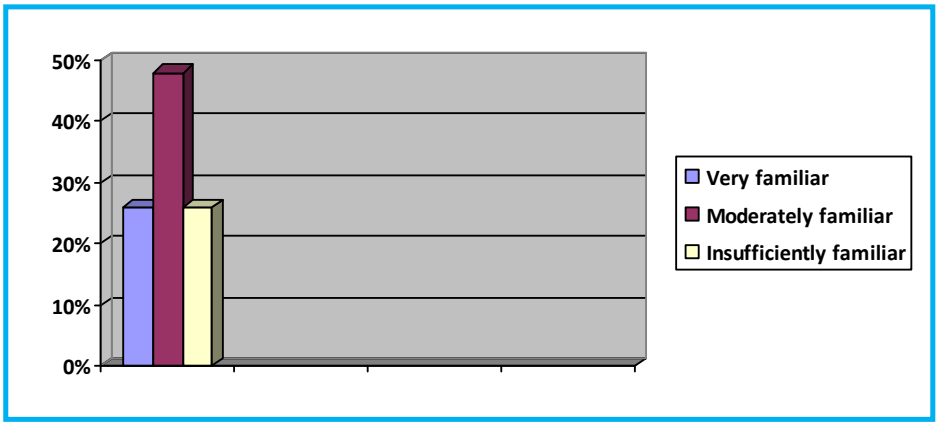

Figure 17: Stakeholders' from Montenegro Feedbacks on their familiarity wit DRINKADRA Shared platform (Source: Final Report on Second Stakeholders National Events)

Over 60 representatives from the water supply utilities, governmental institutions, universities and research institutions participated in II SNE in Serbia. The topic of event was **Drinking water quality and protection of Water Sources in Serbia.** The feedbacks with respect to relevance of protocols significance for cross-border/ cross-regional drinking water supply systems management is presented in Figure 18.

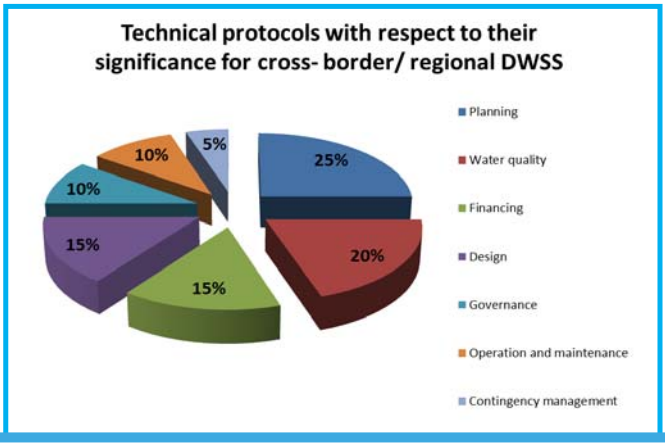

Figure 18: Serbian Stakeholders' feedbacks on technical protocols relevance for sustainable cross-border/cross-regional DWSS (Source: Final Report on Second Stakeholders National Events)

Majority of participants on II **SNE in Slovenia** come from water utilities. All of the participants would like to be informed about common methodologies for water availability determination; estimation of climate change – induced land use changes; Water Resources vulnerability, risks and hazards and delineation of water protection areas. In addition to uniform questions, participants provided feedbacks on some additional questions (Figure 19).

	Yes	No	Neutral
Would it be appropriate to determine the (technical) standards for drinking water supply central - at the national level?	5	3	5
Are you satisfied with the way of identifying, monitoring, implementing technical standards (ISO, EN, BS et al.) in Slovenia?	2	6	5
Is the existing mechanism of water pricing (and the implementation of network access services) appropriate?	6	3	4
Is the pricing of drinking water supply and supervision adequate?	4	7	1

Figure 19: Summary of Slovenian stakeholders' feedbacks on selected questions (Source: Final Report on Second Stakeholders National Events)

For the ***Third Stakeholders' National Events*** (III SNEs) within the scope of DRINKADRIA in all countries within the project implementation area stakeholders are familiarized with the project main results and outputs accomplished in addition to different topics that are recognized as country specific . The project closing conference (July 7, 2016, Castello di Duino, Trieste, Italy) was recognized as the great opportunity to have back to back event on project capitalization and sustainability, given the presence of different stakeholders and decision makers. The total number of participants was 88, and distinguished audience is familiarized with the main project outputs that provides solid base for the main outputs capitalization and project sustainability after the implementation is finalized.

