STAKEHOLDER ENGAGEMENT FOR INCLUSIVE WATER GOVERNANCE

ACKNOWLEDGEMENTS

The report is an output of Working Group 1 on Stakeholder Engagement of the OECD Water Governance Initiative, which members are gratefully acknowledged. It was developed within the OECD Regional Development Policy Division headed by Joaquim Oliveira-Martins, at the Public Governance and Territorial Development Directorate led by Rolf Alter.

The project was spearheaded and managed by Aziza Akhmouch, Head of the OECD Water Governance Programme. The report was written by Delphine Clavreul, Junior Policy Analyst within the OECD Water Governance Programme, under the supervision and guidance of Aziza Akhmouch. Special thanks are herein conveyed to Oriana Romano and Shahnaaz Parker, Water Governance Programme, for their instrumental help in processing the Survey results. The Secretariat is thankful to the members of the project's Task Force for their high availability and involvement: Joannie Leclerc from Suez Environnement, Alexandre Brailowsky from GDF Suez, as well as Joppe Cramwinckel and Julie Oesterlé from the World Business Council for Sustainable Development.

Findings stem from an OECD Survey across 215 stakeholders (see respondents' list in Annex H) and 69 case studies, submitted on a voluntary basis (Annex F), which will also be accessible in their full version via an online platform collecting best practices. Two webinars were organised on 17 January 2014 and 2 July 2014 to discuss progress results and collect feedback and comments on previous drafts, and a side event was held at the 3rd Istanbul International Water Forum (27 May 2014) to present findings and carry out broader consultation. The report builds on an issues paper produced by the OECD Secretariat on 30 June 2014 with the Survey's results, and submitted for written comments to Working Group Members. A first draft of the report was circulated on 18 August 2014 and discussed at a multi-stakeholder workshop (Paris, 19 September 2014) and during a session of the IWA World Water Congress (Lisbon, 24 September 2014). The draft report was peer-reviewed at the 4th meeting of the *OECD Water Governance Initiative*, whose delegates are acknowledged for their comments

The Secretariat is thankful to the following delegates for their written comments on the draft report: Stijn Brouwer (VU University Amsterdam), Emilio Custodio (Real Academia de Ciencias), Andriy Demydenko (GWP-Ukraine), Aurélien Dumont (Botin Foundation), Andrew Fenemor (Landcare Research – New Zealand), Milo Fiasconaro (Aqua Publica Europea), Catarina Fonseca (IRC), Rosalie Franssen, Stephanie Janssen and Chris Seijger (Deltares), Rui Godinho (APDA), Joannie Leclerc (Suez Environnement), Sara Hernandez (Sara Hernandez Consulting), Heide Jekel (Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety of Germany), Johannes Kannicht (KfW), Tadashige Kawasaki (Japan Water Agency), Greg Koch (Coca-Cola Company), Olimar Maisonet-Guzmán, Sharon Megdal and Kelly Lacroix (University of Arizona), Christopher Napoli (KAPSARC), Nic Newman (Canterbury Regional Council), Thomas Todtling (Academic Forum for Foreign Affairs), Rob Uijterlinde (Association of Dutch Regional Water Authorities), Arwin van Buuren (Erasmus Universiteit Rotterdam), Antoine Verville (Regroupement des organismes de bassins versants du Québec), Uta Wehn de Montalvo (UNESCO-IHE) and Lesha Witmer (Butterfly Effect).

The report will be submitted for comments and approval to delegates from the OECD Territorial Development Policy Committee. The final publication will be released during the 7th World Water Forum (12-17 April 2015, Korea).

TABLE OF CONTENTS

ACKNOWLEDGEMENTS **2**

ACRONYMS **9**

EXECUTIVE SUMMARY **10**

ASSESSMENT AND RECOMMENDATIONS **12**

Stakeholder engagement is a rising topic in the water agenda 12
Drivers of stakeholder engagement 14
Mapping stakeholders 15
A question of scale 16
Stakeholder engagement obstacles 16
Strengths and weaknesses of stakeholder engagement mechanisms 17
Assessing effectiveness, costs and benefits of stakeholder engagement 19
Setting up the enabling environment: Key principles for policymakers 21
Structure of the report 24

CHAPTER 1. SETTING THE SCENE **25**

Introduction 25
1. Stakeholder engagement has become a rising topic in the water agenda 25
1.1. Water: a fragmented sector 25
1.2. A paradigm shift toward "open" decision-making and implementation 26
2. Key definitions and insights from the literature 27
2.1. From public participation to the broader concept of stakeholder engagement 27
2.2. Typologies of engagement 28
2.2.1. Literature insights 28
2.2.2. OECD terminology and typology of levels of engagement 29
Communication 30
Consultation 31
Participation 32
Representation 32
Partnerships 33
Co-production and co-decision 33
2.3. Targets and promoters of engagement 34
2.4. Structural vs. issue-based engagement 35
2.5. Progress in water resources vs. services management 37
3. Analytical Framework 39
Conclusion 44

CHAPTER 2. DRIVERS FOR STAKEHOLDER ENGAGEMENT **46**

Introduction 46
1. A gloomy picture calling for a new governance climate 46
2. Structural drivers 46
2.1. Climate change 47
2.2. Economic and demographic trends 48
2.3. Socio-political trends 48
2.4. Technological drivers 49
3. Conjunctural drivers 49

3.1. Reforms, crises and democratic pressure 50
3.2. Binding and non-binding frameworks....51
3.3. Water allocation 53
3.4. Adaptive water governance....54
Conclusion....55

CHAPTER 3. MAPPING STAKEHOLDERS AT ALL LEVELS....56

Introduction....56
1. Identifying who does what....56
1.1. Mapping stakeholders 56
1.2 Typology of stakeholders....59
1.3. Typology of water management functions....61
1.4. Emerging stakeholders and new players 61
1.4.1. Business....62
1.4.2. Long-term institutional investors....62
1.4.3. Property developers 64
1.5. Unheard stakeholders 64
2. What matters for whom: different motivations for different stakeholders....67
2.2. Water resource management 68
2.3. Water supply and sanitation 70
2.4. Water disaster management and environmental protection....72
2.5. Managing stakeholders' expectations 77
3. The importance of *connectivity*....77
3.1. Stakeholders' interactions 78
3.2. Interaction gaps 80
4. Getting the scale right....81
4.1. The multi-level nature of water governance....81
4.2. Defining the appropriate scale for stakeholder engagement 82
4.3. The emergence of transcalarity 85
Conclusion....86

CHAPTER 4. OBSTACLES TO STAKEHOLDER ENGAGEMENT....88

Introduction....88
1. Highlights from the Survey....88
2. Obstacles to the integration of stakeholder engagement in water policies and practices....89
2.1 The lack of political will and the shift of power 89
2.2. Institutional fragmentation 90
2.3. Weak legal frameworks....90
3. Obstacles hindering the effective implementation of engagement processes....90
3.1. Lack of clarity on the use of engagement processes' input....90
3.2. Lack of funding....91
3.3. Information asymmetry....91
3.4. Too many or too few voices....92
3.5. Lack of interest and concern 92
Conclusion....93

CHAPTER 5. STAKEHOLDER ENGAGEMENT MECHANISMS....95

Introduction....95
1. A tentative taxonomy....95
1.1. Formal engagement mechanisms 97
1.2. Informal engagement mechanisms....99

2. A zoom on the increasing importance of ICT tools 101
2.1. Open government data 103
2.2. The digital divide and risk of exclusion 103
3. Tailoring stakeholder engagement mechanisms 104
3.1. Matching mechanisms to the development stage of water policy and projects 104
3.2. Aligning mechanisms with intended objectives 105
3.3. Fitting mechanisms to stakeholders and places 106
Conclusion 108

CHAPTER 6. ASSESSING STAKEHOLDER ENGAGEMENT 109

Introduction 109
1. Why evaluating stakeholder engagement? 109
1.1. Valued-added of stakeholder engagement evaluation 109
1.2. Challenges to stakeholder engagement evaluation 110
1.3. A range of evaluation tools and practices 110
2. How to evaluate? The need for indicators 114
2.1. Existing indicators for monitoring and assessing stakeholder engagement 115
2.2. Reporting on evaluation outcomes 116
3. What should be evaluated in stakeholder engagement? 117
3.1. Effectiveness 119
3.2. Costs 123
3.2.1. Early costs 124
3.2.2. Operational costs 124
3.3.3. Ex-post costs 125
3.3.4. Risks 125
3.3. Benefits 127
3.3.1. Acceptability and sustainability 127
3.3.2. Social equity and cohesion 128
3.3.3. Capacity and knowledge development 129
3.3.4. Economic efficiency 130
Conclusion 131

CHAPTER 7. PRINCIPLES AND A CHECKLIST FOR ACTION 134

Introduction: Why are principles needed? 134
1. Conditions for success: Highlights from the Survey 135
1.1. Clarity of goals 135
1.2. Ability and capacity to take decisions 135
1.3. Financial and human resources 136
1.4. Quality and accessibility of information 136
1.5. Time and timeliness 136
2. Principles for stakeholder engagement and a Checklist for Public Action 137

SELECTED BIBLIOGRAPHY 149

ANNEX A. STAKEHOLDERS' PROFILES 153
National governments 153
Subnational governments 161
International organisations 168
Service providers and their networks 175
Watershed institutions and their networks 182
Regulators 189

Business 196
Financial actors 203
Civil society 210
Science and academia 217
Advisors 224

ANNEX B: Parliamentarians in water-related stakeholder engagement 231

ANNEX C: Agricultural actors and stakeholder engagement 232

ANNEX D: Trade unions and stakeholder engagement 233

ANNEX E: Media and stakeholder engagement 234

ANNEX F: Cross case-study list 235

ANNEX H: List of respondents to the OECD Survey 244

Tables

Table 1. Typology of mechanisms identified in the OECD Survey 95
Table 2. Assessment of formal mechanisms 99
Table 3. Assessment of informal mechanisms 100
Table 4. Assessment of evaluation mechanisms 112
Table 5. Risks and mitigation measures 126
Table 6. Principles on Stakeholder Engagement in Water Governance 137

Figures

Figure 1. Levels of stakeholder engagement 30
Figure 2. The dual role of stakeholders in engagement processes 34
Figure 3. OECD Analytical Framework of Stakeholder Engagement in Water Governance 41
Figure 4. Categories of stakeholders represented in the OECD survey sample 42
Figure 5. Composition of clusters of respondents 43
Figure 6. Respondents' overall experience with stakeholder engagement 44
Figure 7. Main drivers for stakeholder engagement in the water sector 50
Figure 8. Existing requirements for stakeholder engagement in the water sector 52
Figure 9. Types of requirements for stakeholder engagement 53
Figure 10. Towards outcome-oriented stakeholder engagement 55
Figure 11. Mapping roles and responsibilities for water resources management in Mexico 58
Figure 12. Institutional mapping for wastewater treatment in the Netherlands 59
Figure 13. Traditional, new and under-represented stakeholders in the water sector 60
Figure 14. Functions, roles and responsibilities in the water sector 61
Figure 15. Stakeholders' aspirations: How do they contribute to better water governance 68
Figure 16. Importance of water resources management across categories of stakeholders 69
Figure 17. Key terms associated to stakeholder engagement in water resources management 70
Figure 18. Importance of water and sanitation services across categories of stakeholders 71
Figure 19. Key terms associated to stakeholder engagement in water and sanitation services 72
Figure 20. Importance of protection against water-related disasters across stakeholders 73
Figure 21. Key terms associated to stakeholder engagement in water-related disaster 75
Figure 22. Importance of environmental protection across categories of stakeholders 76

Figure 23. Most frequent interactions across stakeholders in the water sector 79
Figure 24. The OECD Multi-level Governance Framework: Mind the Gaps, Bridge the Gaps 82
Figure 25. Most frequent territorial scale of intervention 83
Figure 26. Towards fit-for-target stakeholder engagement at the relevant scale 87
Figure 27. Major obstacles to stakeholder engagement in the water sector 88
Figure 28. Towards anticipatory and resilient stakeholder engagement 94
Figure 29. Use of stakeholder engagement mechanisms 97
Figure 30. Use of web-based technology tools for stakeholder engagement 102
Figure 31. Involvement of stakeholders across stages of the policy/project cycle 104
Figure 32. Are there sufficient stakeholder engagement mechanisms? 106
Figure 33. Towards fit-for-purpose stakeholder engagement 108
Figure 34. Evaluation mechanisms used for stakeholder engagement 111
Figure 35. Frequency of use of evaluation mechanisms across categories of stakeholders 114
Figure 36. Perceived impact of stakeholder engagement on water governance 119
Figure 37. Perceived impact of engagement processes across categories of stakeholders 120
Figure 38. Level of influence of stakeholder engagement across stages of the policy/project cycle 121
Figure 39. Categories of costs in stakeholder engagement 124
Figure 40. Most important costs of stakeholder engagement in the water sector 125
Figure 40. Four types of risks in stakeholder engagement 126
Figure 41. Four types of long-term benefits of stakeholder engagement 127
Figure 42. Main benefits of stakeholder engagement in the water sector 128
Figure 43. Towards adaptive and sustainable stakeholder engagement 133
Figure 44. Conditions for success for stakeholder engagement 135

Boxes

Box 1. An overview of participation and engagement typologies 29
Box 2. Key definitions 29
Box 3. Initiatives towards greater awareness-raising 31
Box 4. Code of practice on written consultation for the EU Water Framework Directive 32
Box 5. Public-public partnership for information-sharing on drinking water quality 33
Box 6. Laying the foundations for co-management 34
Box 7. Institutionalised stakeholder engagement 36
Box 8. Stakeholder engagement in corporate social responsibility 37
Box 9. Stakeholder engagement for integrated water resource management 38
Box 10. Setting tariffs and investment priorities 39
Box 11. OECD Survey on Stakeholder Engagement for Effective Water Governance 42
Box 12. Climate change-driven stakeholder engagement in Arizona 47
Box 13. Democratic pressure as a driver for stakeholder engagement 51
Box 14. Legal requirements for stakeholder engagement in the Japan Water Agency Law 51
Box 15. Voluntary requirements for stakeholder engagement: The Archi Canal Summit Declaration 52
Box 16. Optimising the water-energy nexus in the Durance Valley, France 54
Box 17. Stakeholder engagement for river basin adaptation to climate change 55
Box 18. A Stakeholder Engagement Toolkit for water utility managers 58
Box 19. Innovative business model attracting long term investment in water and sanitation in the US 63
Box 20. Co-decision-making with spatial planners 64
Box 21. Engaging under-represented stakeholders 64
Box 22. The Water Youth Network 65
Box 23. Stakeholder engagement to support rural water system change in Ghana 65
Box 24. Engaging indigenous communities in integrated catchment management in New Zealand 66
Box 25. Fostering women and youth involvement in the water sector in Portugal 67

Box 26. Stakeholder engagement for better water quality 69
Box 27. Customer Engagement in setting water prices and investment priorities in Scotland 71
Box 28. Community engagement in post-disaster contexts 72
Box 29. Consultation for the development of flood defence infrastructure 74
Box 30. Engaging with farmers to manage risks of floods, droughts and water pollution 74
Box 31. Stakeholder engagement for environmental restoration and sustainability 76
Box 32. An example of sociometric network analysis 78
Box 33. Information-sharing on water among policy-makers 79
Box 34. Transboundary participatory management in the Niger, Senegal and Congo rivers 84
Box 35. Stakeholder engagement at the watershed level 84
Box 36. Multi-level stakeholder engagement in the Great Lake region 85
Box 37. The National Water Pact: a contract to engage with state authorities in Brazil 98
Box 38. A 3-dimentional tool to engage stakeholders in flood defence 100
Box 39. Web-based information systems: The case of Italy and Portugal 101
Box 40. Building the evidence in support of decision-making 105
Box 41. Fitting engagement mechanisms to stakeholders: Water schools for mayors in Spain 106
Box 42. Tailoring stakeholder engagement to specific local needs 107
Box 43. Evaluation of stakeholder engagement 111
Box 44. The Hydropower Sustainability Assessment Protocol: Multi-stakeholder engagement to promote sustainable hydropower and practical implementation in Brazil 113
Box 45. Overview of existing indicators for assessing stakeholder engagement 115
Box 46. Reporting on participation process under the EU Water Framework Directive 117
Box 47. Assessing performance in stakeholder engagement: NARBO's benchmarking system 118
Box 48. Improving the willingness to pay in South Australia 120
Box 49. Improving stakeholder co-ordination through evaluation: The "MuSSAP" in South Africa 121
Box 50. Tracking participation to evaluate stakeholder engagement in water planning in Arizona 122
Box 51. Engagement to secure buy-in and acceptability for new technologies 127
Box 52. Stakeholder engagement for trust building 129
Box 53. Knowledge development : A mechanism and an output of stakeholder engagement 130
Box 54. Engaging stakeholders to solve the water conservation economic dilemma 131
Box 55. Water governance indicators : challenges and caveats 138

ACRONYMS

ANA	National Water Agency – Brazil
APDA	Portuguese Association of Water and Wastewater Services
CONAGUA	National Water Commission – Mexico
EDF	Electricité de France
EIA	Environmental Impact Assessment
EU WFD	European Union Water Framework Directive
GWP	Global Water Partnership
ICT	Information and Communication Technologies
INBO	International Network of Basin Organisations
ISO	International Organisation for Standards
ISO	International Organisation for Standardisation
IWRM	Integrated Water Resource Management
MENA	Middle East and North Africa
NBA	Niger Basin Authority
NGO	Non-Governmental Organisations
OECD	Organisation for Economic Co-operation and Development
PPP	Public Private Partnership
R&D	Research and Development
RBO	River Basin Organisations
ReWab	Regional Water Governance Benchmarking Project
SIWI	Stockholm International Water Institute
UK	United Kingdom
UNDP	United Nations Development Programme
UNECE	United Nation Economic Commission for Europe
UNESCO-IHE	Institute for Water Education
US	United States
USAID	United States Agency for International Development
WBCSD	World Business Council for Sustainable Development
WEPA	Water Environmental Partnership in Asia
WIN	Water Integrity Network
WWC	World Water Council

EXECUTIVE SUMMARY

1. The report presents an evidence-based assessment of the main trends, drivers, obstacles, mechanisms, impact, costs and benefits of stakeholder engagement contribution to water governance. It builds on a year-long iterative process with the contributors of the working group n°1 of the OECD Water Governance Initiative supported by extensive data collection and analytical work.

2. The size and nature of water challenges ahead is prompting more recognition that governments cannot tackle these alone. Whether they succeed in addressing these challenges may depend, in a large part, on their ability to engage the wide range of stakeholders affected by water management, or likely to influence its outcomes. The topic of stakeholder engagement has then gained traction as a principle of water governance[1], and has been largely incentivised in a broader context of bottom-up call for open government and society,

3. In addition, intrinsic characteristics of the water sector justify the need for engaging all stakeholders having a shared responsibility in water management, and the adoption of effective co-ordination mechanisms. To many extents, the water sector is fragmented. In addition to governments and policy-makers, citizens, private actors, end users, financial institutions, and infrastructure and service providers have a stake in the outcomes of water policy and projects. The water cycle generates important externalities in many domains and spills over many other policy areas that often work in silos. Therefore, a coherent, holistic and integrated approach is needed to engage these mutually dependent stakeholders.

4. For long, stakeholder engagement in water governance remained overall incidental (with a few exceptions), especially for water services where it was essentially assimilated to handling customers' complaints. The concept of "integrated water resources management" and the emergence of regulatory frameworks (e.g. EU Water and Flood Directives, Aarhus Convention etc.) have undoubtedly spurred the creation of multi-stakeholder fora and mechanisms (e.g. in planning). This helped move from reactive to proactive stakeholder engagement.

5. The report argues that engaging stakeholders provides them with opportunities to be part of the solution and share views and priorities, and helps increase the willingness to pay, raise awareness on water risks and costs, foster co-production of services and policy, manage trade-offs related to water allocation, and prevent or solve conflicts over water use. The views of customers can also shape priorities to be pursued by service providers, including price-setting. But proper framework conditions are needed and governments can play a role in setting the conducive institutional environment for effective and inclusive engagement of all those having a stake in the water outcome.

6. Making inclusive water governance happen can be a challenging task. Beyond the "usual" actors traditionally involved in water-related decisions and implementation, new players have gained interest in water governance and now influence water policy and projects. For example, business companies are more and more concerned with water allocation; property developers on land use in flood-prone areas generate future liabilities in the sector; long-term institutional investors provide innovative financing mechanisms for water projects. These newcomers are likely to grow in number and influence, which raises important challenges for decision-makers to remain inclusive despite the diversity of actors at play. This is all the more important as citizens and users' associations have gained increasing influence over political decisions

[1] Water governance is a dynamic concept referring to who does/gets what, when and how. It encompasses political, institutional and administrative rules, practices, and processes through which stakeholders articulate their interests, their concerns are considered, decisions are taken and implemented, and decision-makers are held accountable in the development and management of water resources and delivery of water services

on water. Carefully and exhaustively mapping who are the stakeholders to be involved will be more than ever crucial.

7. In practice several obstacles hinder stakeholder engagement on the ground. The most frequent challenges identified include the lack of clarity on the expected use of inputs from stakeholders in decision-making and implementation (leading to a consultation "fatigue"), the absence of political will and leadership, the lack of time, staff and funding, weak supportive legal frameworks, consultation "capture" from over-represented categories, resistance to change and reluctance to relinquish power, weak capacity, the lack of citizens' concern and awareness, information asymmetry, fragmented settings, and the complexity of issues at hand.

8. There is a wide variety of formal and informal mechanisms for engaging stakeholders, each with their own sets of advantages and disadvantages. They work differently according to places, times and objectives and selecting the right mechanism(s) is a daunting task for decision-makers. The key is to carefully consider the broad range of options at hand to match the most suitable mechanism(s) to the places and categories of stakeholders..

9. Stakeholder engagement may be costly (in terms of logistics, process, reputation, delays in decision-making and implementation) but by allowing testing and refining decisions, it is likely to yield short and long-term benefits in terms of *acceptability and sustainability* (e.g. effective implementation, proper enforcement of regulation, political acceptability, ownership of decision and outcomes); *social equity and cohesion* (e.g. trust, confidence, customers' satisfaction, corporate social responsibility); *capacity development* (e.g. awareness-raising, information sharing, opinion forming); and *economic efficiency* (e.g. cost saving, value for money, time saving, broader economic benefits as policy coherence, synergies across projects). Different costs and benefits accrue to different stakeholder groups at different times and require managing trade-off to ensure successful engagement processes and outcomes.

10. To clarify the "black box" that governs water, policy-makers need to go beyond a tick-the-box approach to stakeholder engagement when designing and implementing water policies and projects. A set of overarching principles is suggested at the end of the report to encourage governments at all levels to take needed actions for outcome-oriented, fit-for-target, anticipatory, and adaptive stakeholder engagement in water governance, from design to implementation.

11. The report argues that decision-makers that take a systematic (rather than ad-hoc) inclusive approach grounded in their initiatives and operations are likely to get better results in terms of the time and resources they invest, and handle stakeholder issues and risks more effectively. The following principles are backed by a tentative Checklist for Public Action which includes indicators, international references and self-assessment questions.

1. Map all those who have a stake in the outcome or likely to be affected, their responsibilities, core motivations and interactions.
2. Define the ultimate line of decision-making, the objectives of stakeholder engagement and the expected use of inputs
3. Allocate proper financial and human resources and share needed information for result-oriented stakeholder engagement.
4. Assess regularly the process and outcomes of stakeholder engagement to learn, adjust and improve accordingly.
5. Embed engagement processes in clear legal and policy frameworks, organisational structures/principles and responsible authorities
6. Customise the type and level of engagement to the needs and keep the process flexible to changing circumstances

ASSESSMENT AND RECOMMENDATIONS

12. This report assesses the main trends, drivers, obstacles, mechanisms, impacts, costs and benefits of stakeholder engagement and provides pragmatic policy guidance to decision-makers and practitioners in the form of a set of principles, a checklist for public action and tentative indicators. Findings rely on desk research, literature review, empirical data from an extensive survey carried out across 215 stakeholders within and outside the water sector, and 66 case studies collected. The objective is to provide better evidence on what works best, when and where as well as framework conditions needed to yield the short and long-term benefits of stakeholder engagement and to create positive objectives without cultivating a tick-the-box mentality because of prescriptive requirements.

13. In the last decade, the topic of stakeholder engagement has gained traction in the water sector as a principle of good governance. International law has spurred, through many declarations, binding conventions or other normative frameworks, a set of objectives related to inclusive decision-making and implementation, transparency and accountability. Operationalising these objectives then became a quasi-prerequisite to bottom-up, place-based and inclusive policymaking, and many case studies have proliferated across the globe to showcase on-the-ground experiences. Stakeholder engagement started moving from theory to practice.

14. Despite extensive research and case studies in recent years on the topic of stakeholder engagement, the lack of evidence-based assessment on how effective engagement processes have proven in reaching intended objectives of water governance is striking. Most evaluations carried out on stakeholder engagement fail to provide decision makers with the evidence they need to inform future engagement processes, rather calling for caution against generalising beyond the context of specific case studies (Abelson and Gauvin, 2006). There is therefore a striking need for better evidence on what works best, when and where for effective contribution of stakeholder engagement in water governance systems, to which this report intends to respond. In addition, mechanisms are needed to measure the short and long-term benefits of stakeholder engagement and to create positive objectives without cultivating a tick-the-box mentality because of prescriptive requirements.

15. Assessing engagement approaches requires stepping back and drawing lessons from the last decade to better understand pressing and emerging issues. These include, amongst others, the *shift of power* across stakeholders, the arrival of new entrants that ought to be considered, the external and internal *drivers* that have triggered engagement processes, innovative *tools* that have emerged to manage the interface between multiple players, as well as the types of *costs* and *benefits* incurred by engagement at policy and project levels.

16. The intended goal of this report is to assess the impact of stakeholder engagement in water-related decision-making and policy implementation, and provide guidance to policymakers in terms of setting up the appropriate framework conditions for successful engagement. In practice, this means scaling up success stories (identified in this report through selected case studies), learning from failures, and trickling down principles' implementation for improved outcomes of stakeholder engagement.

Stakeholder engagement is a rising topic in the water agenda

17. Governments and public governance are becoming increasingly open. As countries are still coping with the far reaching consequences of the financial crisis, the public sector is facing acute challenges in terms of fiscal pressure with increased demands from citizens to be more engaged in how public policy decisions are made. The general move from "top-down hierarchical model" exerting sovereign control over the people and groups making up civil society, to gradual involvement of public,

non-state actors such as private and not-for-profit organisations and sectors at different levels has characterised public policy since the 1990s.

18. The traditional role of "governments" as the single decision-making authority has gradually been replaced by multi-level, polycentric governance to reflect that a plethora of stakeholders can contribute to better guide decision-making. Water is affected by numerous external drivers and spills over many other policy areas that are critical for economic development and well-being, including health, agriculture, land-use and spatial planning, poverty alleviation and energy, amongst others. These policy areas tend to work in silo and further improvement is often needed in terms of consultation, participation and coordination to engage stakeholders in a coherent, holistic and integrated way.

19. Recent years have seen a shift in water debates from the notion of "participation" to the concept of "engagement". *Participation* typically refers to the involvement of individuals and groups in the design, implementation and evaluation of a project or plan. *Engagement* is an "umbrella" term that broadly refers to an organisation's efforts to ensure that individuals, groups, and organisations have the opportunity to take part in the process of decision-making and policy/project implementation that will affect them, or in which they have an interest. It embraces a broader range of inclusive processes, with different intentions and different inputs to the decision-making process. Therefore *participation* does not necessarily entail that those attending are contributing in any way to decision-making and implementation, while *engagement* is characterised by meaningful inputs to the process. In other words, participation is a *level* of engagement, amongst others.

20. A distinction is also necessary between *public* participation and *stakeholder* engagement. The former encompasses a range of procedures and methods designed to consult, involve, and inform local communities and citizens (i.e. the "public", essentially civil society and customers). The latter opens a broader perspective to different groups of actors, including levels of governments, the private sector, regulators, service providers, donor agencies, investors and other relevant constituencies, in addition to civil society in its different forms (e.g. NGOs, citizen movements, etc.).

21. Water supply and sanitation is lagging behind water resources management. Legislation on surface and groundwater quality and quantity and principles such as IWRM encouraged the creation of river basin organisations and their fora and the contribution of stakeholders to decisions related to planning for example. Engagement has been less systematic for water services and often restricted to handling customers' complaints despite the existence of consultation (more ad hoc) via shareholding, governing boards, regulatory policy and partnerships with citizens and users.

22. For a long period, stakeholder engagement in water governance remained mostly incidental, apart from some noticeable exceptions (e.g. Polder approach in the Netherlands to build consensus). The flexibility associated with project- or issue-based stakeholder engagement has made it a preferred option for many decision makers rather than engaging in more systematic inclusive approaches. It consists in setting-up ad hoc mechanisms such as workshops, hearings, panels or campaigns to gather stakeholders around a specific issue. But these engagement processes are often time-bound, limited in scope and end conjunctly with the implementation or evaluation of the given project or policy. Stakeholder engagement processes have also been reactive rather than proactive. They tend to be a response to a need or obligation, such as to comply with regulatory frameworks on the topic, or during crisis and emergencies (droughts, floods, economic crisis etc.) rather than carried out on a voluntary basis.

23. However, there has been some progress to move towards more structural forms of stakeholder engagement in the water sector. New legislations, guidelines and standards at various levels (Aarhus convention, EU Water Framework Directive, etc.) have spurred the emergence of more formalised forms of stakeholder engagement, embedded in organisations' overarching principles and policy to encourage greater information, co-operation, consultation or awareness-raising into their operational rules and

procedures. Shifting from an issue-based to a structural form of stakeholder engagement raises some challenges for decision-makers. Formalising, or even institutionalising collective decision-making related to water issues requires strong leadership commitment with clear objectives and strategies to prevent and manage risks of "capture". It also implies securing the needed financial and human resources at the appropriate levels to sustain the engagement process.

24. Because there are more and more actors in the water sector willing to get mobilised and to take part in discussions to influence certain decisions, it is crucial to evaluate regularly the actual weight and value added of stakeholder engagement in water-related decision-making and policy/project implementation, and its contribution to better governance. The analytical framework suggested by this report is organised around five components: i) *detecting drivers* to understand the forces and levers for actions *ii) mapping stakeholders* in terms of their roles, responsibilities, influence, motivations, level of connectivity and scale*; iii) diagnosing obstacles* and mitigating related risks to integrity, accountability and sustainability ; iv) *identifying mechanisms* that are fit-for-purpose; and v) *fostering evaluation* to point out areas of improvements and trade-offs needed;

Drivers of stakeholder engagement

25. The water outlook is not optimistic and future economic, social, climate, urban and technological trends challenge water governance and the capacity of governments to address them, often calling for multi-stakeholder solutions. Pressure points over water allocation, infrastructure financing, and disaster management require doing better with less money, less water and with more people willing to get on board. The future daunting picture for the water sector has triggered new emphasis on the role of stakeholder engagement across public, private and non-profit sectors, combined with structural and conjunctural drivers that have pushed stakeholder engagement to develop along different rationales.

26. A range of long-term structural drivers have triggered a change in water governance paradigms to better cope with future challenges. They can be clustered into four broad categories: *climate change* will affect water availability and resilience of water infrastructures, with different level of impacts across the world; *economic and demographic trends* will drive water demand and in particular in cities, and affect the capacity of governments to respond (i.e. their ability to mobilise public funds); *socio-political trends* such as the concept of integrated water resources management, recent developments in European water-related policies, and the United Nations post-2015 Sustainable Development Goals will set new standards, regulations and aspirational goals paying greater attention to adaptive governance; and *innovation and technologies* will stimulate greater connectivity and new relationships, in particular related to web-based communication avenues.

27. Stakeholder engagement has also been triggered by conjunctural drivers and greatly influenced by changing circumstances and situations. Water-related disasters, policy reforms, big infrastructure projects, competing water demands and greater democratic pressure have pushed for more inclusiveness in water-related decision-making and policy/project implementation. Changes in organisational culture and incentives from donors have less done so, suggesting that technical assistance programmes fostering stakeholder engagement are still too anecdotic or conditionalities on inclusive decision-making do not have stringent enough requirements. Similarly the potential of stakeholder engagement in helping design new contacts, identify new customers or secure new sources of revenue has not been evidently demonstrated in the survey results. But practical experiences on the ground testify to the increasing efforts, particularly from service providers and business, to invest more in stakeholder engagement for ensuring value for money. Thus, a business case for inclusive decision-making and policy/project implementation, and for engaging further with partners is needed towards move towards engagement processes that deliver their full potential for meeting water challenges

Mapping stakeholders

28. Engaging properly stakeholders requires their prior thorough identification within and outside the water box, as well as a good understanding of their core motivations. Knowing *who* is responsible for *what* and at *which* level is a primary first step to capture the stakeholder "landscape" and identify redundancies and gaps in the institutional framework having impacts on policy coherence and sector performance. A stakeholder mapping can be used to identify the core functions of stakeholders involved in the sector and to assess how effective they are in carrying them out. Such mappings also bring attention to the interaction with and the impacts of stakeholders in other areas that influence the water sector.

29. The identification of stakeholders can be a politically charged responsibility. There can be internal and external pressure to expand or reduce the spectrum of stakeholders to be engaged. Promoters of stakeholder engagement sometimes try to avoid involving the "usual suspects", which has become a term of denigration for actors with vast interests in water-related decisions (typically water service providers, farmers, etc.). It is equally detrimental to exclude stakeholders for being known opponents of the issue at hand as involving them can trigger some ownership and likelihood that they support the final decisions, or at least, that they be less inclined to undermine it as if they had been excluded.

30. All stakeholders need to be informed at various stages and on the outcomes of policy and project cycles, but all stakeholders do not have to be involved at each stage of the water project or policy. Engagement processes can be most effective when they include a careful and strategic selection of stakeholders that strikes a balance between comprehensive representation and workable sized groups. It can be useful to consider at which stage of the policy/project cycle stakeholders are best suited to participate (e.g. objective setting, development, implementation review), and it is important to consider and discuss with stakeholders what they expect from the process and what could prevent them from getting engaged. If each stakeholder's motivations can be clarified at the start, it is likely there will be less confusion and consultation fatigue, and greater satisfaction with the outcomes.

31. Beyond the "traditional" actors, new players have gained interest and influence in water governance. While the role of the private sector tended to focus on companies delivering water supply and sanitation, business companies have paid increasing attention to water governance in their strategies, especially to cope with regulatory risks and secure water allocation. In parallel, citizens and users' associations have gained increasing influence over political decisions on water. As risks of floods intensify, property developers are also gaining influence as spatial development generates long term liabilities and financial implications in terms of water management, such as compensations for the loss of nature values, green areas and water amenities. They can play an important role to harness new sources of finance and contribute to the development of non-technical solutions to manage floods. Institutional investors (e.g. pension funds, insurance companies, mutual funds) have also begun to factor environmental, social and governance issues into their decision-making process and invest more and more in water infrastructures and utilities looking to diversify their portfolio.

32. Some categories of stakeholders often get omitted and remain unheard. These include women (as the primary users of water in many parts of the world, for domestic consumption, subsistence agriculture, and health), youth (as the future generation that will need to solve issues related to water), the rural and urban poor (as the main consumers in informal urban and rural settlements) and indigenous and aboriginal communities. Nature and other non-consumptive users are also often an absentee from engagement processes. Additional efforts and innovation are needed to contact and engage with these groups or individuals, who do not always come forward on their own. Including these minority or "less-vocal" stakeholders, beyond formal engagement channels, is important to obtaining a more balanced picture.

33. Stakeholders have different motivations, needs and interests. Engagement strategies related to the development of dam projects will by definition engage different stakeholders than those of a water tariffs reform. Based on their core motivations, and often their mandate, stakeholders have different governance concerns which affect their willingness to contribute to water-related policies and projects as well as their degree of engagement. Understanding how stakeholders interact and the connectivity dynamics is important to assess their level of influence and engagement, and to achieve multi-level and inter-sectoral water governance. This can vary from places to places and help understand questions related to diffusion of information, trust, consensus-building and solidarity.

A question of scale

34. Water logics and hydrological boundaries cut across administrative frontiers and perimeters. Water governance and water resources management takes place at various spatial scales, both in their ecological and political dimensions. Engagement processes range from local watershed groups negotiating about allocation practices, to national committees debating priorities, or international meetings seeking consensus about the management of transboundary basins between sovereign states. The issue of scale also relates to questions of democratic legitimacy. The higher the level of decision-making is, the lower the possibilities for comprehensive participation of all relevant constituencies are and thus the more likely conflicts may arise. Inversely, the lower the government level, the more difficult it is to effectively address water-related problems, in particular those that are not strictly local, without having the big picture.

35. Stakeholder engagement can provide platforms to address the mismatch between administrative and hydrological scales. Water-related projects and policies can be driven by local livelihoods tied to local ecosystems, or by energy producers making long-term production and investment choices at the national level. Thus, some stakeholders promote hydrological scales that correspond to manageable units in which they operate (e.g. river basin organisations). Others promote conventional administrative levels, arguing that this is where capacity, accountability, and legitimacy already exist. Decisions taken at one level can positively or negatively affect decisions at another level (e.g. subsidies to farmers for irrigation at national level can be detrimental to groundwater bodies at the aquifer level). Fitting stakeholder engagement to place-based needs can help reconcile decisions within and across spatial scales.

Stakeholder engagement obstacles

36. Engagement processes vary across places and stakeholders but common barriers can be identified. Mainly, two categories of obstacles can be identified. The first category of obstacles includes those hindering the *transposition of the concept of stakeholder engagement* in practice. They relate for example to political leaders' resistance to relinquish power to other stakeholders as well as the absence of legal framework to embed stakeholder engagement in institutional practices. These obstacles restrict instilling principles of inclusive decision-making and policy/project implementation, into concrete projects and policymaking. The second category of obstacles includes *bottlenecks that impede the effective implementation* of engagement processes. They concern those situations where the engagement process is not questioned *per se*, but frustrated by issues of process, logistics or conflicting goals.

37. The Survey highlighted three major obstacles in the first category: the lack of political will, institutional fragmentation and poor legal frameworks. First, stakeholder engagement implies a shift in the balance of power including towards actors that may not share the same intentions, perspectives and interests. The greater the level of engagement (i.e. representation, partnerships, co-decision), the more the power-balance is equalised. The reluctance to relinquish power in the water sector is often justified by the fact that decision-making should be left to experts who understand technical details and political realities. Second, responsibilities scattered across a multitude of actors creates fissures in water governance with sub-areas administered independently and limited coordination incentives leading to poor consultation and

weak accountability. Last, the absence of sound legal framework hampers stakeholder engagement, the application of standards for inclusive decision-making, and the capacity to assess the compliance of decision-making with these requirements. Current progress towards more formalised and institutionalised forms of inclusive decision-making should be accompanied by a change in rules and legislation towards a common set of standards and better monitoring of compliance.

38. The Survey highlighted four main obstacles in the second category: the lack of clarity on the use of stakeholders' input, the lack of funding, information asymmetry and representativeness. First, if stakeholders with interest or influence do not understand how their input will contribute to the decision-making, they may feel misled or manipulated and lose interest. Satisfying all stakeholders' interests is a daunting task and implies willingness to support the outcomes of the engagement process, even when they fail to coincide with one's vested and partisan interests. Clarifying the engagement process is one way to secure support and buy-in. Second, insufficient or unstable revenues to sustain the engagement process, logistical expenses related to meeting venues or support material and the lack of competent and dedicated staff are common bottlenecks, especially when government funding has been slashed in times of economic and financial crisis. Third, uneasy access to quality information hinders their ability to study and analyse water-related issue and make informed contributions to decision-making processes. Last, conflict of interest and capture of the process by certain groups of actors and lobbies often better organised, with high financial stakes and political ramifications can also hinder decision-making processes.

39. Often, one of the reasons for participation initiatives not matching up to the expectations is the rhetoric/practice gap. This embraces situations where the expectations and advertising that accompany an engagement process are not matched by the actual opportunities to participate or the eventual influence of the process. This gap can be explained for instance by overenthusiastic marketing and advertising, purposeful window dressing, etc.; by overly ambitious objectives for the process as compared to the individual or organisational capacity to carry it out effectively; or by the mismatch between the interests in engagement with the actual level of motivations to make change happen.

40. Decision-makers need to carefully anticipate bottlenecks to the integration of stakeholder engagement in water policy and project, and mitigate related risks. Different tools and procedures can help doing so. Translating existing standards for inclusive decision-making into legislative frameworks can provide incentives to support the integration of stakeholder engagement into water policy and practices. Defining upstream strategies that set out clear rationale of how to use the contribution of stakeholders for the final outcome along with all relevant information can help engage on the right foot. Setting-up information water systems and securing funds will also be critical to sustain engagement processes in the long run. Engagement efforts should be allocated the same staffing and budget as other components of a water policy and project development process. Integrity pacts and social witnesses can also help reduce the likelihood of conflict of interest and consultation capture, while ex-post surveys on motivations can investigate levels of interest on specific water issues to set-up the right incentives.

Strengths and weaknesses of stakeholder engagement mechanisms

41. There is a wide variety of mechanisms for engaging stakeholders, but they work differently according to places, time, and objectives. Navigating this diversity and selecting the right mechanism(s) for the engagement process can be a daunting task for decision-makers and a tentative taxonomy of such instruments can provide some guidance. The report identifies 24 mechanisms that can be classified into two types: *formal* mechanisms (tools that have institutional or legal ground, often stem from an official agreement, contract between parties, or charters with clear operating rules and priorities) and *informal* mechanisms (not institutionalised but rather can be implemented for a large variety of issues and at the discretion of the convener of the engagement process).

42. Formal mechanisms of engagement bring about some advantages and inconvenient. For example, water associations and river basin organisations generally benefit from a strong sense of legitimacy as they are often based on the principle of representative democracy which makes them crucial partners to engage with others. Nevertheless, they can also be perceived as single-minded when they solely focus on pushing forward the agenda of a singular group of stakeholders (e.g. association of irrigators) and do not encompass a wider membership that includes other players likely to be impacted by their activities. River basin organisations (as other umbrella organisations) can raise challenges in terms of lobbying and consultation capture when discussions and decisions are "high-jacked" or monopolised by the interests of certain groups. Both can also generate principle-agent tensions by which the person sitting at the table voices his/her own concern rather than representing his/her broader constituency. This should be a key concern when selecting stakeholders that should take part in advisory boards, working groups or assemblies.

43. Informal mechanisms for stakeholder engagement also present some advantages and disadvantages. For example, the relatively informal nature of meetings and workshops can foster both deliberation and build a sense of community. They provide an open atmosphere which makes participants generally more willing to discuss issues and maximises dialogues on issues that may not come to light through more structured mechanisms. For instance, *meetings* and *workshops* are flexible in terms of time frame and scale (from community meetings to international conferences) and can apply to a wide range of issues (e.g. from discussing a municipal sewer project to debating on transboundary basin management agreements). They offer an opportunity for anyone to express concerns, access and share information, and gain better understanding. However, if tools used to involve stakeholders do not have a minimal level of structure and mediation, outcomes may be difficult to incorporate into the final decisions. Follow-up are also needed to turn views and concerns into actual contributions to decision-making beyond information sharing.

44. Innovative mechanisms and decision tools are gaining traction because of technological advances as well as greater skill and openness in the actual use of such tools for participation purposes. The practical deployment of new information and communication technologies has become a driving force of customised internet platforms and applications and the function of ICT platforms has taken new and varied dimensions as virtual meetings, internet-based platforms (social media, chat rooms, online fora), and eVoting are more and more used. Efforts are still needed to generalise digital tools in water decision-making and policy/project implementation, but in their various multi-lateral forms, ICTs are increasingly being used by governments to help stakeholders better understand what they do. Increased data transparency provides the basis for stakeholder engagement and collaboration in the creation of innovative projects and policies. But web-based tools can raise some challenge regarding the digital divide between developed and developing countries, rich and poor, and rural and urban areas.

45. The selection of stakeholder engagement mechanisms should be tailored to each context, stakeholders concerned, policy goals targeted, and local needs. The different rationales that underlie inclusive approaches imply that stakeholder engagement can be a *goal* in itself (normative-democratic approach), a *means* to more efficient and legitimate water-related decision-making; and an *instrument* to fulfil objectives that go beyond the water sector (e.g. empowerment of marginalised groups). These objectives rely on different types of mechanisms and players. Decision-makers should tailor existing mechanisms to specific categories of stakeholders. Indeed, young people, for instance, might be more receptive to internet-based mechanisms such as social media and online discussion platform to share their ideas, than to conferences that might require travel expenses they cannot always afford. Careful attention to cultural habits, levels of education and material means is also needed to select the appropriate tool.

Assessing effectiveness, costs and benefits of stakeholder engagement

46. There has been little evaluation of the effectiveness, costs and benefits of stakeholder engagement in the water sector and at large, which can be explained by the relative novelty of cost-effectiveness and cost-benefit analyses in the public sector. Evaluation has generally remained on an *ad hoc* basis potentially because stakeholder engagement has often been carried out as an "ad-on" to conventional processes or has often consisted in a "tick-the-box" approach to comply with existing legislation and rules.

47. Assessing stakeholder engagement should not be considered as an end in itself but serve a broader purpose of improving the process and its outcomes. It can strengthen the *accountability* of decision makers, by measuring whether public and institutional resources, including stakeholders' time and efforts, are properly used. Evaluation can help determine whether the engagement process works well and learn from experience to improve practice in the future. A robust evaluation can also be an effective form of *risk management*. It can help to map out the different views at the start of a process and allow for recognition and awareness of the potential challenges that the process may face (e.g. divergent perspectives regarding flood defence measures between land planners, property owners and government authorities or regarding water resource allocation between farmers, industries and environmentalist).

48. Evaluating stakeholder engagement can raise some difficulties. First, there is a lack of comprehensive frameworks of agreed-upon evaluation methods and reliable measurement tools. Second, there is a wide variety in the design and goals of engagement processes; therefore, evaluation frameworks should be general enough to apply across different types of processes, yet specific enough to have value for learning and practice. Third, stakeholder engagement is an inherently complex and value-laden concept; hence there are no widely held criteria for judging the success and failure of engagement efforts both in terms of process and outcomes.