In **Bosnia and Herzegovina** the third stakeholders national event was organized as a part of the annual international scientific - professional conference ***"Man and karst"*** Blagaj, Bosnia and Herzegovina, from 19-22.05. While first and second national workshop were focused on dissemination and exchange of project results within stakeholders drinking water supply companies and governmental institutions, as it was planned third one was dedicated to spreading the scientific information within research Institutes, universities and

NGOs in the Balkan region and more. An issue of cross-border karst hydrology, particularly in terms of

sources used for water supply, has been highlighted as a special theme of this conference. The fact that the source is located in one country and its catchment area in another poses a great challenge, when it comes to protection, both in scientific - professional and legal terms. Relying on the longstanding tradition of the gathered participants and interesting thematic basis, the Hydro Engineering Institute, has managed to intrigue about 72 authors of scientific-technical works, from Bosnia and Herzegovina, Croatia, Serbia, Slovenia, Montenegro, Australia, Italy and France, to participate in the meeting via published scientific papers and oral and poster presentations. In summary, 26 papers, 9 scientific posters created by 72 authors were submitted to the organization committee of the conference. A Book of abstract was issued and distributed to all participants. The DRINKADRIA project partners from Bosnia and Herzegovina presented the results achieved through numerous scientific and research activities generated during the project. Overall, 46 participants of the meeting have contributed to the regional and professional connecting and especially motivating and promoting of young researchers. Except the presentation of the results obtained through the DRINKADRIA project done by HEIS (FB12), partners from Croatia (University of Rijeka and Croatian Geological Survey) the following topics addressed during the conference are:

- Living world of Karst;
- Underground world of Karst;
- Water management in Karst;
- General Karstology;
- Protection of Karst and environment in general.

During the III SNE in **Croatia**, the participants (37) were familiarized with information and data relevant for ***Sustainable water resources management*** *(November 13, 2015, Buzet, Croatia)*. Workshop organized by all final beneficiaries from Croatia had the purpose to present the main project outputs and to improve stakeholders' participation in project implementation. Apart from Croatian final beneficiaries the event was attended by representatives of University of Ljubljana – Faculty of Civil Engineering and Geodesy,

Public heath Institute of region of Istria, Kolektor Sisteh Ltd from Ljubljana and water Utility of Istria contactors.

In **Greece** 3rd National Capitalization Workshop and 2nd Technical Workshop (June 3rd 2016, Chania, Crete, Greece), are organized as the back to back event with 2nd EWaS International Conference – Efficient and sustainable Water Systems Management toward Worth Living Development. FB16, with the participation of FB5 and FB10 organized these workshops as speakers and disseminators of the DRINKADRIA results, in order to accomplish the targets established in WP2 and WP3 of the DRINKADRIA project. More specifically, these national DRINKADRIA workshop and capitalization meeting was organized in Crete, in order to present and disseminate the DRINKADRIA project results during the 2nd EWaS International Conference. This conference is organized by the University of Thessaly (FB16) and the Technical University of Crete, aiming to bring together scientists dealing with research challenges encountered throughout the entire water cycle. It focuses on the integrated and sustainable water resources management, the effects of global climate change, the efficiency improvement of water systems and the protection of the environment. Thus, particular emphasis was given to the latest developments, strategies, techniques and applications of international best practices in efficient and sustainable water systems management, urban water and waste management, environmental protection and also to the ways in which hydraulics contribute to sustainable engineering investigations and design in the water environment. The 3rd National Stakeholders' Event workshop titled ***Non Revenue Water Reduction – Efficient and Reciprocal Use of Urban Water*** was attended by a total number of 49 participants from relevant stakeholders and organizations in a national level such as decentralized administrations, water utilities, local government of Crete and several municipalities. The questionnaires were distributed to participants and approximately 31 % of them provided their valuable inputs and feedbacks. Figures bellow presents some of the answers provided by Greek stakeholders. With respect to the water quantity problems and issues question: 22, 47% of participants ranked as the most important increase in water use and 20, 22% climate change (Figure 20).