49. More and more, stakeholder engagement promoters are using evaluation tools to measure the success of their engagement efforts. Multi-stakeholder meetings help collect feedbacks on the level of performance of engagement processes; evaluation reports allow analysing and keeping records of the success and lessons learnt from engagement processes, and can, when publicly shared, shed light on the use of stakeholders' inputs. Other tools can provide information for assessing the engagement process, such as levels of satisfaction, as it is the case of polls and surveys. Some categories of stakeholders (e.g. civil society) use evaluation mechanisms more often than others. Often, receiving feedback from customers on a given stakeholder engagement process, particularly in terms of complaints, can be seen as something to be wary of rather than fostered. However, complaints should not be seen as problems to be ignored, dismissed or under-valued, but as useful warning signs that the process can be improved.

50. Indicators are increasingly advocated as a tool for measuring stakeholder engagement impact. However, existing research calls for caution as they can be highly contentious, in theory and practice. It can be argued that complex processes of social change should not be reduced to simple metrics, and the process of defining indicators and analysing the implications of the results can be highly complex and political. Some outcomes of engagement processes can be intangible (such as improved relationships or a sense of empowerment) and both quantitative and qualitative indicators should be employed to review the engagement process. Having said this, though indicators may be imperfect, they can certainly be informative measurement of complex systems. Chapter 6 of the report suggests a set of indicators to assess the effectiveness of stakeholder engagement along the 5 building blocks set out in chapter 1 (drivers, mapping, obstacles, tools, evaluation).

51. Transparent reporting to stakeholders on the results and outcomes of the engagement process is essential to build support and trust. Reporting gives feedback to the participants on how their inputs have been used into the final decision. It should not be only directed at the promoters of the engagement process, or a supervisory authority, but also to the stakeholder involved. As such, it is more than an *ex post* tool for the promoters of the engagement process but also a mechanism to involve stakeholders. Reporting deserves consideration not only at the end of an engagement process, but also throughout. It can concern the different stages of the water policy or project, from the way information is made accessible or how stakeholders have been targeted and involved, to the amount of human and financial resources invested.

52. Evaluating the effectiveness of engagement process and outcomes can shed light on the contribution of stakeholder engagement to better water governance. Measuring the impact of stakeholder engagement on the various aspects of water governance can help identify where inclusive decision-making is the most effective and helpful to reach the intended objectives. Evaluations can shed light on the differentiated impacts of stakeholder engagement across categories of stakeholders. Depending on the rationale behind, stakeholders perceive the benefit of engagement processes in different ways (e.g. support effective implementation of policy and project, raise awareness, develop knowledge, help opinion forming, build political acceptability etc.).

53. Costs of stakeholder engagement also need to be carefully assessed. Discussions, consultation and exchange of opinions raise some costs, be they direct or indirect, monetary or not, that relate to different phases of the engagement process whether they concern the production and disclosure of needed information, operational expenses (facilities, travel, staff, overtime etc.), or opposition to the final decisions and delays in decision-making or implementation.

54. The process of engaging stakeholders may be more costly than the total absence of consultation, but by allowing testing and refining decisions, it is likely to yield short and long-term benefits. Short-term benefits relate to the outcomes of engagement such as better quality decision-making, increased willingness of stakeholders to collaborate to solve common water problems, or greater support for the implementation of a water project or policy. Long-term benefits relate to improved understanding and awareness on flood risks, more confidence in governments' decisions, or capacity-building. Overall, benefits can be clustered into four types: acceptability and sustainability (e.g. effective implementation, proper enforcement of regulation, political acceptability, ownership of decision and outcomes); social equity and cohesion (e.g. trust, confidence, customers' satisfaction, corporate social responsibility); capacity development (e.g. awareness-raising, information sharing, opinion forming); and economic efficiency (e.g. cost saving, value for money, time saving, broader economic benefits as policy coherence, synergies across projects).

55. Conducting evaluations on the costs and benefits of stakeholder engagement can provide the evidence to guide effectively decision-making and policy/project implementation with tangible data and analyses. Different costs and benefits accrue to different stakeholder groups at different times and require managing trade-off to ensure successful engagement processes and outcomes. There is a dearth of knowledge on the distributional impacts of stakeholder engagement. The danger is the potentially inequitable distribution of the benefits of engagement.

56. An efficiency-enhancing engagement process, if successful, should deliver substantial benefits in the long term. Yet, any change that brings about benefits to the society as a whole but has negative consequences for certain groups may face opposition by the latter. If they have sufficient economic and political power and are well-organised, the "losers" may succeed to slow down or block the change. Failure from decision-makers to compensate the likely "losers" may reinforce opposition and increase costs, both monetary and non-monetary (delays, conflicts). Careful consideration is also needed so as to not compare costs and benefits *stricto sensu*. The investments needed for stakeholder engagement are

rarely proportional to the benefits it creates. Often, costs of stakeholder engagement are short-term (e.g. early and operational costs) while benefits may arise during the engagement, immediately after or in the long term. Therefore, an engagement process considered as costly may still yield great long-term benefits and therefore be worth investing in and conducting.

57. The sustainability of stakeholder engagement will not only depend on the net difference between aggregate costs and benefits, but also on how they are distributed between stakeholders, and on stakeholders' willingness to bear them. Also, water policy reforms and large projects can induce important adjustment costs, especially in the short term, while the benefits of such initiatives may only arise in the long term. It is crucial to critically reflect upon the ratio of costs and benefits during engagement processes, and determine the appropriate trade-offs related to this dual temporality.

Setting up the enabling environment: Key principles for policymakers

58. For engagement processes to be relevant a careful balance between what they try to achieve, the resources they require, and whether they succeed in reaching the intended objectives is needed. Critical aspects of governance should guide stakeholder engagement frameworks. First, *equity*. Fair access to engagement opportunities is key to ensure a balanced and representative process that takes into account diverse ideas and opinions. Second, *transparency*. Being transparent and open about the ways to identify stakeholders, choose engagement mechanisms, and define the objectives pursued can help to raise interests among stakeholders and develop an understanding of and support for the final decisions. Third, *accountability*. It is not sufficient to provide platforms for stakeholder to share their ideas. Their inputs need to be actually taken into account by decision-makers. Procedural transparency is key to ensure the legitimacy of decision-making processes and their outcomes. Fourth, *trust*. Engagement processes may bring together groups with opposing views, which do not always trust that their views will be taken into account. Assuring participants that this is the intention of the process is important to ensure productive discussions and exchange of opinion.

59. Governments at all levels have a critical role to play in setting the enabling environment for result-oriented, effective and impactful stakeholder engagement. Although engagement processes cannot be easily replicated from one context to another, the following principles can provide orientations to encourage governments to set up the proper framework conditions for result-oriented stakeholder engagement, and catalyse efforts for making good practices more visible.

1. **Inclusiveness and equity. Map all those who have a stake in the outcome or likely to be affected, their responsibilities, core motivations and interactions**. Stakeholder mappings should be drawn in relation to a specific issue. Such mappings should pay attention to newcomers, players outside the water sector, and traditionally marginalised groups. This is critical to ensure that all stakeholders are identified and properly involved throughout the policy/project cycle. Finding the right balance between inclusiveness and empowerment of stakeholders is also important. Engagement processes (and related mechanisms) need to accommodate the needs of stakeholders with varying levels of interests and resources to ensure inclusivity and accessibility. Careful consideration is also needed regarding the risks of potential consultation capture from over-represented categories, to the detriment of unheard voices, as well as risks of prejudice regarding a particular category of stakeholders. Equity between present and future generations in a perspective of sustainability should be promoted.

2. **Clarity of goals, transparency and accountability. Define the ultimate line of decision-making, the objectives of stakeholder engagement and the expected use of inputs**. Clarifying the goals and reasons for engagement is key to build mutual understanding of how stakeholders may be involved in the process, and for stakeholders to provide quality contributions in line with expectations. Objectives of stakeholder engagement can be contributing to the formulation of river basin plans at watershed

level, service delivery, awareness-raising (e.g. on water costs, risks, future trends), auditing, risk mapping, as well as performance monitoring. Whatever the purpose, it should be made explicit as well as the authority responsible for decision and its willingness to take stakeholders' ideas on board in doing so to enhance confidence in the value of the process. Transparency and accountability in how the engagement process is designed and implemented (e.g. stakeholder mapping methods, use of stakeholders' inputs) is crucial to improve credibility and legitimacy, and build trust among stakeholders involved. Diligent work is necessary to ensure the engagement process is fair and equitable and to reliably engage stakeholders.

3. **Capacity and information**. **Allocate proper financial and human resources and share needed information for result-oriented stakeholder engagement**. Improving the overall contribution to substantive discussions and decision-making requires access to information, technical expertise, experience-sharing and funding in the right format and sufficiently on time (planning) to realistically and effectively participate. Supporting two-way information-sharing through consistent and appropriate communication channels, including web-based technologies, are key as is ensuring the financial affordability of the engagement process to ensure the effective engagement of all having a stake, convey accurate, trusted and accessible information to diverse sectors, foster opinion-forming among stakeholders and build support to the process. The interpretation and application of these resources and information require competences and capability development at all levels to enable sustainable stakeholder engagement (e.g. skills, social learning).

4. **Efficiency and effectiveness: Assess regularly the process and outcomes of stakeholder engagement to learn, adjust and improve accordingly.** Such evaluation and monitoring can resort to fact-based and perception-based tools and indicators, and carried out by targets, promoters and/or third parties. Public disclosure of results to increase accountability and provide insight on success in reaching intended objectives and learn from experience to improve practice in the future. Evaluation should not be limited to ex-ante and ex-post assessment but remain an on-going process throughout the policy/project cycle. Stakeholder engagement can yield benefits in terms of resilience, sustainability, cohesion, acceptability, capacity and efficiency. But it can also delay decision-making and implementation and implementation, and generate different types of (monetary and non-monetary) material, process, reputational and social costs. Assessing the costs and benefits of engagement processes can help ensure that all interests, included those underrepresented, are respected regarding the distribution of impacts, compensation and benefits. Mitigation measures are needed to reduce costs, and set the right incentives while managing the dual short-term / long-term temporality.

5. **Institutionalisation, structuring and integration: Embed engagement processes in clear legal and policy frameworks, organisational structures/principles and responsible authorities.** There is no water governance without governance at large. Similarly, there can be no effective stakeholder engagement without proper incentives for bottom-up and inclusive policy making. A clear set of rules, platforms and vehicles for doing so is critical to move from reactive to proactive and systematic stakeholder engagement in the water sector. But institutionalisation per se is not the panacea and raises risks of engagement "fatigue" and/or "capture" from over-represented categories to the detriment of unheard voices. It should provide for the flexibility needed to adjust to place-based needs and changing circumstances while fostering a change in the "mindset", daily practices, professional skills and culture of decision-making. Provisions for stakeholder engagement should be aligned coherently and holistically across the water chain and policy domains related to water.

6. **Adaptiveness: Customise the type and level of engagement to the needs and keep the process flexible to changing circumstances.** Stakeholder engagement tools and mechanisms work differently across places, times, objectives, and stages of policy/project cycles. They should be tailored to each

(geographic, socio-economic, cultural) context, type of stakeholder concerned, policy goal targeted and place-based needs to accommodate varying levels of interest and resources from stakeholders and consider other options as needs arise. Water governance systems are complex and in flux, where change is dynamic and often unpredictable. Engagement processes therefore need to enable multiple stakeholders to respond and adapt to the uncertainty. They should remain flexible to manage risks and resilient to adapt to changing environments. Lessons can be learned from failure in engagement approaches in terms of management of complexity and how to trigger fundamental change.

Structure of the report

60. The report is structured around 7 chapters:

- **Chapter 1 sets the scene** in terms of i) how the topic of stakeholder engagement has gained traction in the water agenda; ii) existing concepts and semantic discussions on terms related to stakeholder engagement; and iii) the analytical framework used throughout the report;

- **Chapter 2** identifies the critical factors driving stakeholder engagement in water governance zooming on structural and conjunctural drivers specific or not to the water sector that have triggered new rationales for further engagement process and inclusive decision-making, and policy/project implementation;

- **Chapter 3** maps traditional players, new entrants and under-represented stakeholders in water governance and their respective motivations, reflecting on the importance of a systemic approach in addressing connectivity and interrelations across stakeholders at the relevant scale;

- **Chapter 4** diagnoses the obstacles hindering stakeholder engagement, looking particularly at the barriers to the integration of engagement principles in water policies and practices, as well as those impeding the effective implementation of engagement processes;

- **Chapter 5** makes an inventory of mechanisms used to engage stakeholders in water policy and projects, be they formal or informal and assesses their strengths and weaknesses;

- **Chapter 6** assesses costs, risks, and benefits of stakeholder engagement;

- **Chapter 7** proposes overarching principles, a checklist for public action and indicators for policymakers at all levels of government to set-up the enabling environment for impactful stakeholder engagement.

61. Based on the Survey results, 11 "stakeholder profiles" are also accessible at the end of the report to shed light on the distinctive perceptions and experiences in water-related stakeholder engagement across various categories of actors (annex A). Perspectives of parliamentarians, agricultural actors, trade unions and the media are also provided in annex B, C, D and E.

CHAPTER 1. SETTING THE SCENE

Introduction

62. There has been a general trend in public policy to move away from the old "top-down hierarchical model" exerting sovereign control over the people and groups making up civil society, to gradual involvement of public, non-state actors such as private and not-for-profit organisations and sectors at different levels, from information-sharing to co-production of public policy. Such change has also taken place in the water sector where the traditional role of "governments" as the single decision-making authority in water policy has been replaced by multi-level, polycentric governance acknowledging that a large number of stakeholders in different institutional settings can contribute to water management. It has materialised in a proliferation of international hard and soft instruments for stakeholder engagement as well as an extensive and diverse semantic in the literature on the topic.

63. Understanding how stakeholder engagement has evolved as well as the key concepts and definitions that underlie it is therefore crucial to identify inherent challenges and relevant policy solutions. This chapter enshrines the OECD analysis of stakeholder engagement in the water sector in the broader policy trends and literature, and provides an overview of recent evolutions on the topic. It sets key definitions and terms and describes the analytical framework suggested in this report as a diagnostic tool for decision-makers to improve the contribution of stakeholder engagement to effective water governance.

1. Stakeholder engagement has become a rising topic in the water agenda

1.1. Water: a fragmented sector

64. To many extents, the water sector is more fragmented than other infrastructure sectors or natural resources (OECD, 2011). Managing water involves a plethora of public, private and not-for-profit actors from local, (sub-) basin, regional, national to international levels. Governments, citizens, end users, private actors, donors and financial institutions, as well as infrastructure and services providers, all have a stake in the outcomes of water policy and projects. In many countries, the allocation of roles and responsibilities in water policy making is scattered across levels of governance. Inherently, the multiplicity of actors represents a complicating factor for decision-making due to interests and concerns. There is generally not one single actor that is powerful enough to control the course of the policy/project process and that can, in isolation, determine the relevant reform agenda.

65. This over-segmentation justifies the need for engaging all players having a shared responsibility in water management, and the adoption of effective co-ordination mechanisms. Different actors are likely to be interested in different policy problems and the existence of such multi-actor complexity puts additional demands on the decision makers, as they have to take into account the different problem perceptions, interests and positions of the stakeholders. One of the ways to deal with this complexity is to adopt effective policy instruments and embark on an iterative process together with stakeholders across the water chain, related sectors and levels of government.

66. In addition, the water sector is affected by numerous external drivers and spills over many other policy areas. The water cycle generates important externalities in domains that are critical for development, including health, agriculture, land-use and spatial planning, poverty alleviation and energy, amongst others. These policy areas tend to work in silo and further improvement is often needed in terms of consultation, participation and coordination to engage stakeholders in a coherent, holistic and integrated way.

1.2. A paradigm shift toward "open" decision-making and implementation

67. Governments and public governance are becoming increasingly open. As countries are still coping with the far reaching consequences of the financial crisis, the public sector is facing acute challenges in terms of fiscal pressure with increased demands from citizens to be more engaged in how public policy decisions are made. In this context, the belief that trust, openness, integrity, and transparency should lie at the heart of effective and performance-driven public sector for better and cost-effective public services has been strengthened. The OECD defines open government as "the transparency of government actions, the accessibility of government services and information, and the responsiveness of government to new ideas, demands and needs" (OECD, 2005). These three building blocks are seen to support improved evidence base for policy making; strengthened integrity; lower corruption; and higher trust in government.

68. OECD countries are responding to public policy challenges by increasingly engaging with stakeholders to foster sustainable reforms. Trends have highlighted three strategies adopted by countries to facilitate policy implementation: mobilising citizens and customers, with special attention devoted to target groups (e.g. children, minorities, lower incomes); involving the private sector, civil society (NGOs) and academia in the provision of public services, experience-sharing and innovative solutions; and engaging with public authorities at different levels, especially through partnerships with regional or local governments to guarantee quality service delivery (OECD, 2010).

69. The open government agenda is transforming how governments conduct their affairs. An increasing number of countries have adopted laws on access to information. Independent oversight and enforcement bodies such as Supreme Audit Institutions, Ombudsman Offices, or Information Commissioners have also played an increasing role to ensure that public authorities comply with their duties in relation to transparency and accessibility. In this context, governments are searching for ways of making public services more responsive to public needs, through consultations and other forms of stakeholder engagement.

70. In the water sector as well, the topic of stakeholder engagement has gained attention in the global arena. For the past twenty years, all World Water Fora have highlighted the critical role of multi-actor partnerships (Marrakech, 1997), participatory approaches (The Hague, 2000), alliances, networks and dialogues (Kyoto, 2003), coordination across levels of government (Mexico, 2006), the critical role of vulnerable and marginalized groups (Istanbul, 2009) and the need for multi-stakeholder platforms to support the effective management of water resources and services (Marseille, 2012)[2].

71. In that context, international (hard and soft) instruments have proliferated. They range from the 1992 Rio Declaration on Environment and Development, which introduced the emerging public involvement norms, to the Agenda 21 that same year which envisaged public involvement in developing, implementing and enforcing environmental laws and policies, including management of freshwaters. More legislation, at regional levels, has elaborated on these principles. The 1998 United Nation Economic Commission for Europe (UNECE) Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (or the "Aarhus Convention") has become a global guideline. It emphasizes three areas – transparency, participation and accountability – for which it establishes minimum requirements for the 39 signatory countries to incorporate into their laws and institutions. The Convention relies on enforceable rights of citizens, including procedural rights and the human right to a healthy environment. It was followed by the adoption of other regulations assimilating similar participatory principles, notably at EU level. For instance, the Directive 2003/4/EC calls for public access to environmental information, while the Directive 2003/35/EC mandates public participation in

[2] See the Synthesis report of Target 1 *Stakeholders' engagement for effective water policy and management* as prepared by the Good Governance core group for the 6th World Water Forum (Marseille, 2012)

respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice. Similarly, Article 14 of the Water Framework Directive requires member states to encourage the active involvement of interested parties in the implementation of the Directive.

72. The increasing attention to stakeholder engagement in the water sector has followed a general paradigm shift in public management and broader dynamics in development and governance (Mollinga, 2010). Governance has become a backbone of effective policymaking, especially since the 1980s when the role of the State started to be questioned. This paved the way to greater democratisation, decentralisation and forms of polycentric governance, relying on the premise that self-governed communities will first try to seek out commonly acceptable solutions and participating in their implementation, rather than to rely solely on top-down or command and control governmental decisions.

73. Trends and trajectories more specific to the water sector have also influenced inclusive approaches to water governance (see Chapter 2). During the 1990s, the political agenda moved from "technical" supply-driven and infrastructure-led solutions towards greater water demand management, emphasising the crucial role of institutions as well as economic and social instruments for a mutually reinforcing "3Is" triangle (infrastructure, institutions and investment) (OECD, 2011). The generalisation of the concept of integrated water resources management (IWRM) introduced the broader issue of co-ordination across different interests, sectors and levels.

74. There is no water governance without proper governance at large. Similarly, there cannot be effective stakeholder engagement in the water sector, if there is no broader framework for bottom-up and inclusive policymaking outside the sector. Water governance is a dynamic concept referring to who does/gets what, when and how. It encompasses political, institutional and administrative rules, practices, and processes through which stakeholders articulate their interests, their concerns are considered, decisions are taken and implemented, and decision-makers are held accountable in the development and management of water resources and delivery of water services (OECD, 2011).

2. Key definitions and insights from the literature

75. The extent to which stakeholders participate in their own governance is a fundamental dimension of governance itself. The task of navigating systems shaped by social, economic and political power differentials makes engagement central to institutional experience. Elinor Ostrom's approach of institutional analysis demonstrates that solidarity-based economies are promising alternatives to traditional state-centred "command-and-control" economic solutions to pressing social and ecological problems (Ostrom, 1990; 2010). It identifies stakeholder engagement in institutional management as an important factor in determining whether institutions will be effective and enduring, in particular from an informational and problem-solving perspective. Hence, engagement processes lift information about intentions and actions of others actors which reduces uncertainties and contributes to coordination and trust-building. Institutional analysis also considers that local knowledge provided by engagement at community-level can lead to better-informed institutional design and economic solutions to solve community problems.

2.1. From public participation to the broader concept of stakeholder engagement

76. Recent years have seen an evolution in water debates from the notion of "participation" to the concept of "engagement". *Participation* typically refers to the involvement of individuals and groups in the design, implementation and evaluation of a project or plan (Brown and Wyckoff-Baird, 1992; Yee, 2010). *Engagement* is an "umbrella" term that broadly refers to an organisation's efforts to ensure that individuals, groups, and organisations have the opportunity to take part in the process of decision-making

(including implementation) that will affect them, or in which they have an interest. It embraces a broader range of inclusive processes, with different intentions and different inputs to the decision-making process. Indeed *participation* does not necessarily entail that those attending are influencing the decision-making while *engagement* is characterised by meaningful inputs to the process. In other words, participation is a *level* of engagement, amongst others.

77. A distinction is also necessary between *public* participation and *stakeholder* engagement. According to Smith (1983), public participation encompasses a range of procedures and methods designed to consult, involve, and inform local communities and citizens (i.e. the "public"). For example, in the water sector, the "public" would essentially encompass civil society (e.g. in the formulation of river basin management plans) and customers (e.g. in improving the quality and accountability of water and sanitation services). *Stakeholder engagement* opens a broader perspective of inclusiveness that goes beyond civil society and end users and reaches out to other groups of actors, within and outside the water sector, in activities related to planning, decision-making, implementation, monitoring and evaluation. Stakeholder engagement therefore also encompasses different levels of governments (multi-level governance), the private sector (water stewardship), regulators, service providers, donor agencies, investors, civil society in its different forms (e.g. citizens, NGOs, users' movements, etc.) and other relevant constituencies.

2.2. Typologies of engagement

2.2.1. Literature insights

78. The literature reveals that the concept of stakeholder engagement means different things for water use, water management and water governance. For water *use*, engagement primarily refers to access (sufficient quantity and good quality); for water *management*, it entails involvement in operational, on-the-ground functions (distributions, infrastructure maintenance, quality monitoring); while for water *governance*, it refers to implementation, including the contribution to decision-making. Water governance, next to water use and water management, is found at all levels, from international to local, and for all types of stakeholders, from governments, to private sector, to civil society. Also, philosophers and socio-political theorists have investigated and forged founding concepts that relate to stakeholder engagement. Habermas's research on democratic communication (1989) points to institutional criteria that are preconditions for the emergence of public spheres, including inclusivity, common concerns and the disregard of social status. In his research on organisational behaviour, Steers (1979) worked on the measurement of *organisational commitment* which he defined as the relative strength of an individual's identification with and involvement in a particular organisation. He found that this involvement involves an active relationship with the organisation such that individuals are willing to give something of themselves in order to contribute to the organisation's well-being.

79. Various typologies of engagement and participation have been discussed in the literature (box 1). A well-known categorisation is the "ladder of citizen participation" developed by Arnstein which identifies eight levels or "rungs", ranging from manipulation (the lowest in the group of non-participation steps) to citizen control (the highest step and highest degree of citizen power) – showing that there is a significant gradation of citizens participation (Arnstein, S. R., 1969). It has served as a starting point for discussion on citizen participation but has also been deemed obsolete and debatable for considering participation as an *end* in itself rather than a *means* (Wehn, U. and Evers, J., 2014). Since then, other typologies have arisen such as Pretty's "typologies of participation" (1995) Fung's "democracy cube" (2006), and more recently UNDP Water Governance Facility/SIWI/WIN's levels of engagement (2013).

Box 1. An overview of participation and engagement typologies

Since Arnstein proposed the "ladder of participation", which categorises participation according to the level of participants' involvement in the decision-making process, researchers have recognised that different levels of engagement exist, from passive (for example, receiving information) to active (for example, contributing to plans and decisions in various ways).

Pretty's typology (1995) suggests a normative classification of participation going from 'bad' forms of participation – "manipulative" participation and "passive" participation subsequent to decisions that have already been taken – to 'better' forms, such as participation by consultation. 'Functional participation' captures the form of participation that is most often associated with "efficiency" arguments: people participate to meet project objectives more effectively and to reduce costs, after the main decisions have been made by external agents.

Fung (2006) went further and described various approaches to participation through a "democracy cube" which is based on axes of authority and power; types of participants; and communication and decision mode. He suggests that it can be used to inform institutional design choices for public participation planning initiatives.

More recently, the User's Guide on Assessing Water Governance (UNDP Water Governance Facility, SIWI, WIN, 2013) provides a typology of 5 forms of engagements: i) owners of the initiative *(i.e.* stakeholders provide the necessary monitoring and evaluation) ; ii) partnerships (i.e. institutions, organisations and citizen fora collaborate in policy development and implementation) ; iii) representation (i.e. stakeholder preferences are represented in the management of the project); iv) *consultation* (i.e. institutions, organisations, citizens and stakeholders are engaged in dialogue and networking) and v) *information and awareness* (i.e. 'participation' is minimal and mainly passive, in the form of educational initiatives, training of staff, etc.)

2.2.2. OECD terminology and typology of levels of engagement

80. In this report *stakeholder engagement* is defined as the process by which any person or group who has an interest or stake in a water-related topic, may be directly or indirectly affected by water policy, and/or have the ability to influence the outcome positively or negatively, are involved in the related activities and decision-making and implementation processes (see further key definition in box 2). This report deliberately focuses on those forms of stakeholder engagement where governments have a role to play in terms of setting the enabling environment and framework conditions. Nevertheless, there are plenty of self-organised forms of engagement where decision-makers/public authorities are not the party facilitating or allowing stakeholder engagement, which rather emerges from a bottom-up perspective.

Box 2. Key definitions

Water governance: Water governance is about who does/gets what, when and how. It encompasses political, institutional and administrative rules, practices, and processes through which stakeholders articulate their interests, their concerns are considered, decisions are taken and implemented, and decision-makers are held accountable in the development and management of water resources and delivery of water services[3].

Stakeholder: Person, group or organisation who has an interest or stake in a water-related topic, may be directly or indirectly affected by water policy, and/or have the ability to influence the outcome positively or negatively

Engagement Process by which stakeholders are involved in the water-related policy/project processes and activities to ensure effective water governance. Engagement process can happen at different stages of an initiative (design/conception, development, implementation, evaluation, etc.) and can have different objectives, from information production and sharing, to co-production and co-decision. Furthermore, engagement can take various forms depending on the degree of involvement of stakeholders.

Inclusiveness: Extent to which engagement processes involve stakeholders from diverse backgrounds and take into account their needs, assets and perspectives into the design and implementation of water policies and projects.
Promoters: Conveners and facilitators who set-up engagement processes to gather stakeholders around a given

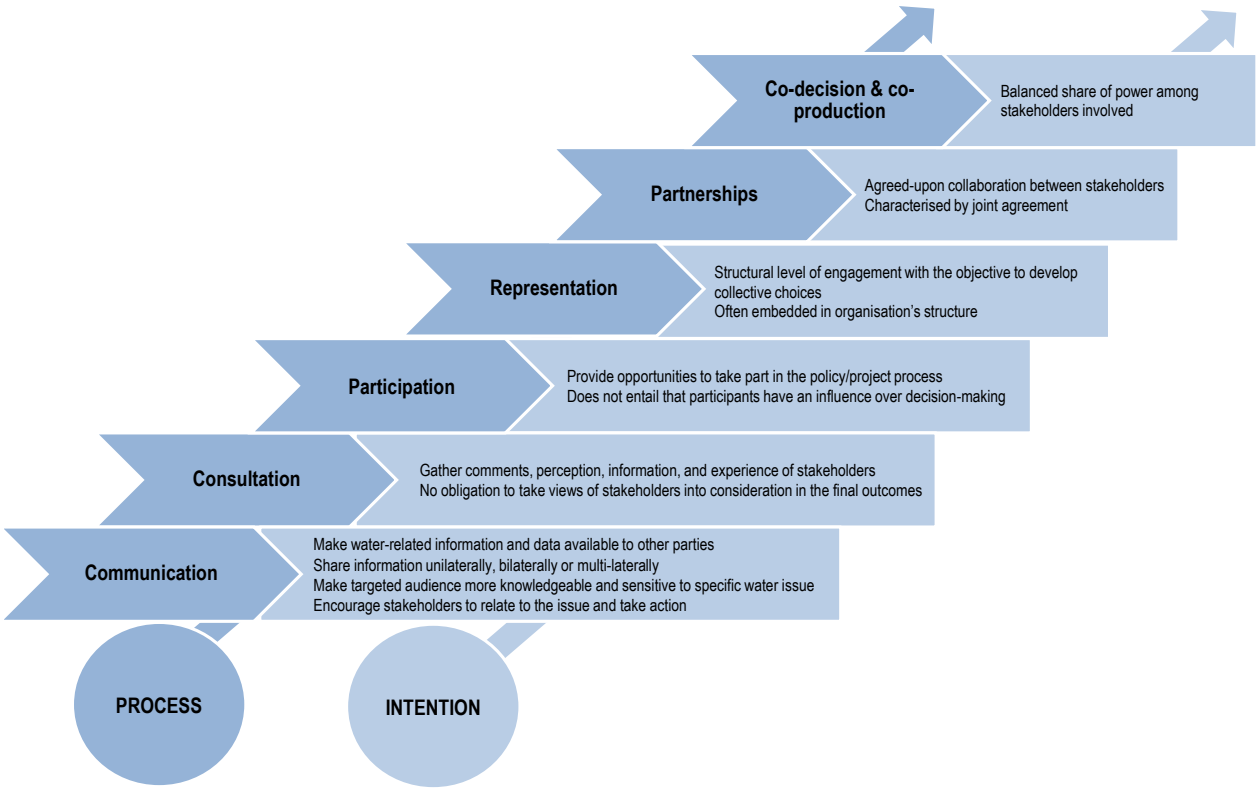
[3] Recent attempts at defining water governance are much in line this definition. For example, Megdal et al (2014) define groundwater governance as the overarching framework of groundwater use laws, regulations, and customs, as well as the processes of engaging the public sector, the private sector, and civil society. It may involve coordinating administrative actions and decision-making between and among different jurisdictional levels.

project, reform or policy.

Targets: Institutions, groups or individuals for which decision-makers set-up engagement processes, with various intentions: to inform and educate them; to consult them for harnessing their knowledge and opinion; or to partner and co-decide with them in order to take joint decisions or actions.

81. The typology suggested in this report (figure 1) distinguishes 5 levels of stakeholder engagement depending on the processes and the intentions they pursue. The first level is *communication*, which intends primarily to share information and raise-awareness but implies that engagement is mostly *passive*, i.e. stakeholders are provided with information related to a water policy or project but not necessarily with the opportunity to influence finale decisions. The typology incrementally progresses up to the level of *co-production* and *co-decision* which corresponds to more intensive decision-making where stakeholders exercise direct authority over. Stakeholder engagement is therefore a multi-faceted exercise which various progressive levels imply different forms and intensity of stakeholder engagement.

Figure 1. Levels of stakeholder engagement



Communication

82. Communication represents the first level of engagement. It intends to make water-related information and data available to other parties. Sharing information can be done through a number of channels, from traditional and social media, to meetings, workshops or platforms specific to the sector such as water information systems. In the majority of cases, stakeholders who participate in engagement processes for information sharing do not put forward their own views. Instead, they participate as spectators who receive information about some policy or project.

83. Sharing information can be done *unilaterally*, with one organisation releasing water data to a number of receivers (e.g. through newspapers, websites, etc.); *bilaterally*, with two entities agreeing to

mutually share information (e.g. two river basin organisations sharing data on neighbouring river basin or aquifers likely to affect one another); or *multi-laterally* when different types of stakeholders come to an agreement to share data related to a common topic or issue (e.g. a municipality, a local service providers and consumers for what regards water service coverage, performance or tariffs).

84. Communication also aims to raise awareness. Generally, it consists in an organisation dialoguing with other entities with the goal to make the targeted audience more knowledgeable and sensitive to a specific issue, such as water quality or flood risk. In the majority of cases, awareness raising starts with sharing information as tangible data are key to understand about the issue at hand as and grasp their magnitude. Engagement processes for awareness-raising can take the form of public campaigns, educational initiatives, or training of water professionals (box 3).

Box 3. Initiatives towards greater awareness-raising

In the Netherlands, Dutch citizens face a critical **awareness gap** whereby they take current levels of safety for granted. This is explained by a high degree of trust in public authorities and the absence of a major flood disaster in the last 60 years (in a country that has 60% of its territory in floodable areas, of which a considerable part is below sea level). A symptom of this is the low voting turnout for the elections of Dutch water authorities every four years. Citizens have to elect officials of regional water authorities in charge of managing water, including for flood defence, while being unaware of their practical duties and roles. The resulting low participation levels during elections call into question the legitimacy of elected officials. In order to get a better sense of how much the public knew about water issues, to fill-in existing gaps and to motivate a cultural shift across stakeholders, and particularly the public, the regional water authority of Rijnland decided to design its new working programme and policy plan for 2015-2021 jointly with stakeholders in the area, including citizens. Targeting specifically the latter, a survey was carried out to assess their knowledge on water, their positions regarding certain water issues, and their willingness to participate further in decision-making. Results were used to set up an online participation platform to help people be more familiar with the roles and responsibilities of the regional water authorities, facilitate discussion on important issues, and encourage new ideas. A large congress took place in June 2014 and gathered citizens as well as other stakeholders (e.g. environmental organisations, municipalities, etc.) which outcomes are currently being considered for inclusion in the draft policy plan.

In Portugal, the « Water Heroes » project aimed at **raising awareness on efficient water use**, in particular among students. The project started in 2012 in the Beja region and was led by the local water and sanitation provider (EMAS). It aimed to foster environmental awareness through teaching materials tackling the description of the water cycle, information on water contaminants, consumption of treated water, tips for saving water, as well as presentation of the environmental and economic value of water. To stimulate research among students, the project also launched two contests inviting new ideas and a pilot project on efficient water use to be submitted to encourage innovation, originality and applicability. Twenty-nine schools were targeted in the first year of implementation, reaching over 2300 students. As the project enters its third year, the service provider continues to receive invitations to organise visits within and outside the school community.

Sources: Case studies submitted by the Dutch water authority of Rijnland and EMAS.

85. Communication processes aiming to raise awareness can allow stakeholders participating to explore develop and even transform their opinions, preferences and perspectives. These processes exert a communication influence on stakeholders who are moved by the reasons, conclusions or by the probity of the process itself (Fung, 2006). Awareness represents a further step from sharing information. It is what makes stakeholders relate to an issue, realise how it can be significant for them and therefore take action.

Consultation

86. Consultation aims at gathering comments, perceptions, information, advice, experiences and ideas of stakeholders. The process is often initiated by decision makers looking for insights and views from the stakeholders involved or likely to be affected by the outcomes. Consultation often takes place during meetings where a given reform, policy, or project is explained and institutions, organisations, and citizens engage in a dialogue to share their opinions, but it can also take the form of written contributions (box 4) or votes (e.g. referendum, surveys).

Box 4. Code of practice on written consultation for the EU Water Framework Directive

According to Article 14 of the EU Water Framework Directive, consultations with the public should be carried throughout the different steps of development of the River Basin Management Plans (e.g. time table and work programme for the production of the Plan, interim review of significant water management issues, draft Plan, etc.).

The Directive specifies that documents, analyses and measures should be made available for written comments by the public (e.g. in paper form, by mail or via e-mail). Additionally, other ways of consultation can be considered such as interviews, workshops or conferences. During these meetings, major issues are presented and the invited stakeholders are asked to give their perception, knowledge and ideas on the specific issues.

Codes of practice on written consultation were developed as part of the WFD Common Implementation Strategy:

1. **Timing** for the organisation of consultation, apart from the dates mentioned by Article 14, should be built into the planning process for a policy or service from the start;
2. It should be clear **who** is being consulted, about **what** questions, in what timescale and for what purpose;
3. The **documents** which are subject to consultation (timetable, work programme, draft copy of river basin management plan) should be as **simple and concise** as possible (including a summary of 2 pages of the main questions it seeks views on). Summaries for a broader audience should be prepared;
4. The **documents should be made widely available**, with the fullest use of **electronic means** and effectively drawn to the attention of all interested groups and individuals;
5. Anyone with an interest has **six months** respond to the documents;
6. Responses should be carefully and open-mindedly analysed, and the **results made widely available**, with an account of the views expressed, and reasons for decisions finally taken;
7. Departments should **monitor and evaluate** consultations, designating a consultation **coordinator** who will ensure the lessons are disseminated.

Source: Working Group 2.9 – Public Participation, (2003), *Common Implementation Strategy for the Water Framework Directive (2000/60/EC)*, Guidance Document No 8, Public Participation in Relation to the Water Framework Directive, European Communities

87. The use of information gathered during consultation process often remains at the discretion of the entity that initiated it. In most cases, there is no obligation to take the views of the audience into consideration when subsequently amending plans, making decisions, or setting directions and little attempts are made to translate the views and preferences of stakeholders consulted into a collective decision. In most consultation meetings, decision makers commit only to receiving the testimony of participants and considering their views in their own deliberations.

Participation

88. Participation means that stakeholders are associated with the decision-making process and take part in discussions and activities. For promoters of participation, the aim is often to improve transparency in decision making and the strengthened the foundation of the choices and decisions to be made. However, the level of influence granted to stakeholders involved in a participation process varies from one situation to another, and they do not necessarily have a say over the final decisions.

Representation

89. Representation is a more structural and institutionalised level of engagement. It attempts to develop a collective choice by aggregating preferences from various stakeholders. It often consists in having stakeholders' perspectives and interests officially represented in the management of a project or of an organisation. Engagement through representation allows stakeholders to explore and deliberate between what they want as individuals and as a group, in order to find the best available alternative to advance joint

preferences they have, be it preserving the quality of a water body or improving the performance of water services.

90. In the case of a water project, representation can take the form of a supervising committee or an advisory board composed of different types of stakeholders that are involved in the various aspects of design, development, implementation and evaluation and that have a say in the strategic and operational orientations of the project. It can also be embedded in an organisation's structure when the board of a company or the steering committee of an institution includes representative of various categories of stakeholders. For instance, most river basin organisations have their councils composed of representatives from the government, water users and civil society participating in water strategies and plans.

Partnerships

91. Partnerships are the next formalised level of engagement. They consist of agreed-upon collaboration between institutions, organisations or citizen fora to combine resources and competencies in relation to a common project or challenge to solve. Partnerships can take place at various scales, from inter-local partnerships between municipalities or service providers to make water service provision more efficient and sustainable, to more global ones aiming to bring innovation and leverage investment in water. Partnerships are often characterised by a joint agreement of the stakeholders involved to share the risks and the benefits (box 5).

Box 5. Public-public partnership for information-sharing on drinking water quality

Responding to the "right to water" call of the European Citizen Initiative, a memorandum of understanding was signed on 21 March 2014 between Gruppo Cap (the water service provider of the province of Milan), 132 municipalities (including Cernusco sul Naviglio , Ossona, and Trezzo sull'Adda), the Province of Milan's government, the Milan Province ATO as well as civil society organisations and citizens committees to disseminate more information on water quality to the public and therefore increase transparency and accountability regarding water service provision in the region.

All stakeholders involved had the opportunity to contribute to the choice of parameters to be published and the online database was launched in July 2014. For example, people can access the platform, select their municipality on a map of the region of Milan and access information on water consumption level in their city, the quality analysis and origin of the drinking water they are provided (from well water or surface sources channelled through aqueducts) as well as the methodology used by the laboratory carrying out the quality analysis. It is also possible to compare all data with statutory requirements. In addition, they have access to information on the local geology, water treatment techniques and ecological status of neighbouring aquifers.

The platform is accessible on the websites of all stakeholders involved in the project and the data is periodically reviewed and up-dated.

Source: Case study submitted by Gruppo CAP

Co-production and co-decision

92. Co-production and co-decision are the ultimate levels of stakeholder engagement as they are characterised by a balanced share of power over the policy or project decision-making process. This form of engagement tends to challenge existing organisational values and practices in the sector, and can have positive implications for accountability (see the example of Adelaide in box 6). In the OECD region, it has been proven that co-decision and co-production in public services (though still in developmental stage in many countries) have led to cost reductions, better service quality and improved user satisfaction (OECD, 2011b).

Box 6. Laying the foundations for co-management

In 2011, after a procurement process of over 2 years, the Allwater Joint Venture (Transfield Services, Suez Environnement & Degremont) and SA Water, the South Australian Government-owned water utility, entered a 10-year Operations & Maintenance Alliance contract.

An alliance contract is a co-operative model aiming to create a better alignment of objectives between parties involved. Differing from a traditional PPP contract, an Alliance offers an integrated governance and team. It is based on the principles of sharing risks, profits and losses (win/win – lose/lose contract), transparency/"open book", shared governance, no blame/no dispute, cooperation, trust and co-construction upstream from the project. This reinforces the joint responsibility for delivering the works against predetermined performance targets.

The full benefits of an alliance can only be achieved with an adequate procurement process that stresses the alignment of objectives, co-construction, transparency, trust and cultural alignment, aimed at building acceptability and ownership of the project from the start. The procurement process emphasises leadership and ownership play an important role in the efficiency and success of the contract.

SA Water is about to undertake a contract review looking at the first three years. As a client, SA Water has regularly reported its satisfaction with the relationship it has with Allwater, the value-added of initiatives undertaken by Allwater and the flexibility that the contract model has provided.

Alliance contracting fosters good governance and ensures progress of key operational performance indicators as well as a good budgetary control. It introduces significant changes of culture by focusing more in responsibilities, developing collaborative working relationships and creating a culture focused on achievement to improve business performances.

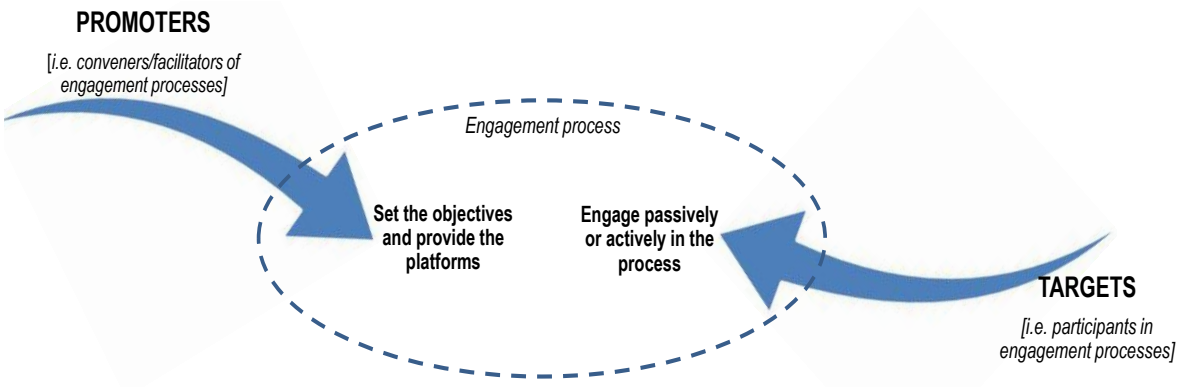
Source: Case study submitted by Suez Environnement

93. Co-production approaches can generate creative policy responses enabling governments to provide better public services in times of fiscal constraints (OECD, 2011b). In water and sanitation service for instance, co-production with customers can help tackle service failures and reduce costs for the public. Successful co-production and co-decision depend on having the right mix of leadership, capacity (*e.g.*, technology, peer support) and incentives (*e.g.* recognition, awards) to ensure that all stakeholders buy into the change process, and to guarantee value for efforts. Co-production and co-decision transform the relationship between stakeholders, enabling each of them to take more control and ownership, and contributing to aligning policy or project outcomes with their aspirations and needs.

2.3. Targets and promoters of engagement

94. Roles and responsibilities vary when considering stakeholder engagement, as do judgments and perceptions. There is a distinction between the two possible roles that a given institution can play in engagement processes - as "target" or "promoter" - knowing that in many cases institutions play both roles, sometimes at the same time (figure 2).

Figure 2. The dual role of stakeholders in engagement processes



95. *Targets* are institutions, groups or individuals for which decision-makers set-up engagement processes, with various intentions: to inform and educate them; to consult them for harnessing their knowledge and opinion; or to partner and co-decide with them in order to take joint decisions or actions. Targets can be either *passive* – for instance when their contribution only consists in being targeted by an educational campaign on water issues – or *active*, when the engagement processes requires that they attend meeting, take part in reflection and brainstorming, and share responsibility of the outcomes – for instance when they are members of a river basin committee deciding over the river basin management plan.

96. *Promoters* are the conveners and facilitators who set-up engagement processes to gather stakeholders around a given project, reform or policy. Promoters set the incentives and provide the platforms. They also determine the rationale for the engagement process, identify and target the stakeholders they wish to involve and provide the framework in which the engagement process takes place.

97. Considering the perspective of targets and promoters is crucial to assess engagement processes exhaustively. As some define the framework within which the others intervene, targets and promoters can pursue different objectives, encounter different bottlenecks, and require different mechanisms or different conditions to effectively contribute and/or set-up inclusive decision-making. Looking at both points of view can therefore help to better align the objectives that targets and promoters aim to achieve and processes for doing so. Because the OECD's ultimate goal is to advisegovernments to design and implement better policies for better lives, this report primarily investigates the perspective of *promoters* in stakeholder engagement to provide them with guidance to set up the enabling conditions for outcome-oriented stakeholder engagement. But the views of *targets* of stakeholder engagement are also reflected throughout the report and in the Survey's results.