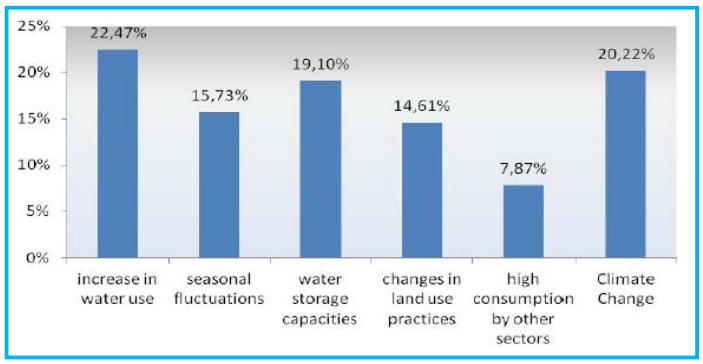

Figure 20: Greek stakeholders' answers on question: Issues/problems in terms of quantity (Source: Final Report on Third Stakeholders National Events)

Third National Event (capitalization meeting) was organized in **Italy** by A.Ato 3 "Marche Centro – Macerata", Final Beneficiary 2 in DRINKADRIA Project. The Conference, with title

"DRINKADRIA Project: sustainable and integrated management of Water Resources and drinking Water Supply Systems", was held in Abbadia di Fiastra, Tolentino (MC) on November 27, 2015. It was completely dedicated to the dissemination of DRINKADRIA general scope and first results, with particular emphasis on the implementation of Pilot Actions. Very interesting presentations were given by ten different speakers, representatives of DRINKADRIA Partners or (External) Experts. About 35% of the participants (26, out of no. 74 registered ones), all invited to contribute in the survey, returned the questionnaire filled in. Answers on selected questions are presented in following Figure 21 on participants' familiarity with cross – border/ water resources.

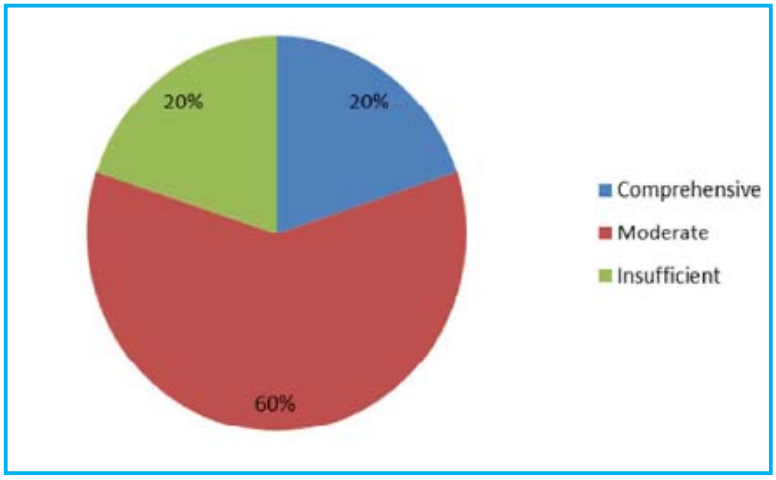

Figure 21: Italian stakeholders' familiarity with issues/constraints concerning Cross-Border/Regional water resources (Source: Final Report on Third Stakeholders National Events)