2.4. Structural vs. issue-based engagement

98. Inclusive decision-making in the water sector can be limited to a once-off exercise for a particular policy process or project, or can be part of a systematic inclusive governance approach by a government or organisation. The different degrees of "formality" that can exist in stakeholder engagement imply different requirements (e.g. resources, support, skills) and different results in terms of how effective engagement is in reaching expected outcomes.

99. Overall, stakeholder engagement has remained mostly incidental in the water sector (i.e. water policies). The flexibility associated with project- or issue-based stakeholder engagement has made it a preferred option for many decision makers rather than engaging in more systematic inclusive approaches, apart from noticeable exceptions (e.g. historical "Polder approach" in the Netherlands for consensus-building). It consists in setting-up ad hoc mechanisms such as workshops, hearings, panels or campaigns to gather stakeholders around a specific issue. These engagement processes are often time-bound, limited in scope and related to the modalities of a specific water project or policy process. They require just enough human and financial resources to sustain the process but often end conjunctly with the implementation or evaluation of the project or policy.

100. Stakeholder engagement processes have been reactive rather than proactive. They tend to be a response to a need or obligation, such as to comply with regulatory frameworks on the topic, or during crisis and emergencies (droughts, floods, economic crisis etc.) rather than carried out on a voluntary basis. Efforts are still needed to develop stakeholder engagement on a more systematic basis in decision-making, with clear objectives, in order to embed stakeholder engagement into the ways of managing water.

101. However, there has been some progress to move towards more structural forms of stakeholder engagement in the water sector. New legislations, guidelines and standards at various levels related to public participation and stakeholder involvement have spurred the emergence of more formalised forms of

stakeholder engagement, embedded in organisations' overarching principles and policy (box 7). Increasingly, public authorities, service providers, regulators, basin organisations or donors have included requirements for co-operation, consultation or awareness-raising into their operational rules and procedures, either because of legal requirements or on a voluntary basis.

Box 7. Institutionalised stakeholder engagement

The Dutch Delta Programme

The Delta Programme is a joint endeavour between the ministry of infrastructure and environment, provinces, municipal councils and regional water authorities, in close co-operation with social organisations and business. It was created in 2010 with two priority goals protect the Netherlands against flooding and ensure freshwater supply over the next 100 years. Stakeholder engagement within this programme has, for example, led to customisation in the strategies and the commitment of several at a regional (within the sub programmes) and national level.

The implementation of the Delta Programme consists of a series of short- and long-term flexible projects to be carried out up to 2015 and beyond. Building on multi-stakeholder dialogue, and technical calculations and assumptions, several "decisions" structure the Delta Programme and provide direction for the measures to be taken in terms of water safety (standards, strategies), freshwater strategy, water levels, protection of the delta, and spatial adaptation.

The Delta Act on Flood Risk Management and Freshwater Supplies came into effect in January 2012 as an amendment to the Water Act. It is the backbone of the Delta Programme and mandates a Delta Commissioner, appointed by the government, to lead the Delta Programme and submit a yearly proposal for action to the Cabinet, in consultation with the relevant authorities, social organisations and the business community. An annual report provides an overview of all measures, facilities, studies and ambitions related to flood risk management and freshwater supplies. The Delta Act also enshrines a Delta Fund to finance the implementation of the Delta Programme and related projects and reduce the risk that too much or too little is invested in water safety and freshwater supply.

The third Delta Programme currently being implemented focuses on the implementation of the Delta Decisions with programmed measures, facilities and studies for the next six years, in line with the Delta Fund budget, studies and progress reports.

The Chesapeake Bay Programme

The Chesapeake Bay Program was created in 1983 in the United States with the objective to reduce the amount of nutrients entering the Chesapeake Bay - primarily nitrogen and phosphorus. It operates under the supervision of the U.S. Environmental Protection Agency, which funds and coordinated the Program.

Partners involved in the program include federal and state agencies, local governments, non-profit organisations and academic institutions. They operate under an agreement that sets out a clear set out outcomes, and time-bound and measurable targets to contribute to achieving restoration and protection of the Bay watershed.

The Program is organised into committees, goal implementation teams, workgroups and action teams. The *ChesapeakeStat* website was created to foster coordination among partners and improve government accountability. It reflects the Bay Program's continuous process of analysing data to assess progress towards the set restoration goals, visualise data, identify priorities and reveal funding gaps.

The Chesapeake Bay Program's Executive Council and the Federal Leadership Committee for the Chesapeake Bay have called for an adaptive management strategy in coordinating and, where appropriate, integrating the goals, outcomes, and actions of the Program with the goals, outcomes, and actions described in the Executive Order Strategy. The Executive Council agreed in July 2011 to update the commitments of the Chesapeake 2000 Agreement. A stewardship funding was also set up and is a critical component to a comprehensive Bay restoration strategy.

Source: Cases submitted by the US Environmental Protection Agency and by the Delta Programme Commissioner

102. In the private sector in particular, more and more companies have embraced corporate social responsibility and have adopted formal ways of engaging stakeholders (OECD, 2001). Implementing social responsibility has been facilitated through standards and common codes of conduct. While business themselves have set guidelines (box 8), governments have also played a role in defining common rules. The OECD *Guidelines for Multinational Enterprises*, adopted in 1976 and revised in 2011, comprise recommendations from 42 OECD and non-OECD governments to multinational corporations covering issues such as humans' rights and environmental protection. They give greater attention to consumers' rights and calls on companies to provide accurate and clear information on products and to effectively address consumer complaints.

Box 8. Stakeholder engagement in corporate social responsibility

In 2010, Tractebel Energia, a large energy generator in Brazil, launched several projects throughout the country to protect river sources in regions where power plants are implemented (e.g. Chopinzinho and Rio Bonito do Iguaçu). The company's corporate social responsibility programme includes priorities in cultural development, social inclusion, and environmental improvement. Tractebel Energia stakeholder engagement policy established proceedings adopted by its representatives and affiliates as part of the development, implementation and operational stages of power plants.

In the case of the river source protection projects, the company encourages stakeholders such as municipalities, youth associations and the Rotary Club to participate in fora at the company's headquarters and power plants. The objective is to build knowledge on river protection practices, water quality levels and standards. Stakeholders living or working need river sources can then be trained to operate river source protection systems and obtain measurements of water quality parameters. These engagement efforts contribute to the sustainability of river source protection measures and have received international recognition with the American Commerce Chamber of Brazil award and the Expressão Ecologia Magazine Award both in 2013.

Source: Case study submitted by Tractebel Energia S.A

103. Shifting from an issue-based to a structural form of stakeholder engagement raises some challenges for decision makers. Formalising, or even institutionalising collective decision-making related to water issues requires strong leadership commitment with clear objectives and strategies (e.g. to prevent capture of engagement processes). It also implies securing the needed financial and human resources at the appropriate levels to sustain the engagement process. Formal stakeholder engagement, even more so than informal engagement, requires the appropriate skills to set-up the process, facilitate it and ensure its expected outcomes. Dedicated staff needs to be trained in terms of mediation, communication, use of technologies, etc.

2.5. Progress in water resources vs. services management

104. Overall, more progress has been made to engage stakeholders in water *resources* management than for water *services* delivery. Legislation on inclusive decision-making enacted in the last decade mostly related to surface and groundwater quality and quantity. This translated into more formalised or institutionalised stakeholder engagement for managing water resources, for example through the creation of river basin organisations and their fora. These guidelines and legislation, in the backdrop of greater water scarcity and competing water demands, have triggered important reforms and incentivised stakeholder engagement as a key pillar for water resources decision-making and planning.

105. Since the Dublin Principles, stakeholder engagement related to water resources management has been enshrined in the concept of Integrated Water Resources Management (IWRM). In particular, principle n°2 states that "water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels". It introduced a transition from top-down approaches to stakeholder-driven approaches, from command-control to more cooperative and distributive forms of water governance (GWP, 2003)**.** The EU WFD also introduced prescriptions in terms of information, consultation and involvement of the public, including users in the implementation of the Directive and development of river basin management plans (see experiences from several European countries in box 9).

Box 9. Stakeholder engagement for integrated water resource management

In **Germany**, the implementation of the Water Framework Directive has mandated river basin authorities to draw river basin management in consultation with the public and interested parties. Beyond these requirements, an extensive involvement of public and interested parties has been carried out in Baden-Württemberg during the development of the first river basin management plans, published in 2009. In this process, interested parties have been involved at different scales. In the framework of an advisory board, information was shared with NGOs, institutions, and the industrial sector, and overarching concepts and strategies were discussed. Over 70 local events were organised prior to the production of the plans where participants were actively involved, during which concrete measures were formulated by the participants. It contributed to identify significant problems, find appropriate solutions and secure high levels of public acceptance.

Spain has also a long history of multi-stakeholder decision-making for water resources management, which has been reinforced by the requirements of the WFD. The Jucar river basin authority promotes information, consultation and public participation in the process leading to the establishment of the river basin management plan, and supports the involvement of interested parties in achieving good status of the Mancha Oriental water body to build multi-stakeholder consensus on key water decisions. This led to the adoption by royal decree of the new water management plan for the Jucar river basin in July 2014, as required by the EU WFD, with monitoring and control tools for water bodies' quality and quantity; resource-saving actions; and measures to substitute water pumping practices. In addition, the revised Water Law (approved by Royal Decree in 2001) also set up formal participation bodies to ensure that decisions made by the river basin authority are in accordance with water users in the basin, such as for instance the Central Board of Irrigation in the Eastern Channel which is represented in the governing board of the Júcar basin authority.

In the **Danube** river basin, intensive public participation is taking place in decision-making under the umbrella of the International Commission for the Protection of the Danube River (which counts 15 contracting parties). There is active participation of accredited observers (currently 23) in all plenary as well as technical meetings. In addition, a designated expert group and a designated staff member work exclusively on public participation. Most importantly, the They steer public consultation activities for the development of management plans in line with Water Framework Directive and the European Flood Directive. To ensure good information-sharing among stakeholders and the public, the Commission also fosters educational and outreach initiatives such as the basin-wide river festival Danube Day.

In **Quebec**, Canada, public, private, and not-for-profit actors sit at the same table to manage water resources at the basin level and jointly design the river basin management plan. The Association of basin organisations in Quebec (ROBVQ in its French acronym) works hand in hand with each basin organisation to foster stakeholder engagement as stated in their mandate. ROBVQ offers various engagement mechanisms according to a "spectrum of citizen participation" which defines five levels of engagement and related responsibilities from information-sharing to empowerment and autonomy of actors in taking informed decisions in water resources management.

Sources: Case studies submitted by the Ministry of the Environment, Climate Protection and the Energy Sector of Germany; the International Commission for the Protection of the Danube River; the Association of river basin organisation of Quebec; and the Ministry of Agriculture, Food and the Environment of Spain.

106. For what concerns water services, engagement has been more heterogeneous and non-systematic than for water resources management, often consisting in handling customers' complaints. However, it does not mean that engagement processes in water and sanitation provision have not been organised at all. In several countries, utilities have set-up governing boards where shareholders have a say in strategic orientations, or advisory boards in which different categories of stakeholders take collective decisions. Partnerships with users and citizens also emerged as an important approach to innovate in service delivery, furthering some trends already underway in OECD countries, related to client orientation or service personalisation (OECD, 2011b). It follows a change in service providers' mentality that services work better when designed and delivered in partnership with citizens in order to harness their interest, energies, expertise and ambitions (box 10). Further efforts are needed in that direction in order for collaborative rather than competitive arrangements and targeting of consumers to become key foundations of future approaches to water and sanitation service delivery.

107. In recent years, international guidelines on the quality of water services have highlighted the importance of trust and goodwill from consumers. The 3rd edition of the World Health Organisation Drinking Water Quality Guidelines stresses that a lack of confidence in the quality of drinking water or the authorities may drive consumers to alternative, potentially less safe sources. The guidelines also explain that consumers have an important role to play in assisting the authorities to ensure the quality of drinking water by carrying out the necessary measures at the household level (WHO, 2008). The Bonn Charter for

safe drinking water aims to achieve good safe drinking water that has the trust of consumers. The charter stipulates that one of the fundamental objective for which all those involved in the supply of drinking water should strive is to ensure water supplies in which consumers have confidence "through open, transparent and honest communication between all stakeholders to develop trust" (IWA, 2004). It is a key principle in the Charter for the development of effective water supply systems.

Box 10. Setting tariffs and investment priorities

In France, the water and sanitation service provider of the city of **Grenoble** (Eau de Grenoble) engages with consumer associations to **co-decide water prices**. In 1996, a Committee of water and sanitation users was created following a citizen initiatives led by the NGO "Eau Secours" which had criticized abnormal tariff evolution following the privatisation of water provision in 1989. Today, an agreement stands between the Committee and the current public service provider that stipulates the roles, responsibilities and modalities of the joint activities related to information-sharing as well as deliberations on water tariffs and water quality. Amongst others, the utility provides the venue for the four to six annual meetings, the budget for specific experts when needed, as well as other logistical expenses. The Committee plays the role of advisor to the Mayor on all measures concerning public water service provision, paying particular attention to issues related to the protection of the resource as well as fair prices for water. Every year, water managers and the Committee of users discuss investments planned, the budget and the tariffs that would support needed infrastructure repairs in the network, while remaining bearable for all categories of users domestic and industrial customers, social housing, business, etc.). The Committee also has a seat at the managing board of the city's technical department for water which manages the annexed water budget.

In the United Kingdom, customers of privately-owned water companies have been given power to **set water prices and investment priorities** for 2015-2020. In the framework of OFWAT expectations for stakeholder engagement and empowerment, water companies have worked to create opportunities for local ownership and leadership in water price setting. Each company has engaged with their customers, through robust research, to capture their views and priorities for water services and tariffs. Companies also carried out research on the willingness of customers to pay to understand customer's expectations for service improvements. A three-tier approach was set to enable customers to influence the price and service providers by water companies. It consists in i) engaging directly with the water company on issues including local services and tariffs; ii) joining one of the customer "challenge groups" to discuss and question the shape of their company's overall business plan; and iii) participating in the sector-wide customer advisory panel to influence and inform water companies' decisions. Each water company's customer challenge group provided an independent evaluation report on the participatory process that was sent to OFWAT. To date, this has been the largest consultation ever carried out by water companies in the UK and was found very useful for OFWAT and the companies to gain a greater understanding and connection with their customers and stakeholders. Water companies committed to use the information collected from the participatory processes in the next price cycle to meet customers and stakeholders' demands and expectation

Source: Case study submitted by Eau de Grenoble / Committee of water and sanitation users of Grenoble; and Water UK

3. Analytical Framework

108. Many international organisations and research institutions have carried out work on inclusive approaches in the water sector. Some focused on a specific type of stakeholders (citizens, women) while other tackled aspects of engagement processes (design, mechanisms). A plethora of good practices have also been showcased around the world. However, there has been a lack of evidenced-base analysis and policy tools to assess how these inclusive approaches ultimately contribute to the performance of water policies and projects. This report proposes an analytical framework to take stock from stakeholder engagement assessments and define framework conditions for engaging stakeholder effectively while scale-up success stories for greater bench-learning.

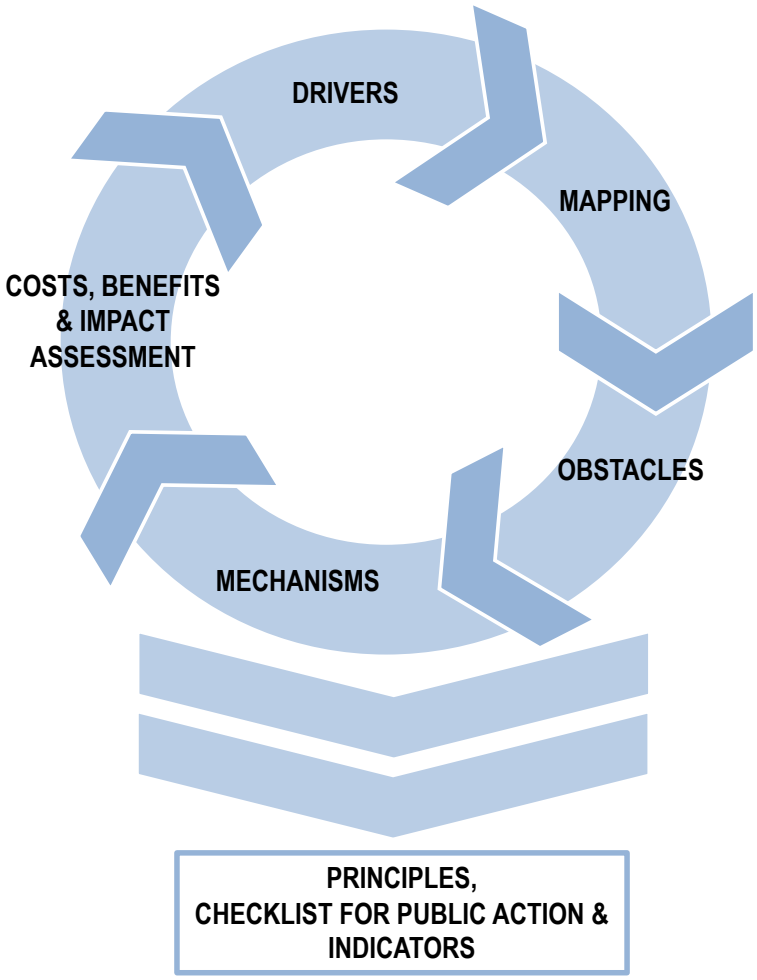
109. Because there are more and more actors in the water sector willing to get mobilised and to take part in discussions to influence certain decisions, it is crucial to evaluate the actual weight of stakeholder engagement in water-related decision-making and to what extent it contributes to making effective water governance happen. In a context of powers, counter-powers and sometimes resistance, and broader democratic debate, an understanding of how actors in the water sector come together to develop common solutions and how these solutions are articulated with objectives of water policy is crucial. Before concrete

actions can be taken, there is a need to identify the main obstacles to, as well as the mechanisms for stakeholder engagement in the water sector.

110. The analytical framework for stakeholder engagement in water governance suggested by this report is organised around five components (figure 3):

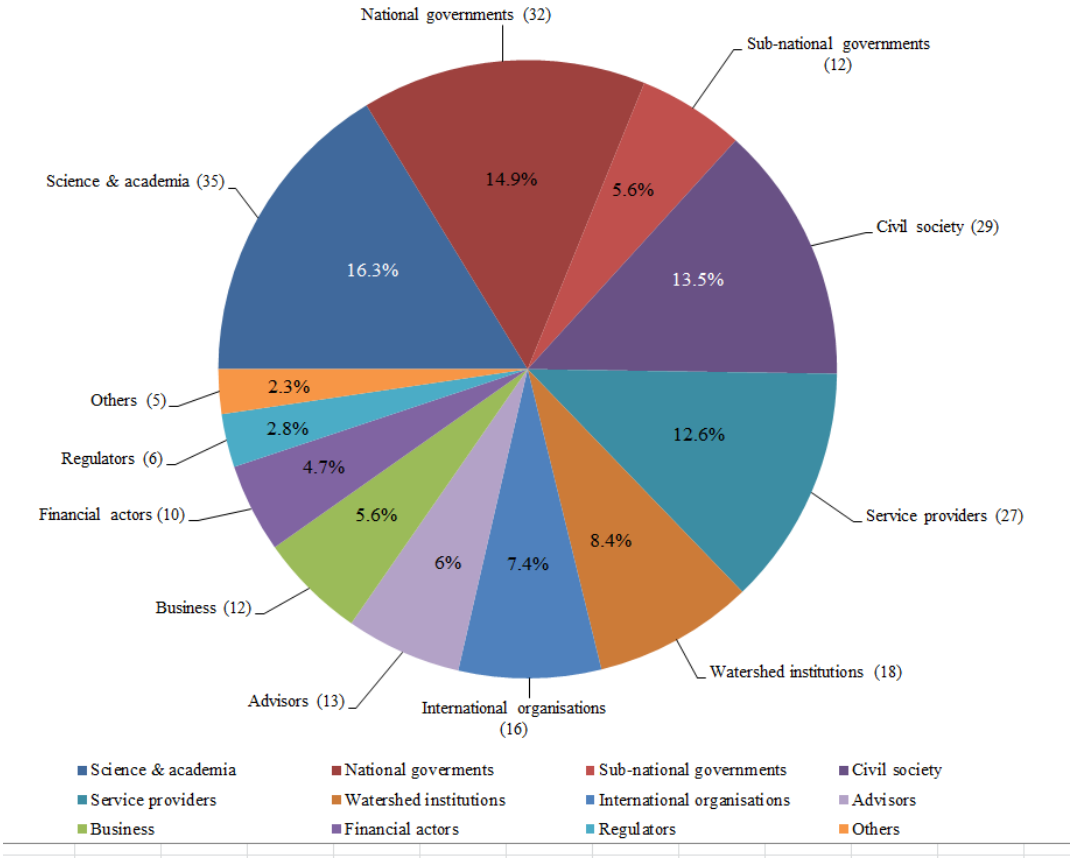
- *Detecting drivers*: understanding the forces and levers for actions to ensure stakeholder engagement is outcome-oriented;
- *Mapping stakeholders and scoping expectations*: identifying who are the stakeholders in terms of their roles, responsibilities, influence, motivations, level of connectivity and scale of intervention to ensure stakeholder engagement is target-oriented at the relevant scale*;*
- *Diagnosing obstacles*: diagnosing and foreseeing the bottlenecks and mitigating related risks to integrity, accountability and sustainability to ensure stakeholder engagement is anticipatory and resilient*;*
- *Identifying mechanisms*: determining which instruments of engagement works best when and where to ensure stakeholder engagement is fit-for-purpose;
- *Fostering evaluation*: assessing the effectiveness of the engagement process and outcomes, the costs and the benefits (monetary or not) to point out areas of improvements and trade-offs needed to ensure stakeholder engagement is adaptive and sustainable;

Figure 3. OECD Analytical Framework of Stakeholder Engagement in Water Governance



111. To support this analysis, an extensive online Survey was undertaken in 2014 in order to collect qualitative and quantitative data on stakeholder engagement identify the trends, drivers, and practices related to inclusive approaches for water resources and services management across a worldwide range of stakeholders, with various levels of interests and experience in the topic (see figure 4 and box 11). Although the Survey provides valuable insights and feedback on the reality of stakeholder engagement practices, it does not intend to be statistically comprehensive and reflect the multitude of views, arrangements and players in the field of water.

Figure 4. Categories of stakeholders represented in the OECD survey sample



Note: The graph presents the results of the respondent's self-categorisation based on a suggested typology of 15 overarching categories, and 33 sub-categories of stakeholders.

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance (2014)

Box 11. OECD Survey on Stakeholder Engagement for Effective Water Governance

Design

The Survey was developed by the OECD Secretariat, with the support of the members of the working group on stakeholder engagement of the OECD Water Governance Initiative. The Survey was pilot-tested (in its word version) by selected representatives from each category of stakeholder targeted to provide for a practitioner's perspective. The Survey was launched online on 1 April 2014, made available in 3 languages (English, French and Spanish) and closed on 16 June 2014.