The third stakeholders' national workshop within the framework of the project Networking for Drinking Water Supply and the Adriatic Region (DRINKADRIA) in **Montenegro** was held on February 26, 2016 in Nikšić, by the Water Utility Nikšić. The topic of the workshop was " ***Project DRINKADRIA: experience and results achieved in the management of losses in water supply systems. Examples of good practice in Montenegro and the region"*** and it was aimed at the exchange of different know-how and experience in this field and presenting real activities implemented by the Water Utility Nikšić and results achieved within this project. This final workshop was aimed to contribute to the sustainability of the project activities through the analysis of all realized in the preceding three-year period. The workshop was attended by a total number of 42 participants from various institutions and organizations from the country and the region, such as: the Ministry of Sustainable Development and Tourism of Montenegro, local government of Nikšić, NGO Association of Water Utilities of Montenegro, Company for Water and Waste Water Services for the Montenegrin Coast and the Municipality of Cetinje (VODACOM), Jaroslav Černi Institute for the Development of Water Resources from Belgrade, German consulting company Sachen Wasser, almost all water utilities from Montenegro, as well as collaborators from the region from the Water Utility Prijepolje and PUC Neum. The workshop included 8 presentations divided into two sessions, thus realizing the successful exchange of know-how and experience, which is essential for the capitalization and sustainability of the project. The first session included presentations on the DRINKADRIA project and its issues generally, and in pilot area in Nikšić concretely. The second session was dedicated to specific case studies and the analysis of NRW in water supply systems both in Montenegro (e.g. Ulcinj), and in the region (e.g. Prijepolje, Belgrade and Neum).

The third and the final stakeholders national event in Serbia within the DRINKADRIA international project framework (*Networking for Drinking Water Supply in Adriatic Region*), titled ˝**Existent and Prospective Regional Water Supply Systems in Serbia**˝, was held in Belgrade on December 4th 2015, organised by the ˝Jaroslav Černi˝ Institute for the Development of Water Resources. The issue of regional water supply in Serbia, gathered almost 40 participants at the workshop. This topic was chosen due to the water supply issues significance and because the solution is increasingly required within the regional framework. The workshop was attended by representatives of water supply and sanitation

utility companies, as well as those of the regional water supply systems in Serbia (Belgrade, Sombor, Kruševac, Čačak, Kragujevac, Valjevo, Arilje), the Republic of Serbian (Bijeljina), Montenegro (Nikšić), experts from various scientific and academic institutions (˝Jaroslav Černi˝ Institute for the Development of Water Resources, University of Belgrade's Faculty of Civil Engineering, etc.). The workshop was also attended by representatives of the relevant state bodies: Ministry of Agriculture and Environment, Serbian Directorate for Water, and the Republic of Serbia's Government European Integration Office. The workshop has raised various issues pertinent to the regional water supply use, maintenance and challenges, as well as offered suggestions concerning possible solutions for the improvement of existing and prospective regional water supply systems. The main objective of the workshop - the exchange of experiences and newly acquired knowledge in the fields of improving the quality of water supply and regional water supply, including the identification of problems and attempts to define solutions to overcome them - has been successfully achieved through a dynamic discussion among the water supply company representatives, but also through their additional constructive discussions with the representatives of academic and government institutions of key issues of any further development and improvement of the regional water supply systems' capacities. Presenting the DRINKADRIA project as an example of a good practice, the ˝Jaroslav Čern˝ Institute representatives demonstrated possible strategies of managing the capitalization and sustainability of international projects. The DRINKADRIA project partners from the University of Ljubljana and the University of Rijeka, as well as from the town of Nikšić Waterworks, have given presentations of their project activities and results, and shared their own experiences concerning regional water supply, thus hugely contributing to the content and quality of the workshop. Guests from the region have expressed a great pleasure to have been part of our Third National Workshop and a dynamic discussion among participants has made a special impression on them.