Dissemination

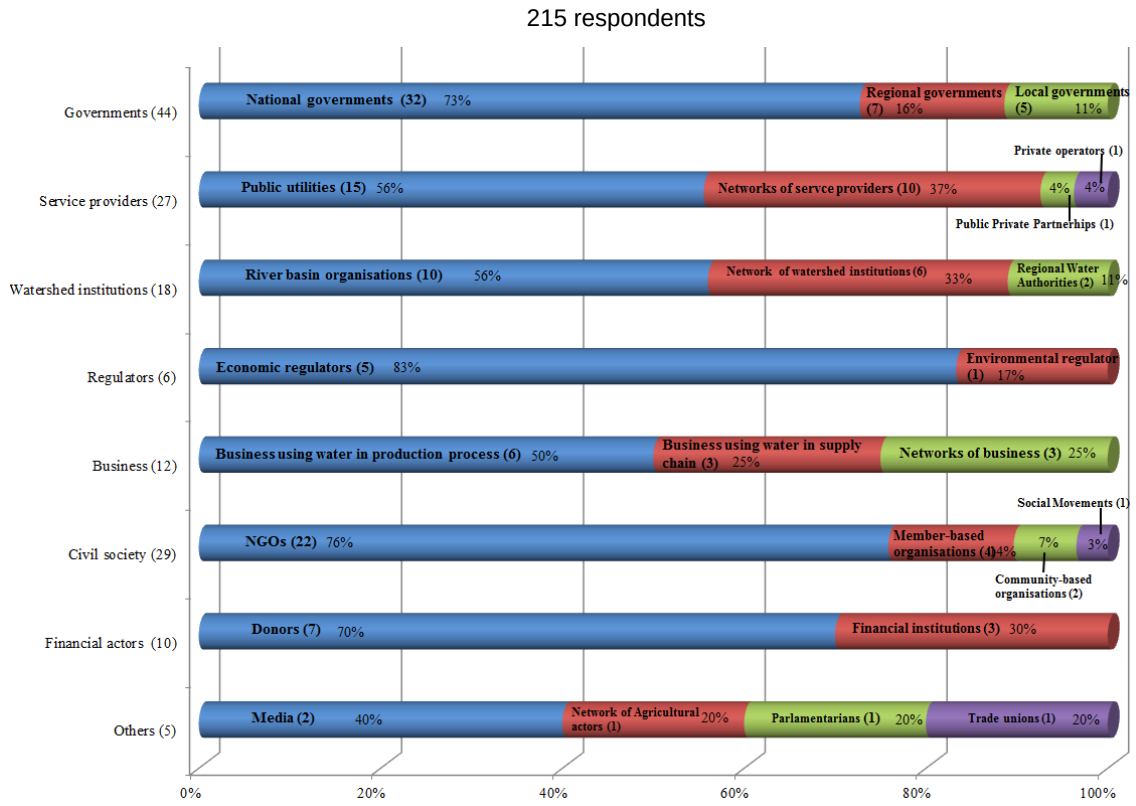
The Survey was disseminated through personal invitations to 165 targeted stakeholders, mainly members of the OECD Water Governance Initiative, 63% of which responded to the questionnaire. Under the suggestion of the working group, a broader invitation to participate was extended through different channels, be they existing networks of practitioners in the water sector (Aqua Publica Europea, GWP-Med, Turin School of Local Regulation, UNESCO-IHE Alumni, Water Youth Network, WBCSD, WWC and INBO), online platforms (Governance Observer monthly newsletter, EIP-Water newsletter), or email-based distribution lists (e.g. Water L., OECD water List etc.). This second row of dissemination allowed collecting an extra 111 responses.

Response sample

In all, 215 responses were collected. Respondents were asked to categorise themselves according to 34 sub-categories. For the purpose of data analysis, they were then clustered into 11 overarching categories: International organisations; governments (national, regional and local); service providers (public, private and PPP); watershed institutions (including RBOs); regulators (environmental and economic); business (depending primarily on water for their supply chain, their production and construction process or the use of their products by their customers; civil

society organisations (including NGOs); financial actors (donors and financial institutions); science and academia (including research centres); and advisors (engineering and consulting firms).

Figure 5. Composition of clusters of respondents



Note: The graph presents the respective share of sub-categories of stakeholders within each overarching category used for the analysis of the survey's results.

An umbrella category named "Other" gathers the limited number of responses on behalf of agricultural actors (1), trade unions and workers (1), media (2) and parliamentarians (1). When results are provided by categories of stakeholders, they are based on the respective share of respondents in each category.

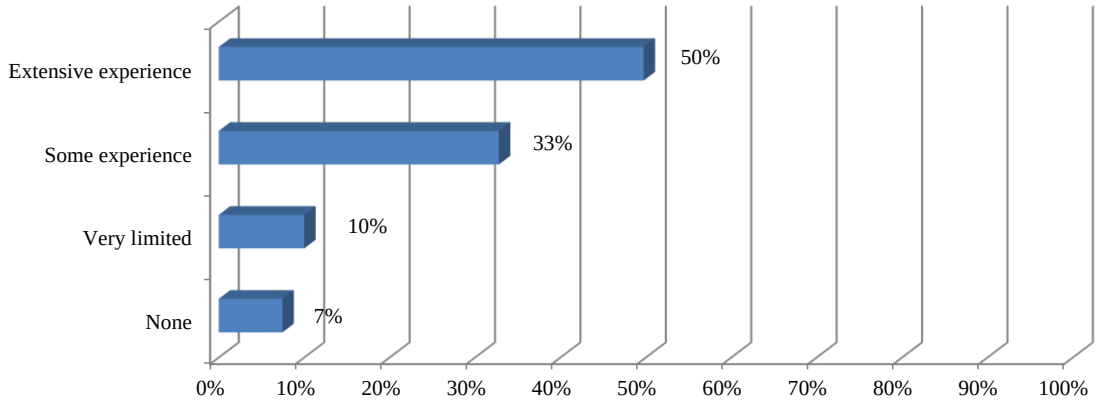
Thirty two responses from central governments coming from ministries of environment (12), water resources (6), infrastructure (4), agriculture (2), territorial development (3), strategic affairs (1), interior (1), as well as of national water authorities (2) and national environmental authority (1).

Data analysis and relevance

Several questions in the survey asked respondents to answer from the perspective of a target, a promoter or both. In some cases, the data was analysed considering the average between the two separate "populations."

Overall, half of the respondents considered their level of experience in terms of stakeholder engagement (either as targets or promoters) to be extensive and around 33% consider having some experience. This can speak as to the level of expertise and relevance of the information collected through the survey.

Figure 6. Respondents' overall experience with stakeholder engagement



Note: The graph provides the average of the respective shares of responses provided from the perspective of targets and of promoters.

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance (2014).

Conclusion

112. Environmental, institutional and social trends within and outside the water sector have called for more inclusive governance and spurred greater stakeholder engagement in water-related decision-making. On paper (*de jure*), regulations such as the Aarhus Convention, the EU Water Framework Directive and the EU Flood Directive mandate public engagement. But in practice (*de facto*), the importance given to engagement, and the extent of its implementation, vary from one situation to another. It underscores the need to consider what effects inclusive approaches have on policy decisions.

113. Developing a common language represents one of the primary challenges to analysing the contribution of stakeholder engagement in the water sector. The process of involving stakeholders has changed and is progressively moving away from mere "participation". It is no longer restricted to "civil society" and project-based approaches, but attempts to address a broader range of actors in a more systematic way. This evolution should be taken into account in the existing variety of concepts and vocabulary associated with stakeholder engagement. Definitions of *key terms* and the *typology* of engagement levels suggested in chapter 1 provide the foundations for looking at stakeholder engagement from different perspectives (targets and promoters); forms (formal and informal) and sub-sectors (water resources and water services).

114. Similarly, the *analytical framework* that lays out the 5 building blocks of engagement processes, i.e. drivers, stakeholder mappings, obstacles, mechanisms and evaluation, provides a reading template for decision- to develop a comprehensive approach to engagement efforts where these mutually dependent components are considered holistically. The following chapters explore each of these components and provide policy guidance to ensure stakeholder engagement is outcome- and target-oriented, at the relevant scale, anticipatory and resilient, fit-for-purpose, and adaptive and sustainable.

CHAPTER 2. DRIVERS FOR STAKEHOLDER ENGAGEMENT

Introduction

115. Structural and conjunctural drivers have pushed decision-makers in the water sector to explore new policies and approaches that engage directly with stakeholders to solve water quality and quantity (floods, droughts) issues, impacts on ecosystems, and competing needs for water (between urban development, energy production, nature conservation, irrigation, etc.). They have often translated into legislative changes to adopt mandatory measures for inclusive decision-making, thus contributing to strengthened institutions' and political will to support the engagement of stakeholders. These trends have also contributed to minimising path dependency and developing innovative and flexible approaches in water management. In this context, it is crucial to have a clear picture of the forces driving inclusive approaches in water policy and project to understand *why* stakeholder engagement is taking place and *for what* purpose.

1. A gloomy picture calling for a new governance climate

116. The water outlook is not optimistic and future economic, social, climate, urban and technological trends challenge water governance and the capacity of governments to address them, often calling for multi-stakeholder solutions. By 2050, the world's population is projected to grow to around 9 billion people, with a major proportion living in urban areas. A total of 4 billion people will live in water-stressed areas, and water demand will increase by 55%, thus generating further competition among water users (especially domestic, hydropower, and irrigation).

117. Pressure points over water allocation, infrastructure financing, and disaster management will require doing better with less money, less water and with more people willing to get on board. The future gloomy picture for the water sector has triggered new emphasis on the role of stakeholder engagement across public, private and non-profit sectors, combined with structural and conjunctural drivers that have pushed stakeholder engagement to develop along different rationales.

118. Four main purposes for water decision makers to engage stakeholders have been identified in the literature: implement normative principles; improve the quality of decision outcomes; generate legitimacy in the process; and solve water-related conflicts (Glucker et al, 2013). The first function is rooted in democratic principles and concerns engagement that derives from the people's right to be informed. Examples include informative meetings to raise awareness on specific water issues such as drinking water standards, tariffs and aquifer depletion, without necessarily looking for inputs to decision-making. The second function refers to situations where stakeholders may contribute by providing decision makers with key information and knowledge. The third case implies that through engagement, stakeholders develop a sense of ownership over the process and its outcomes and tend to consider it more legitimate. The fourth case shows that inclusive approaches can also contribute to identify and resolve water-related conflicts before final decisions are made and facilitate project and policy implementation.

2. Structural drivers

119. A range of long-term structural drivers have triggered a change in water governance paradigms to better cope with future challenges. They can be clustered into four broad categories: *climate change* will affect water availability and resilience of water infrastructures, with different level of impacts across the world; *economic and demographic trends* will drive water demand and in particular in cities, and affect the capacity of governments to respond (i.e. their ability to mobilise public funds); *socio-political trends* such as recent developments in European water-related policies, and the United Nations post-2015 Sustainable Development Goals will set new standards, regulations and aspirational goals paying greater attention to adaptive governance; and *innovation and technologies* will stimulate greater connectivity and new relationships, in particular related to web-based communication avenues.

2.1. Climate change

120. Climate change is reshaping how water will be managed in the future. It aggravates existing strains and complicates future planning, management and investment in water infrastructure. More than 70% of the consequences of climate change manifest themselves in the water sector. More torrential rains, floods and droughts can be expected in many areas. Changing precipitation patterns are shifting rainy seasons and affecting the timing and quantity of melt water from snow pack and glaciers. Arid and semi-arid areas are also expected to face increasingly serious challenges related to residential migrations of the elderly, or mining development putting more pressure on groundwater resources. In many cases, these impacts are making flood protection, water storage, urban drainage, water supply and treatment more costly (OECD, 2013e). Reducing the adverse consequences and costs of climate change and tapping into any opportunities will require adjusting to new circumstances – that is, adaptation.

121. Adaptive water governance and sound water policy will go a long way to enhancing resilience to climate change. However, most water policy instruments have not been adaptive. Climate change is a novel challenge that will test conventional approaches (see box 12). Not all water risks can be avoided, but well-prepared, resilient water systems will be better able to adjust to new conditions, at lower cost, and bounce back from disasters more quickly. Reforming and adjusting water governance systems takes time, political will, and requires the involvement of all stakeholders concerned, but action needs to start now. Countries that adapt their water governance systems now and implement the needed policies to cope with the future can manage water crises in a proactive and less costly way.

Box 12. Climate change-driven stakeholder engagement in Arizona

Arizona is acutely challenged by climate change and engagement with relevant information is needed to move towards better management of scarcity and adaptation to increasingly extreme conditions. Various management options have been discussed, but relatively little guidance existed on how public utilities and agencies can evaluate the suitability and effectiveness of water harvesting strategies to provide tangible and significant benefits to the community.

The Water Harvesting Assessment Toolbox ("WHAT") was created over a 2-1/2 year period beginning in August 2011 by the University of Arizona Water Resources Research Centre, following multiple requests of local residents for information on water harvesting and consensus among professionals that up-to-date information was too dispersed. The project developed guidance for assessing and planning water harvesting at multiple scales, to help meet the challenges of managing water resources under conditions of changing climate and increasing water demands. The Toolbox was developed iteratively, in several stages, each involving various stakeholders. In the initial phase, stakeholders representing organisations active in water harvesting, stormwater management, and climate adaptation provided inputs on the state of knowledge, available information and data sources both on an individual basis and in a group setting. A facilitated workshop was organised in 2012 and gathered stakeholders from public and private sectors to identify research gaps. In subsequent phases, engagement with local stakeholders was conducted to ensure the toolbox's usefulness for potential users and 4 test drives were conducted with municipalities in the Tucson region, which provided additional insights to the development of the tool.

The Toolbox was successfully launched on-line for public use in May 2014 and an additional facilitated test was made of the completed tool at a community new to the Toolbox concept. Stakeholders, such as utilities, city departments, county government and businesses considering water harvesting as a potential solution were involved on a voluntary basis. They had different motivations for using the Toolbox ranging from expressing their interest in water harvesting practices, sharing information, developing decision guidance or producing information on water harvesting.

The University has carried out a similar project on "Incorporating Climate Information and Stakeholder Engagement in Groundwater resources Planning and Management" since August 2012, employing a novel modelling framework related to climate change, surface and groundwater, and extensive stakeholder interactions to:

- Address climate uncertainties with a sophisticated modelling framework;
- Increase stakeholder capacity to adapt water planning and management to future trends; and
- Establish the transferability of the modelling framework and capacity building approach.

Stakeholder engagement employed a series of workshops in which project team members interacted with stakeholders to direct the use of the modelling framework to practical questions and regional goals. Additional explored the possibility of carrying out similar experiences in other parts of Arizona and in Mexico which yielded new questions to be addressed using the project methodology. The Water Resources Research Centre considers outreach and engagement a key mission and allocated a budget and skilled staff to support engagement of a range of stakeholders, i.e. inter-governmental organisations, authorities at different levels of government, service providers, regulators, civil

society and academia. This had a positive impact in building lasting relationships with local actors, building capacity on technical issues while making sure that complex climate and hydrologic modelling information was made clear and understandable for all.

Source: Case studies submitted by the WRRC http://wrrc.arizona.edu/GCASE.

2.2. Economic and demographic trends

122. The major advanced economies are finally gaining momentum and the likelihood of some of the most worrisome events that have preoccupied markets and policymakers in recent years has diminished. The OECD Economic Outlook 2014 shows that after years of weakness, investment and trade have started to rebound and private-sector confidence is rebuilding. While unemployment remains unacceptably high, the labour market situation is improving in most countries and has stopped deteriorating virtually throughout the advanced economies. On the other hand, the pace of growth in the major emerging market economies has slowed.

123. However, the legacy of the crisis still needs to be addressed. After difficult years of low growth and fiscal stringency and consolidation, policymakers are facing these challenges with depleted political capital (OECD, 2014e). Countries are confronted with significant challenges to securing financially sustainable water management. This cannot be achieved in a vacuum and requires concerted efforts across all stakeholders and strengthened relations and interface between water and other sector. But there are now opportunities for countries to make water management more resilient – more robust to shock – and more inclusive in order to set water governance on a stronger and more sustainable footing. This is key to supporting confidence and trust, and has to be backed by structural policy actions, including the promotion of institutional frameworks that support stakeholder engagement.

124. In addition, the world's population is projected to grow to around 9 billion by 2050, with rapidly increasing proportion living in urban areas (70% by 2050). Many cities are located in river basins that are classed under severe water stress. These trends raise challenges for the financing and provision of water supply and sanitation services, replacing and modernising existing water infrastructure and maintaining water quality. In addition, growing populations and cities put pressure on lands and space, calling for greater co-ordination between water policies and other sectors, such as spatial planning, nature conservation Cities are becoming major contributors to water management and play a key role as nodes between water actors at the local level. Their active contribution to national strategies and decision-making related to water is therefore necessary to fit policies to places.

2.3. Socio-political trends

125. Political changes are also taking place calling for further stakeholder engagement. While constitutional duties to facilitate public participation and citizens' rights to petition have been in place for a while in certain countries (e.g. South Africa, United States), new efforts in recent years have further enshrined principles of inclusive decision-making in laws, strategies and practices. For instance, a law on the implementation of the public participation principles has been adopted in France in 2012 whereby individuals shall be informed of any decision-making process that may impact the environment. Similarly, a stakeholder engagement strategy was put in place in 2013 for the joint Australia-New Zealand food regulation system. Whether they relate to the water sector or not, these socio-political trends demonstrate new efforts in political practice and mentalities to open and change how decisions are taken.

126. Similar trends are observable at EU level. For instance, several European directives (floods, water) have called upon governments to include citizens and other actors in the drawing up of flood and basin management plans. These Directives have set new levels of ambition regarding stakeholder engagement in the water sector which countries have to uphold to and motivated changes in EU member countries' legislative frameworks to reflect these new requirements.

2.4. Technological drivers

127. Information technology and the internet have become major drivers of research, innovation, interconnectedness, growth and social change (OECD, 2010). Data has never been transferred faster and communication has never been more sophisticated than it is now. Actors no longer have to wait for days to receive information thanks to websites, online databases, emails and chat platforms. Stakeholders are no longer obliged to attend meetings in person. Long-distance exchange and online meetings have torn down geographical distance and barriers. The rapid development of information and communication technologies has brought actors in policy fields closer, including in the water sector.

128. Technological innovation is also a driver for co-operation between governments, business, knowledge institutes and non-governmental organisations. As countries are developing more and more innovative solutions to address water challenges be they technological or not, governments seek out to companies and research centres for their expertise, their knowledge and their investment capacities. Therefore, the development of water innovations has been a powerful incentive to build new relationships across stakeholders.

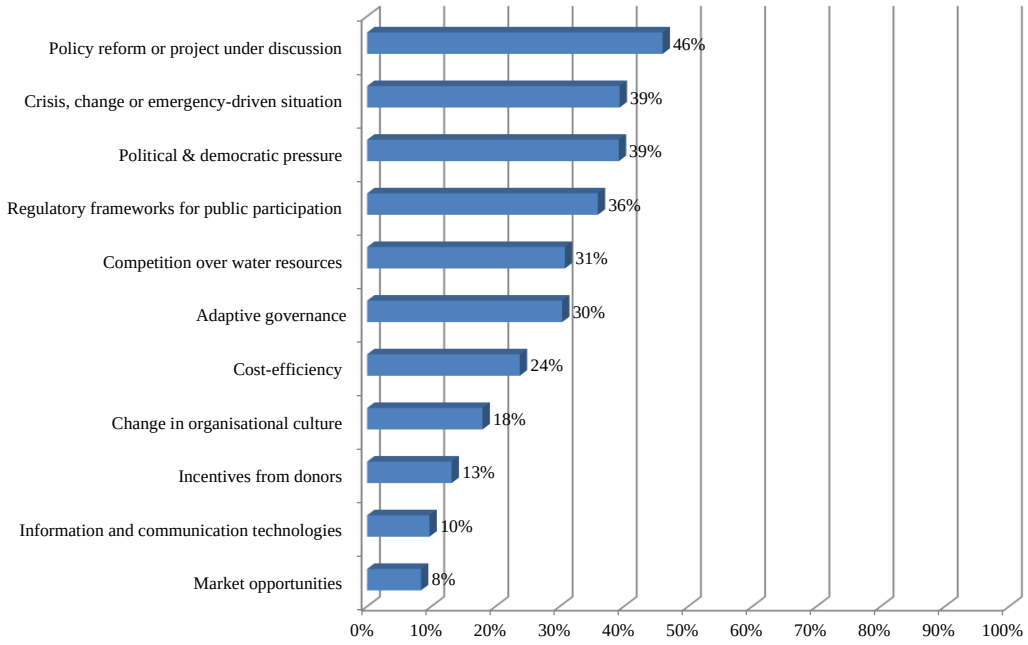
3. Conjunctural drivers

129. Stakeholder engagement has also been triggered by conjunctural drivers and greatly influenced by changing circumstances and situations. On the one hand, water-related disasters, policy reforms or big projects (e.g. dams, other infrastructure) as well as social demands for more inclusiveness in water-related decision-making are among the key levers that have pushed decision-makers towards greater stakeholder engagement. On the other end, factors such as change in organisational culture and incentives from donors have not been priority drivers (figure 7). It can be explained by the fact that technical assistance programmes fostering stakeholder involvement in water management are still too anecdotic or because donor conditionalities on inclusive decision-making do not have stringent enough requirements.

130. There is still a lack of a business case for stakeholder engagement. Interestingly, market opportunities (i.e. potential for new contracts, customers and sources of funding) do not appear as strong incentives for expanding stakeholder engagement. Indeed, the potential of engagement processes in helping design new contacts, identify new customers or secure new sources of revenue has not been evidently demonstrated in the survey results. But practical experiences on the ground testify to the increasing efforts, particularly from service providers and business, to invest more in stakeholder engagement for ensuring value for money. In both categories, 44% of respondents pointed out to cost-efficiency as an important driver for stakeholder engagement. Thus, a business case for inclusive water policy and projects and for engaging further with partners is needed to move towards engagement processes that deliver their full potential for meeting water challenges.

Figure 7. Main drivers for stakeholder engagement in the water sector

215 respondents



Note: The graph considers the drivers ranked from one to three on a scale from 1 to 11.

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance (2014)

3.1. Reforms, crises and democratic pressure

131. Stakeholder engagement is often reform- or crisis-driven. The development of new policy, reform or project was pointed out as the primary factor encouraging stakeholders to take part in decision-making by 46% of respondents surveyed, followed by crisis and emergency situations – be they political, economic or environmental as well as political and democratic pressure (both ranking second with 39%) and regulatory frameworks for public participation (38%) in the third place:

- Debates around water-related policy reforms and projects appear as the primary driver to stakeholder engagement. They often entail important change in stakeholders' activities and lives, such as new tariffs for water services, reforms on subsidies, more stringent environmental regulations (e.g. quality standards). Stakeholders are more prone to take part in discussions, decision-making and implementation when it concerns new policies they will have to uphold to, and inversely, decision makers look to consult and involve stakeholders likely to be impacted to ensure the acceptability and sustainability of policies and projects to be implemented.
- Crises, change or emergency-driven situations also have an impact on stakeholder engagement. These can include a wide range of situations such as droughts and floods that have devastating impacts on people's lives, or economic or environmental crises spurring social dissatisfaction and tensions. Crises shed light on the weaknesses of governments to properly assess the risks and call upon them to set-up preventive measures to mitigate their impacts. As such, they are often windows of opportunity for new ideas to emerge, and create a social and political environment with a potential for developing partnerships.

- Growing democratic pressure has called upon decision makers to improve accountability vis-à-vis their constituencies, including in the water sector. In MENA countries for instance, the aftermath of the Arab Spring and the resulting major political, economic and social changes have led to greater demand from citizens to play a bigger role in decision-making related to basic services

such as drinking water and sanitation. Pressures calling for greater transparency and accountability push decision makers to revisit their methods towards greater inclusiveness (box 13).

Box 13. Democratic pressure as a driver for stakeholder engagement

Since the 1980, South Africa has experienced a vast transformation of policy, law and institutional arrangements related to water, against the backdrop of democratic political change. Democratic pressure was a key driver to reform imperatives for water re-allocation and access. It altered the environment in which water-related governance takes place in South Africa and increasingly, people have recognised that working together in conditions of increased transparency and integration is an urgent imperative. This shift materialised under the National Water Act of 1998, which promoted extensive dialogue and intensive negotiations across stakeholders from the public, private and not-for profit sectors. According to the National Water Act, water users are supposed to pay a levy on water use as the primary source of funding for the engagement processes. However, delays in various administrative processes and water use licenses have led to the Department of Water and Sanitation funding CMA activities.

Source: Case study submitted by the University of KwaZulu-Natal.

3.2. Binding and non-binding frameworks

132. Legal requirements on water-related stakeholder engagement have emerged in the last decade and boosted stakeholder engagement while triggering policy change (5th driver for 36% of respondents). The EU Flood Directive requiring public participation mechanisms to ensure citizens' involvement in the flood management cycle is an example. In addition, more and more stakeholders have adopted requirements for stakeholder engagement (figure 8). These tend to be more often binding than voluntary, and can take different forms from overarching principles in a given organisation's policy (52%) to requirements for consultation (35%) (Figure 9). Examples of legal and voluntary requirements for stakeholder engagement are provided respectively in box 14 and box 15.

Box 14. Legal requirements for stakeholder engagement in the Japan Water Agency Law

The Japan Water Agency is responsible for managing 7 major river basins in Japan which encompass more than 50% of the country's population and around 50 of the total amount of industrial production. The Agency also develops infrastructure projects such as multi-purpose dams and canals. The Japan Water Agency carried out its activities under the Japan Water Agency Law, originally established in 1962 and revised in 2005.

The Law requires that for all projects, the Agency reviews project proposals and management plans with prefectural governors and water users for the regions concerned. Governors themselves are asked to consult their prefectural assemblies to secure their approval over the projects. Once an agreement is reached with regional stakeholders, the Japan Water Agency seeks approval of the national government that oversees its activities. Consultations are therefore carried out with the concerned ministries on the proposed projects. The Japan water Agency Law also requires the Agency to carry-out stakeholder mapping as part of any project plan, as well as engagement processes (e.g. daily communication, information-sharing, and collaboration activities) to take their views into account.

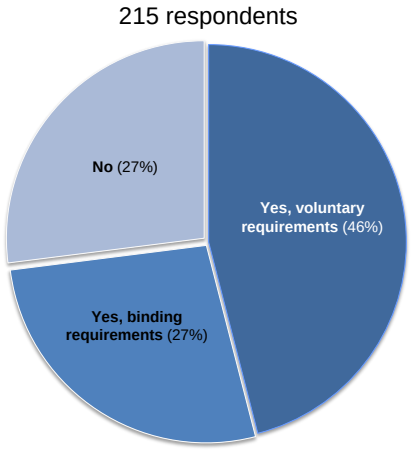
As an Incorporated Administrative Agency under Japanese law, the Japan Water Agency's achievements are evaluated yearly by an Assessment Committee established by its line ministry, looking, among other aspects, at stakeholder engagement activities such as information-sharing efforts in context of water-related events; discussion with stakeholders on water charges; and collaboration at basin level between upstream and downstream residents. The Committee assesses the achievements of each plan and disclose the results on the Japan Water Agency's website.

Mandatory stakeholder mapping and engagement has shown positive impacts on the Japan Water Agency's activities: reaching consensus on project proposals has allowed saving time and money, and has strengthen water users' acceptability and willingness to share the costs of project implementation and management after the construction. Information-sharing activities, including questionnaire to stakeholders about the Japan Water Agency's procedures and activities have led to a better understanding among stakeholders of the Agency's role. Overall, the introduction of legal requirements for the Japan Water Agency to carry out stakeholder engagement activities has contributed to build capacity and successfully meet domestic water demand, thus yielding broader economic benefits.

Source: Case study provided by the Japan Water Agency.

133. However, legal requirements and frameworks have not always led to optimal and quality outcomes of stakeholder engagement. When they require *some* form of engagement, without a clear mandate on the exact form and the matter concerned, it can lead to a "tick-the-box" approach promoting the minimum level of engagement required (e.g. information sharing) without making the maximum benefit from it. Also, governments are often unfamiliar or inexperienced with stakeholder engagement and lack the necessary human and financial resources to sustain extended forms of consultation and manage risks related, for instance, to traditional powerful lobbying. For example, in many EU countries, the views of environmental groups were marginalised in discussions related to the implementation of the WFD (e.g. to tackle water quality) as opposed to those of the agricultural sector, which spurred discontent and frustration regarding their supposed role in deliberative inputs beyond interest-representation (OECD, 2014).

Figure 8. Existing requirements for stakeholder engagement in the water sector



Note: The graph considers the respective share of responses as "no", "yes, binding requirements" and "yes, voluntary requirements" to the question whether their organisation is subject to requirements for stakeholder engagement, be they internal or external.

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance (2014)

Box 15. Voluntary requirements for stakeholder engagement: The Archi Canal Summit Declaration

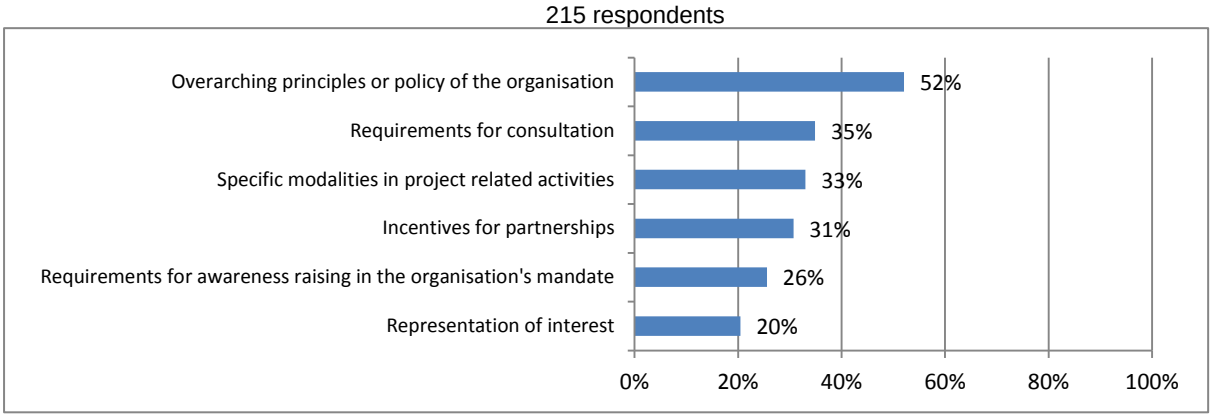
In 1991, the Aichi Canal Summit took place in Japan with the objectives to bring together stakeholders from various municipalities located upstream and downstream of the Aichi Canal Project which supply water for domestic use as well as for industries, mainly Toyota Motor factories. As the close of the Summit, stakeholders agreed-upon a Aichi Canal Summit Declaration that committed them to invest efforts in better co-operation across citizens in upstream and downstream municipalities, as well as to jointly improve water usage and water quality; and to raise awareness of citizens regarding water issues.

Since then, the Declaration as served as a non-legal binding framework to foster stakeholder engagement in the river basin. It has spurred the organisation of regular "exchange" events where stakeholders share information and knowledge on their water situation, and has provided an incentive to develop joint activities between upstream and downstream actors such as to address the detrimental impact of deforestation on the watershed. For instance, in 2000, a foundation to conserve forests for was established and is partly funded from water charges. In addition, an agreement for the development of forests to protect water resources was signed by upstream and downstream municipalities to foster forestation in the watershed. As a concrete result of the Declaration, an Aichi Canal council was created to coordinate the various stakeholder involved, with the support of the Japan Water Agency's regional office in the area.

The outcomes of the "exchange" events are reviewed every year in the framework of the Japan Water Agency law and communicated online. These evaluations have shown that the Aichi Canal Summit Declaration has had a positive impact in committing municipalities to work together in the long term and in ensuring the sustainability of their joint activities. They also demonstrated that "exchange" events have contributed to building capacity and raising awareness of the gravity of deforestation impacts on water resources among stakeholders of the watershed, and in particular citizens. In light of these positive achievements, similar efforts are now taking place for the Toyogawa canal, located in a neighbouring river basin.

Source: Case study submitted by the Japan Water Agency.

Figure 9. Existing requirements subjecting organisations to stakeholder engagement in the water sector



Note: The graph considers the respective share of responses that responded "yes" to the question "Specify the type of requirement".

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance (2014)

3.3. Water allocation

134. Competition over water resources is considered the 4th driver to stakeholder engagement by 31% of respondents surveyed. Water allocation and sharing can often be contentious because of conflicting needs (e.g. between irrigators, domestic users, the environment, etc.). Indeed, water resources serve multiple purposes and provide value to individuals, ecosystems, farms, firms, and society in various ways. These range from ecological value provided by supporting key species, to socio-cultural value, to economic value derived from productive uses of water, to the existence value of iconic lakes or rivers. How much water is left in water bodies (rivers, streams, aquifers), how much is diverted for various uses; who is able to use these resources, how, when and where are questions that directly affect the value that individuals and society obtain from water resources.

135. Water resources allocation raises complex policy issues related to rivalry and excludability. These related to the different types of uses, the extent to which the use is consumptive, and the nature of return flows (how they have been transformed in terms of quality and transported or discharged in a new location). Growing pressures on water resources and intensifying competition to access and use water is therefore a critical challenge for stakeholders inside and outside the water in the future. Engaging all actors impacted (through structure such as watershed committees and boards) can support continuing dialogue on competing needs to be balanced and necessary trade-offs (box 16). Thorough consultation in support of consensus-based decision-making can therefore be a valuable solution when designing water allocation regimes to achieve economic efficiency, environmental sustainability and social equity.

Box 16. Optimising the water-energy nexus in the Durance Valley, France

In 2003, a Water Saving Convention was signed between **EDF** (Electricité de France) and the **two main irrigators** in the Durance valley (France) to improve water efficiency and allocation through better local stakeholder engagement.

The objective was to optimise water allocation between energy generation and irrigation, and to develop appropriate incentives for water savings to restore financial margins and answer future water demands. The Durance valley is host to a major dam and reservoir comprising 32 hydropower plants producing over 6 billion KWH of renewable energy, supplying drinking water and water for industrial purposed to the entire region, and irrigating 150 000 hectares of farmland. In the framework of this convention, EDF carried out an assessment of the monetary value of water savings from reduced abstraction for agricultural irrigation in the valley.

The main business argument for the valuation study was to demonstrate the benefits of optimizing water uses for each party (farmers, water institutions, and energy producers). The two parties entered a win-win agreement whereby EDF was to optimise hydro-generation and benefit from further flexibility to generate electricity during daily peak periods when energy prices are higher, while irrigators were to benefit from remuneration by EDF based on the water savings they were able to make, and having more water stored in the reservoir to cope with drought periods. This agreement led to a reduction of agricultural water consumption from 325 million to 235 million cubic meters.

The Convention was renewed in 2014 and plans to further save 20 to 25 million cubic meters through an annual remuneration upon defined objectives. It allows irrigators to revise freely their objectives each year while knowing the economic consequences of their water consumption choices. The new convention also includes the Rhône-Méditerranée-Corse water agency which expects to benefit from additional saved volumes of water for the environment in order to reduce water deficit in the river basin.

Source: Case study submitted by Electricité de France

136. Reform of water allocation regimes are technically, politically and legally challenging and stakeholder engagement and public consultation are instrumental to facilitate the reform process. A significant number of countries are either currently reforming their allocation arrangements or have recently done so according to an OECD Survey on Water Resources Allocation (OECD, 2015a). Experiences in water allocation reforms in Israel, Canada, the United States, South Africa as well as in England and Wales have shown that stakeholder engagement processes can be valuable to identify preferred options, gain a deeper understanding of the preferences of different water users, and spell out what the proposed reform would mean for them.

3.4. Adaptive water governance

137. The call for adaptive water governance is another important driver for co-operative long-term approaches in water decision-making. For 30% of respondents, the need for flexible and resilient co-management mechanisms to deal with economic, political and ecological uncertainties also explains the renewed focus on stakeholder engagement in the last decade. State actors have increasingly realised that the uncertain future is too complex and daunting for governments to solve alone. Solutions to overcome these challenges require broader support and collaboration to be effective, and governments have to find ways to interact with stakeholders across administrative, geographic, and institutional boundaries (box 17).

138. Adaptive governance also implies flexibility across time. Indeed, developments in water resources management take place at a different timescales than political behaviour and social perception. Adopting water governance frameworks that can evolve through time can ensure that future generations do not have to manage poor decision-making and policy/project implementation from previous ones.

Box 17. Stakeholder engagement for river basin adaptation to climate change

Between 2012 and 2014, the *South Saskatchewan River Basin Adaptation to Climate Variability Project* brought together regional water systems experts looking for opportunities to enhance the resiliency of the Bow and Oldman-South Saskatchewan river basins in southern Alberta, Canada.

The project stems from the recognition that adaptation to future climate uncertainties and other environmental changes, is key to ensure for environmental, economic and social prosperity, growth and sustainability. It builds on and integrates existing data, tools and expertise of water users and decision makers to improve knowledge base and to explore options to manage the range of potential impacts of climate variability in the river basin.

Stakeholder engagement was conducted on a voluntary basis and has been aided by mechanisms such as collaborative modelling processes, using sophisticated simulation for modelling water systems. The modelling sessions integrated computer techniques and included over 80 years of historic data on water management structures and demands. Together with developing performance measures, they allowed parties to set common objectives and collaborate effectively to identify practical and implementable solutions to improve resilience and adapt to current and future water challenges. Stakeholder involved in the project include governments and regulators, water institutions, civil society, business and farmers interested in the reliability and quality of raw water supply, scientists and researchers that ensured scientific rigor and made the best information available for the project, as well as parliamentarians and municipalities which ensured that municipal water needs were properly taken into account.

Since the completion of the project, stakeholder groups were able to use the same model to discuss a series of flood mitigation options in the Bow River Basin and the interactions between them with respect to water management in the basins.

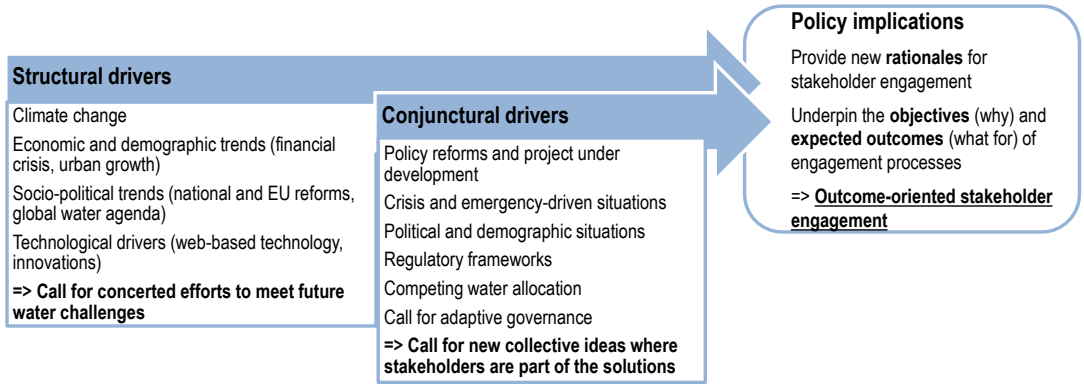
Source: Case study submitted by Alberta WaterSMART.

Conclusion

139. Successful stakeholder engagement comes from a real understanding of the rationale that underlies it. As the outlook for the water sector paints a dire picture for the future, different forces have been at play to trigger further stakeholder engagement in water-related decision-making and implementation. In this chapter, two types of drivers have been identified, structural and conjunctural drivers, and call for new governance paradigms to develop collective and resilient solutions to future water challenges.

In terms of the policy implications, appraising the levers of action for stakeholder engagement is a critical step for decision-makers to develop a clear rationale for engagement. Instruments such as strategic outlooks and forecast can help foresee the likely impact of structural drivers (e.g. climate change), while perception-based assessment can be useful for instance regarding the influence of crises and reforms. Although it is not exhaustive, the typology of drivers identified in this chapter can provide decision makers with a reading grid to figure out *why* engagement should/need to take place and *for what* outcomes. As a result, it helps to understand the implications for engagement processes as it points to the categories of stakeholders to be targeted; and pre-conditions the right mix of formal and informal engagement mechanisms (see Chapter 5). In turn, decision-makers can define realistic and forward-looking policy objectives for stakeholder engagement and ensure that engagement processes are outcome-oriented (figure 10).

Figure 10. Towards outcome-oriented stakeholder engagement



CHAPTER 3. MAPPING STAKEHOLDERS AT ALL LEVELS

Introduction

140. A major governance gap often pointed out in the water sector is the high degree of fragmentation of players and decision-makers, which roles and responsibilities are not always clear and tend to overlap. The type of actors contributing to decision-making and implementation processes varies largely across water governance functions from policy making, to regulation, service delivery, water resource management, and financing. This chapter aims to provide guidance on the critical steps needed to ensure the inclusiveness of stakeholder engagement processes, taking into account recent trends (newcomers) and the longstanding need to better engage "unheard voices".

1. Identifying who does what

141. Engaging properly stakeholders requires their prior thorough identification within and outside the water box, as well as a good understanding of their core motivations. Knowing *who* is responsible for *what* and at *which* level is a primary first step to capture the stakeholder "landscape" and identify redundancies and gaps in the institutional framework having impacts on policy coherence and sector performance. A stakeholder mapping can be used to identify the core functions of stakeholders involved in the sector and to assess how effective they are in carrying them out. Such mappings also bring attention to the interaction with and the impacts of stakeholders in other areas that influence the water sector.

1.1. Mapping stakeholders

142. Stakeholder mapping is an exercise that relies on two important steps. First, it should start with the *identification* of stakeholders in relation to their involvement across the water chain (i.e. quality, quantity, drainage, drinking water supply, wastewater management etc.) and potential linkages with other sectors (land use, agriculture, planning, energy, etc.). It aims to determine who is directly responsible for the decisions on the water issue at hand; who is influential in the areas, community or organisation; who can obstruct a decision if not involved; and who has been involved in the issue in the past. Mapping should include stakeholders who act, have formal responsibility and have an impact on the decision-making process, as well as stakeholders with material interest or who might be impacted by the project/policy process or its outcomes.

143. The second step aims to assess the *potential* of stakeholders to contribute to or hinder decision-making and implementation processes on water policies/projects. The mapping exercise can help i) show the core *governance functions* of identified stakeholders (i.e. policy making, regulation, financing, service delivery, water resource management etc.); ii) track their *interactions* (coordination, partnership, consultation, information-sharing etc.); and iii) assess their *interests* in the issue at hand (from low [status quo] to high [committed to the process]). It can shed light on the stakeholders who have the most influence or power over the process, for instance when they have control over decisions or how they are implemented. It also helps identify possible gaps and overlaps, and to look beyond the "usual suspects" to reflect the actual diversity of actors.

144. The identification of stakeholders is intensive, time-consuming and can be a politically charged responsibility. There can be internal and external pressure to expand or reduce the spectrum of stakeholders to be engaged. Promoters of stakeholder engagement sometimes try to avoid involving the "usual suspects", which has become a term of denigration for actors with vast interests in water-related decisions (typically water service providers, farmers, etc.). Describing stakeholders as "usual suspects" should not be grounds to exclude them from the engagement process, any more that it should be ground for

including them (Involve, 2005). Stakeholders should be involved because they are the relevant actors for the decision-making process in question. Similarly, it is equally detrimental to exclude stakeholders for being known opponents of the issue at hand as involving them can trigger some ownership and likelihood that they support the final decisions, or at least, that they be less inclined to undermine it as if they had been excluded.

145. All stakeholders need to be informed of the various stages and outcomes of policy and project processes but all stakeholders do not have to be involved at each stage of the water project or policy. Engagement processes can be most effective when they include a careful and strategic selection of stakeholders that strikes a balance between comprehensive representation and workable sized groups. Many NGOs for instance are constantly asked to be involved in engagement processes, and do not always see these as the most effective use of their limited resources. In addition, some see the compromise that can be inherent in some engagement processes as conflicting with their primary mandates, such as nature conservation groups sitting at a table negotiation table with a major industrial group to discuss a specific water-related project that is likely to impact the environment. Both parties may have to reach an agreement that does not fully align with either of their core purposes for the sake of reaching a consensus. It can be useful to consider at which stage of the policy/project cycle NGOs are best suited to participate (e.g. objective setting, development, implementation review).

146. It is important to consider and discuss with stakeholders what they expect from the process and what could prevent them from getting engaged. If each stakeholder's motivations can be clarified at the start, it is likely there will be less confusion and greater satisfaction with the outcomes. This is especially important in areas suffering from consultation fatigue. Strategic planning can help identify the different actors to be involved in the steps of the process which are most relevant to them. In principal, having fewer stakeholders leads to each actor having a larger voice. While it is important to include all relevant actors, this may come at an expense. It is important to find the appropriate balance between inclusiveness and empowerment of participants. Therefore, methods and processes adopted to identify who should be involved must be based on a coherent understanding, with clear reasons for selection, and be as transparent as possible.

147. A range of tools for stakeholder mapping exist in the water sector and should be scaled-up. For example, USAID has developed a Regional Water Governance Benchmarking Project, known as "ReWab", to map stakeholder in the water sector of MENA countries. It consists of a matrix that analyses water-relevant organisations depending on their level of influence over five standard functions (organisations; organising and building capacity; planning and allocating water strategically; developing and managing water resources; and regulating water resources and services). Suez Environment has also developed a methodology and software to help its utility managers build stakeholder dialogue "road map" and design action-oriented strategies that fit both with the operator's and stakeholders' expectations. Based on each local context; the tool maps the most critical issues to address and the most relevant stakeholders to engage with regards to specific issues (operation, communication, philanthropy programmes, etc.). While giving a clearer view of local expectations, the methodology ensures more informed choices in various fields, from operation to communication and philanthropy programs (box 18).