In **Slovenia** the third and final National DRINKADRIA Workshop in Slovenia was organized in April 2016. The event was held in Chamber of Commerce and Industry of Slovenia in Ljubljana. We have invited operators of water supply systems, local communities and other relevant government institutions (in attachment). The invitation with agenda was prepared and gave promotional material to the attendees

(general brochure with all important information on DRINKADRIA project, brochure about WP5 topic, DRINKADRIA folder with notepad, layman report and promotional buff). Total number of all participants that have attended the National workshop was 73. First lecture was held by Mr. Enrico Altran, who is project manager of the DRINKADRIA project and comes from CATO Trieste (Italy). He introduced project with lecture DRINKADRIA – the network of experts from eight countries works! Next presentation was held by dr. Barbara Karleuša, who is WP4 leader and comes from Faculty of Civil Engineering in Rijeka (Croatia). She presented part of work on work package 4 - Cross-Border Water Resources in Adriatic Region and Climate Change. Next lecturer was dr. Mihael Brenčič with lecture: Protection areas – obstacle or opportunity; experience in Adriatic area and was followed by dr. Polona Domadenik that comes from Faculty of Economics in Ljubljana (Slovenia) and held a lecture about Structure and design of drinking water price in Slovenia and abroad. Dr. Primož Banovec comes from Faculty of Civil and Geodetic Engineering in Ljubljana. He talked about the contract template for cross border drinking water supply. First part of the workshop was concluded with the lecture Development of cross-border cooperation in the field of water management and the role of bilateral commissions held by dr. Mitja Bricelj (Ministry of the Environment and Spatial Planning). Second part of National workshop opened Matjaž Hvalič, who is FB4 project leader and comes from Water Utility Nova Gorica. He introduced a pilot area within the project DRINKADRIA in Slovenia - Determination of district metering areas and identification of water losses. The event was concluded with the round table with the invited speakers. Topic of the round table was ***Inter-municipal drinking water supply in Slovenia, problems and comparison with the cross border water supply.*** During the event participants provided feedbacks on several questions. Figure 22 depict their answers knowledge on water price.

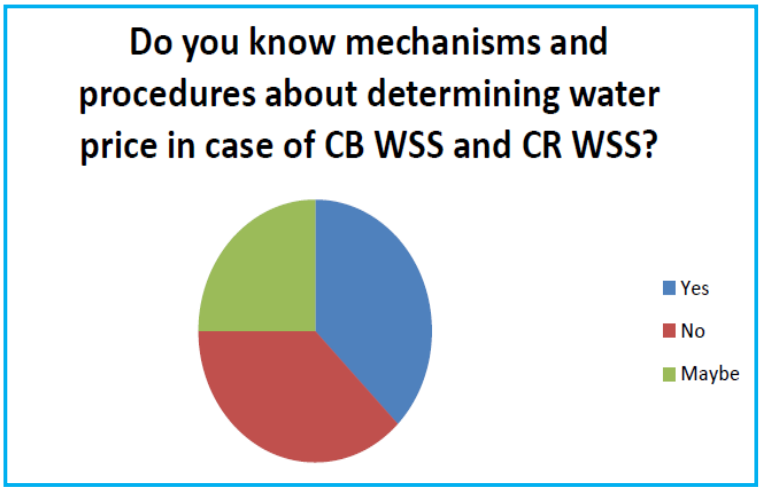

Figure 22: Figure 7: Slovenian Stakeholders' feedbacks on their knowledge with respect to water price determination (Source: Final Report on Third Stakeholders National Events)

5. RELEVANT PROJECTS AND OTHER CAPITALIZATION ACTIVITIES

At the present, over 200 projects are identified by FBs of DRINKADRIA project. Given the complexity of DRINKADRIA project and issues that are identified, all projects are of great relevance and capitalization of their results contributes significantly to project implementation. Figure bellow depicts schematically overall ratio between projects implemented at the national level and those of cross – border/ transnational relevance. The full list of the projects is available at the http://drinkadria.fgg.uni-lj.si/capitalization_sustainability/related-projects/

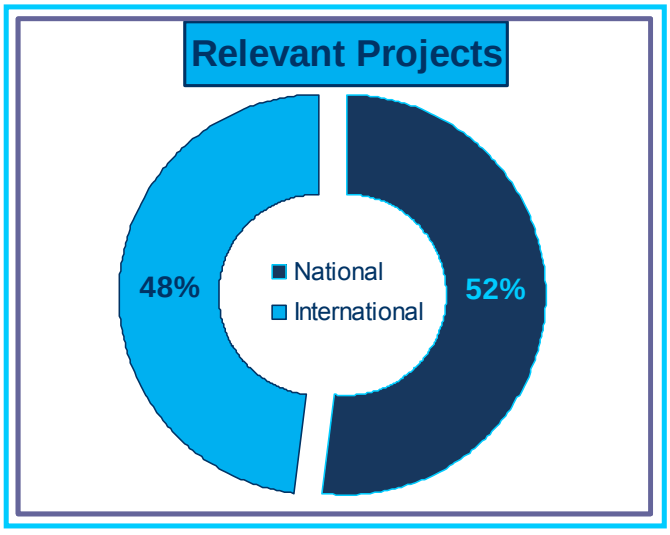

Figure 23: DRINKADRIA relevant projects (Source: Report on methodology for project integration. Report of the DRINKADRIA project. www.drinkadria.eu & http://drinkadria.fgg.uni-lj.si/)

In addition to relevant projects DRINKADRIA team members presented and introduced project to wider audience beyond the scope of Adriatic region as listed bellow:

- UNESCO IHP conference in Zagreb;
- UNESCO IHP G WADI - Launching of South East European Network – Belgrade;
- CMC Zagreb & WDS Velika Gorica, In Nova Gorica
- International Symposium and Round table: Cross-border drinking water management Rijeka;
- French Students visited Istria;
- TWAS (THE WORLD ACADEMY OF SCIENCES for the advancement of science in developing countries) Science Diplomacy Workshop on Sustainable Water Management;
- Two-day national workshop carried out in Croatia targeting students;
- Students in Slovenia and Serbia;
- International Sava River Basin Commission;
- International Commission for Protection Danube River Tisza EG;
- Series of workshops for the kindergarten children organized by Region of Istria;
- 2nd EWaS International Conference – Efficient and sustainable Water Systems Management toward Worth Living Development.

Finally, the number of scientific and technical papers are presented and/or published with respect to DRINKADRIA project results and outputs:

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6. CONCLUSIONS

During the DRINKADRIA project implementation all capitalization activities are implemented in line with Application Form with tremendous efforts and contribution of all team members. The stakeholders' national events highlighted that project objectives and main goal are well defined and recognized as extremely significant by participants in all DRINKADRIA countries. During the stakeholders' events professionals that are involved on daily basis in drinking water supply management participated actively in discussions and provide valuable inputs and feedbacks. Projects' Final Beneficiaries established precious mutual network and cooperation despite their different fields of expertise and types of institutions they are coming from. Moreover, during the stakeholders'' events presentations are given by guest speakers from other countries, e.g., Final beneficiaries
To put in numbers, over 1100 relevant stakeholders participate in 24 events, additional 400 people are familiarized with DRINKADRIA project objectives.

DRINKADRIA shared platform is established and generates all DRINKADRIA's outputs and reports, and is important tool for project's capitalization and sustainability.

Based on data and information provided by DRINKADRIA Final Beneficiaries 13 bilateral commissions are identified and addressed within the project area. Moreover, 3 bilateral commissions and two International Commissions for river basin management are addressed with project objectives and key cross-border water management issues and conflicts with respect to drinking water supply. Within the project area total number of cross – border/ regional drinking water supply systems is 28. The full list is available in Implementation Report on Capitalization Plan Preparation.

Finally, at the moment 31 scientific paper is presented and published based on outputs and results of DRINKADRIA project.

Figure 3: DRINKADRIA project Stakeholders' streamline

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