Box 18. A Stakeholder Engagement Toolkit for water utility managers

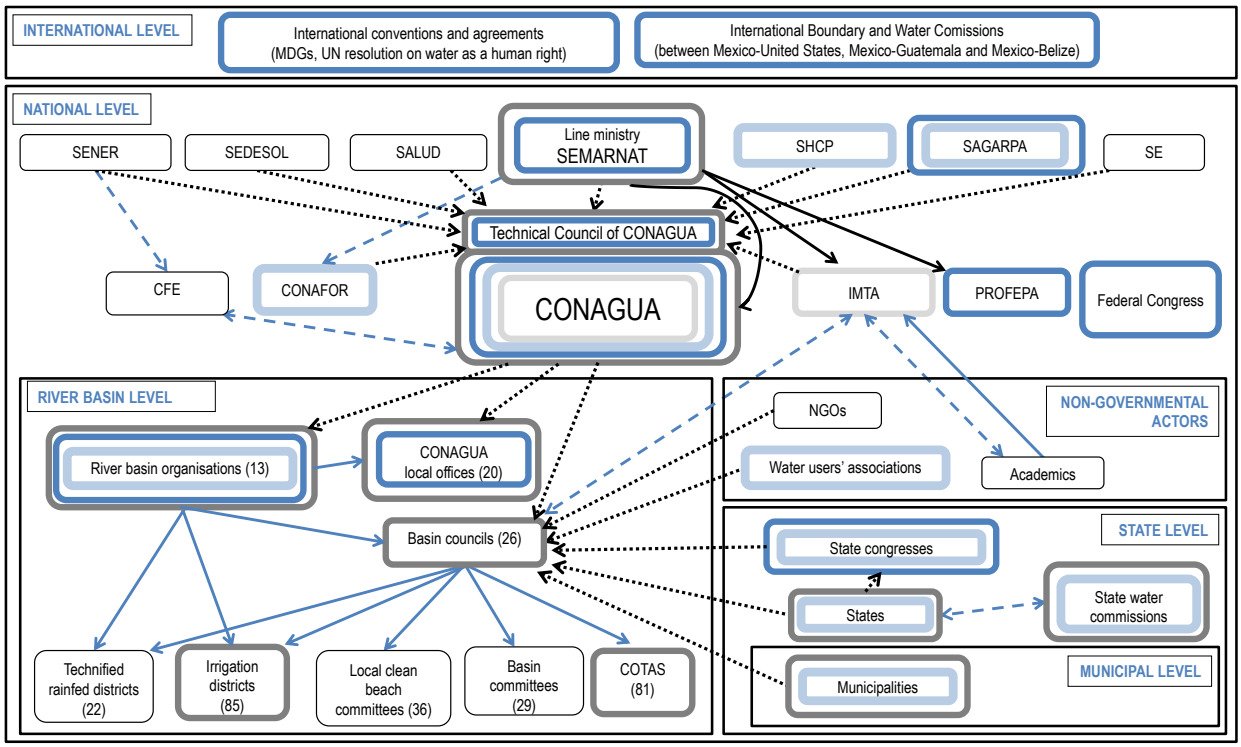
Suez Environnement has been advocating stakeholder engagement not only a driver for better reputation and license to operate but also a component for the successful operation of water and sanitation utilities. The company has developed a methodology and software to help its water managers build stakeholder dialogue road maps.

Until now, the toolkit has been implemented in France (Bordeaux, Lyon), Mexico (Cancun) and Jordan (Samra). While analysing the local context, the tool guide managers to identify priority topics and critical stakeholders to engage, in cooperation with all departments and functions of the utility. It is organised in 6 steps: i) identifying stakeholders; ii) analysing the context and external perceptions; iii) identifying and ranking issues; iv) mapping stakeholders according to these specific issues; v) build action plans; and vi) ensuring monitoring and reporting.

Key outputs from the Toolkit have included better understanding and coordination between departments; more solid argumentation over choices toward stakeholder; better return on investment for communication efforts and corporate social responsibility programs. The methodology is now being implemented within all Suez Environnement's business units, and has also been shared outside the water sector with companies interested in transposing the methodology to their own activities

Source: 6th WWF Session group 1, (2012), *Synthesis report - Stakeholder engagement for effective water policy and management*, as prepared for the 6th World Water Forum

Figure 11. Mapping roles and responsibilities for water resources management in Mexico



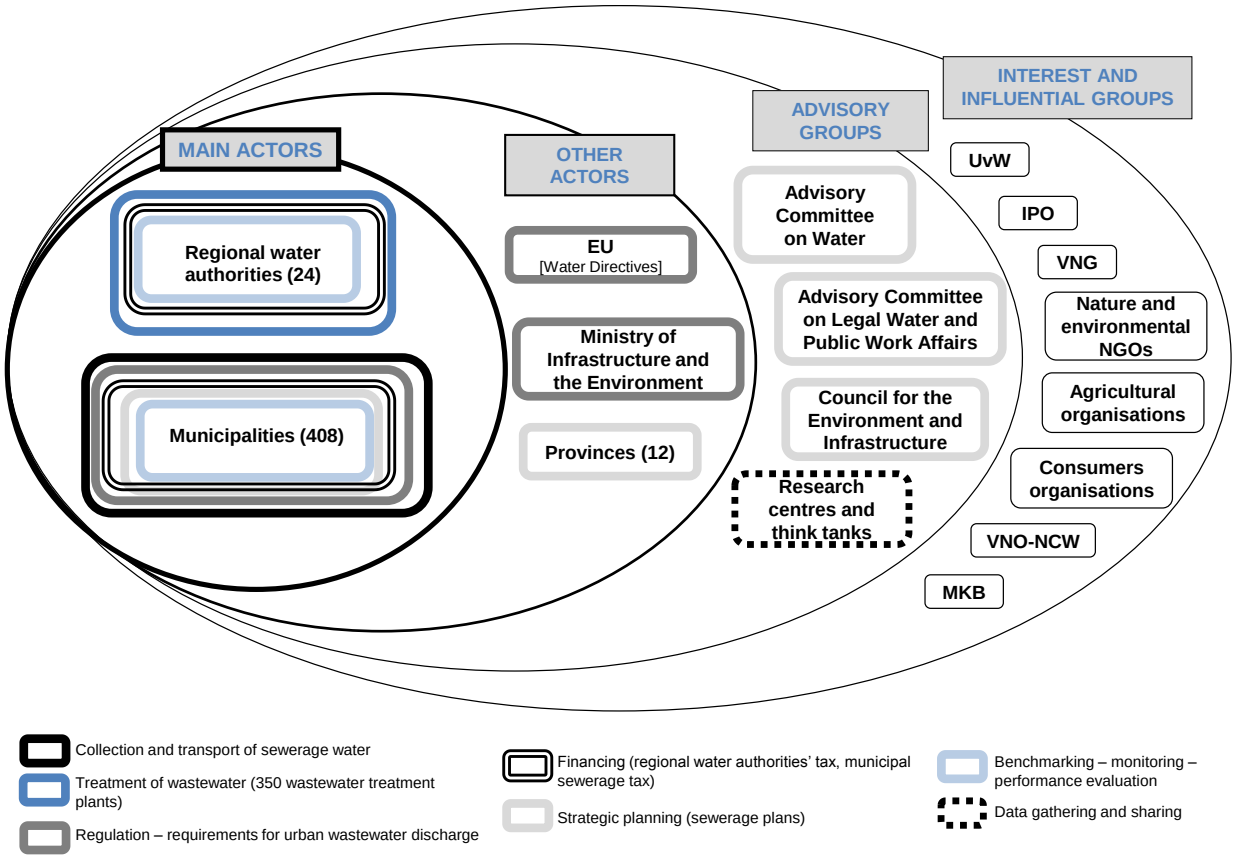
Source: OECD (2013b)

148. Institutional mappings can also shed light on multi-level governance gaps to be addressed and provide policy guidance. The institutional mapping exercises carried out as part of OECD policy dialogues in support of water reform in selected countries have proven useful to diagnose inconsistencies in the interaction across stakeholders. For example, the mapping of water institutions in Mexico shed light on the cumulative functions of the National Water Commission (CONAGUA) in terms of policymaking, financing, regulation, service provision and capacity building (OECD, 2013b). A corresponding policy recommendation consisted in recalling the need for a clear-cut separation of service delivery, policymaking

and regulatory powers in Mexico's water sector, some of which could be discharged to other authorities (figure 11).

149. Similarly, mapping who does what across the wastewater chain in the Netherlands (OECD, 2014) reveals a unique arrangement whereby (408) municipalities are in charge of sewage collection and (23) regional water authorities deal with wastewater treatment. Coordinated efforts are spurred through multi-level governance contracts towards greater efficiency gains. However, the institutional mapping provides a tangible basis to make the point that if regional water authorities were to retain wastewater treatment function, it should be under different governance setting (i.e. not as functional democracies) and financing frameworks (i.e. without specific taxation powers) (figure 12).

Figure 12. Institutional mapping for wastewater treatment in the Netherlands



Source: OECD (2014)

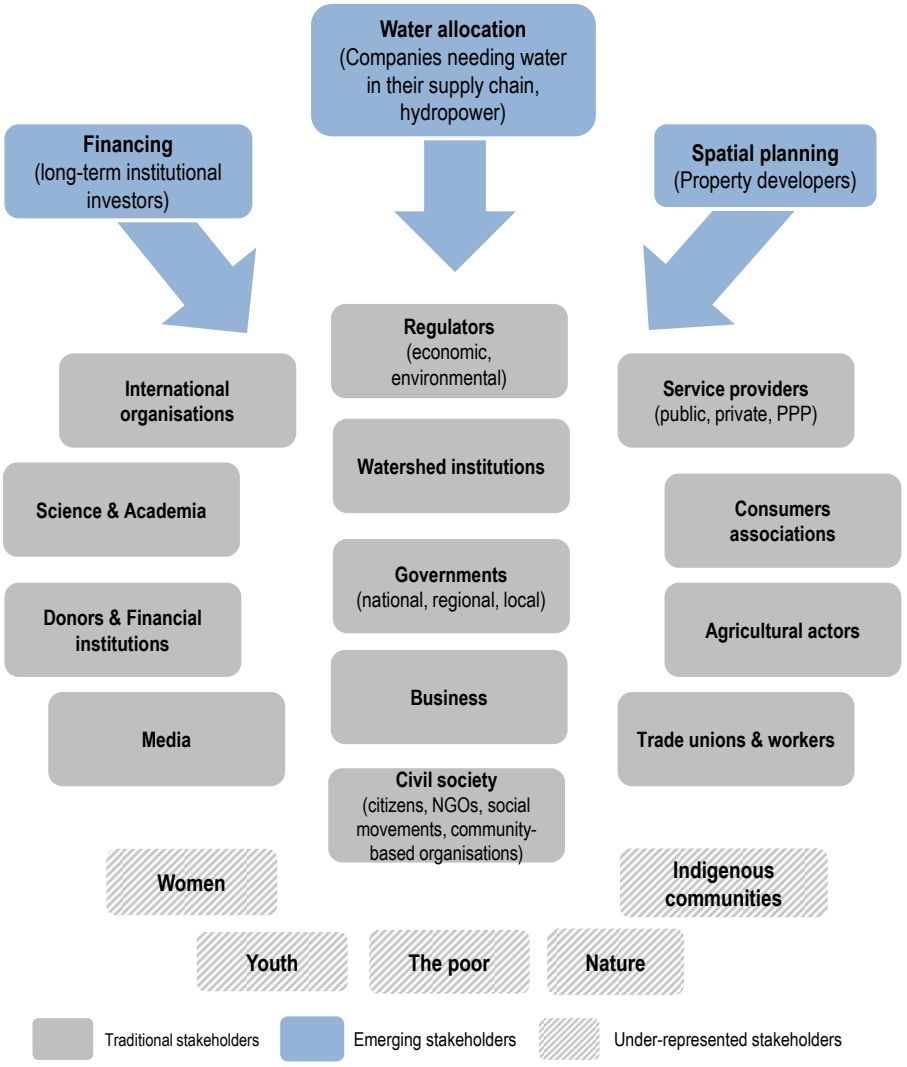
1.2 Typology of stakeholders

150. Mapping exercises highlight the myriad of stakeholders that play a role in managing water, in terms of strategic planning, priority setting, allocation of uses, economic and environmental regulation, information, monitoring, evaluation, and at different level (from local to global). A typology of stakeholders can help clarify *who* they are, while a typology of water management function can help categorise *what* they do.

151. At central government level, there is a wide diversity of policy areas related to water policy making (*e.g.* energy, agriculture, territorial development, health, public works/infrastructure, economy, finance, etc.). Because of the sectoral fragmentation of water-related tasks across ministries and public

agencies, policy-makers constantly face conflicting objectives and the temptation of retreating into silo approaches. At sub-national government level, a diversity of "local" actors are involved in water policy making be they decentralised or deconcentrated entities (municipalities, inter-municipal bodies, regions, river basin authorities, regional development agencies, water users' associations, etc.). This may generate obstacles in managing the interface between different local actors and building capacity at the sub-national level. Finally, because most OECD countries have decentralised their water policy making, joint action is required between central government and sub-national actors in the design, regulation and implementation stages of water policy. This requires overcoming obstacles related to co-ordination across levels of government.

Figure 13. Traditional, new and under-represented stakeholders in the water sector



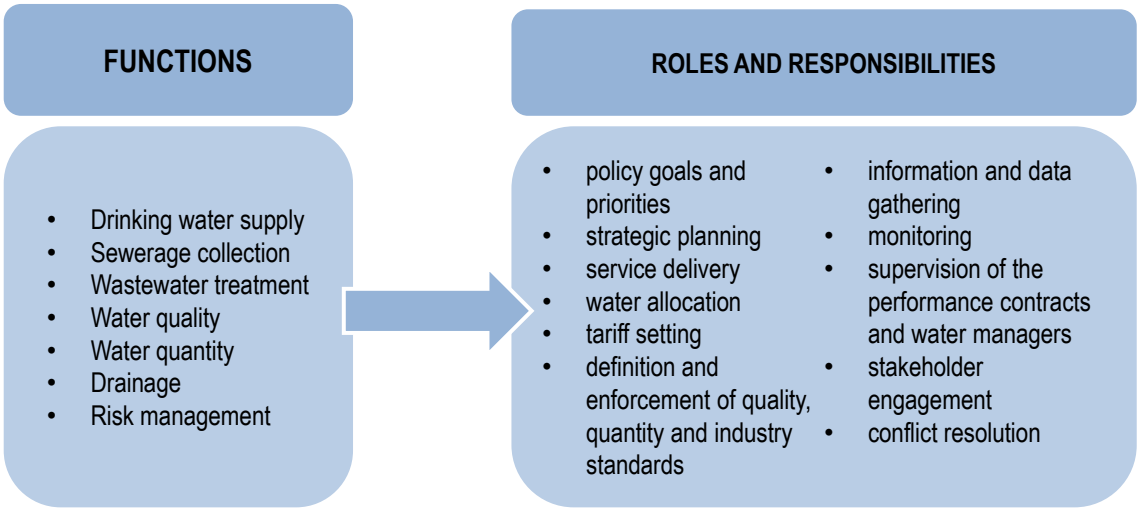
152. The number of public, private and not-for-profit organisations and their responsibilities in water management differ from country to country but common institutions and stakeholders with recurrent roles can be identified (see figure 13). The typology provides for a categorisation of the main actors who most often intervene in the water sector, but it does not intent to be exhaustive. The number of actors and the degree to which they are active/passive in water management depends on each context. Identifying stakeholders requires a holistic approach because they are interrelated and can influence each other depending on the water function they carry out.

1.3. Typology of water management functions

153. Water *functions* refer to the range of governance activities covering different areas of water policy: water quantity and quality management, drinking water supply, sewerage collection and wastewater treatment), flood defence, drainage and risk management. Particular water reforms, such as decentralisation, have affected how these functions are carried-out and by whom. (figure 14)

154. A number of governance *roles* and *responsibilities* can be associated with carrying out these water functions: policy goals and priorities; strategic planning; service delivery, water allocation, tariff setting, standard definition and enforcement, information and data gathering, monitoring, supervision, stakeholder engagement and conflict resolution.

Figure 14. Functions, roles and responsibilities in the water sector



155. Functions, roles and responsibilities in the water sector can be organised and allocated in multiple ways, depending on the institutional setting in place, which can raise some coordination challenges. The type of governance system strongly influences how water functions are carried out between national and sub-national authorities, across levels of government and among formal and informal actors, which has policy implications for decision-makers. They include implementing integrated and place-based approach at territorial level, integrating the involvement of different actors at central and sub-national levels, as well as integrating multi-sectoral and territorial specificities at the central level

1.4. Emerging stakeholders and new players

156. Beyond the "traditional" actors, some stakeholders have gained increasing influence in the decision-making and implementation processes related to water. Strong monopolies, and at times oligopolistic markets have characterised the water sector and decision-making processes have been in the hands of a close group of stakeholders. Beyond governments, certain types of stakeholders have become the usual suspects when deliberating or deciding over water-related issues. Regarding water and sanitation provision, public, private or mixed service providers are often first in line, while for water resources management, the IWRM concept has confined much influence within river basin organisations and their constituencies (i.e. governmental actors, farmers and irrigators, industrial actors, etc.). However, economic, social and environmental trends are raising news challenges: ageing and obsolete infrastructures require investments to be renewed; increasing risks of extreme events need to be managed and mitigated; and

innovative and adaptive solutions need to be developed. Addressing these pressing challenges has motivated new stakeholders to enter the stage to develop solutions for the future.

1.4.1. Business

157. While the role of the private sector regarding water tended to focus on companies delivering water supply and sanitation, business companies, within and outside the water sector (e.g. energy, agri-food, construction, etc.) have been paying increasing attention to water governance in their strategies, especially to cope with regulatory risks and secure water allocation (CEO Water Mandate, 2014). Companies increasingly recognise the risk that water scarcity, pollution, and weak water governance raise for their core business. They are increasingly acknowledging the need to manage water as a key input to production and better address the ways in which their water use and wastewater discharge can affect nearby ecosystems and communities. Investors, governments, and NGOs all have increased expectations for corporate sustainability around water issues. Perhaps even more importantly to business, consumers consider more and more companies' water sustainability performance in their purchasing decisions.

158. The role and process of stakeholder engagement in companies has evolved over the past decades. Historically, companies engaged local community members and other organisations to meet regulatory requirements and secure permits for projects in specific locations. As companies began to realise the benefits of regular dialogue with key constituency groups, engagement transitioned from a process largely focused on compliance conditions to one that was about identifying and managing a wider range of risks. Such stakeholder engagement can prove invaluable as a way of working through issues in the wake of incidents or conflicts. Focus groups, one-off meetings, and ongoing engagements also help companies to understand reputational risks. Companies are now increasingly seeing the connection between engagement, disclosure and corporate performance, recognising that listening to stakeholders' insights can foster innovation, including the development of new business practices, products and services. Investors, for their part, are beginning to recognise that companies that routinely engage stakeholders on sustainability issues are also typically leaders in risk management and innovation (Ceres, 2010).

159. Business contribution to water governance takes the form of corporate water stewardships for identifying and managing water-related risks alongside governments and civil society organisations. Business engagement with universities and research centres to technical innovation and/or to financing start-ups developing innovative technologies is also worth noticing. Stewardship approaches can result in companies improving water efficiency within their own operations, encouraging good practice throughout their supply chain, and collaborating with others to advance sustainable water management. In particular, integrity assessment of water stewardships can provide business with valuable lessons to manage risks and improve their activities. The CEO Water Mandate and the Water Integrity Network carried such an evaluation for water stewardship initiatives to measure the severity of integrity risks and the frequency with which they occur. The resulting "risk score" provides stewardship participants with an indication of the nature of risk area (e.g. partner representation, planning and design, imbalanced stakeholder engagement, etc.) and can inform management framework for mitigating hazards and reducing the likelihood of this risks occurring.

1.4.2. Long-term institutional investors

160. The financial sector plays an essential role in providing and channelling financing for investment, including in the water sector. Beyond providing short-term finance for businesses' day-to-day operations and other temporary cash requirements, financial institutions, capital markets and institutional investors are also sources of long-term finance. Over the last decades, public capital investment in infrastructure has on average declined in OECD countries (OECD, 2013c). Public provision of infrastructure has sometimes failed to deliver efficient investment with misallocation across sectors, regions or time due to political considerations. Constraints on public finance and recognized limitations on the public sector's

effectiveness in managing projects have led to a reconsideration of the role of the state in infrastructure provision, including water-related ones.

161. Today, institutional investors, particularly, pension funds, insurance companies, and mutual funds are increasingly important players. Institutional investment has emerged as a new source for funding water projects, in particular infrastructural ones. An increasing number of pension funds and private equity have begun to factor environmental, social and governance issues into their decision-making process and recognise their unique position to play a role in driving the transition to a more sustainable financial system. Water infrastructure and projects require high initial capital costs but have relatively long operating life cycles, low expenses, and high potential returns, thus offering institutional investors long-term cash flow and attractive payback periods. Pension funds and private equity invest more and more in water infrastructures and utilities for instance through debt financing when they lend to the owners or operators of the infrastructure. Thus, investment in water supply and sewage is receiving increasing attention as an opportunity for institutional investors looking to diversify their portfolio and make a difference socially and environmentally (see example in the United States in box 13).[4]

Box 19. Innovative business model attracting long term investment in water and sanitation in the US

A large portion of infrastructure in the US is obsolete and in need of improvement in order to provide consumers with quality drinking water. Some municipalities however cannot fund these projects because of their debt caused by the economic crisis. U.S. drinking water infrastructure earned a D Grade from the American Society of Engineers in its 2013 Report Card for America's Infrastructure, estimating the cost of repair at more than $1 trillion over the next 25 years, according to the American Water Works Association.

In that context, United Water, a SUEZ ENVIRONNEMENT subsidiary, has developed a new business model, called SOLUTION[SM], which provides a way for local authorities to clear millions of dollars of accumulated debt, create a cleaner environment and ensure that ownership and stewardship of the water system never leaves public hands. SOLUTION[SM] was first implemented in 2012 in the city of Bayonne, New Jersey, USA: brought together within a joint venture (90% Kohlberg Kravis Roberts & Co, 10% United Water), the two partners act as a concessionaire to the Bayonne Municipal Utilities Authority (BMUA).

SOLUTION[SM] separates the asset management and operating activities, with the distinctive feature being that the city has retained ownership of the infrastructures. United Water and KKR provide an upfront payment of over $150 million, allowing the Bayonne Municipality Utilities Authority to pay off the large majority of its debt. And $107 million will be invested over the contract in order to manage, repair and renovate the networks. The other distinctive feature is the length of the contract: working as an operating contract, the Bayonne contract was granted for a period of 40 years. The arrangement minimizes the impact of the rates increases needed to support the capital improvement program (+8.5% the first year, a 2 years rates freezing for 2013-2014, and then +3.5% per year, linked with inflation index). Efficiency savings and new revenues are expected to come from private operating efficiencies but also from re-metering to capture unbilled water: $7 million will thus be invested in the first three years to replace meters and upgrade billing and collection.

Three months after the project began; Moody's Investor's Service upgraded the City of Bayonne's bond rating from Baa1 with a negative outlook to Baa1 with a positive outlook. In addition to receiving the New Jersey Alliance for Action's Distinguished Engineering Award, United Water's SOLUTION[SM] business model is part of a Commitment to Action made by United Water at the Clinton Global Initiative (CGI) 2012 Meeting in New York. United Water also received the Partnership Performance of the Year Award at the 2012 American Water Summit in Chicago for this contractual approach. Another Solution[SM] contract has been signed October 2014 by United Water, KKR and the municipality of Middletown, Pennsylvania. The water and wastewater concession has a total value worth over $285 million over its 50 year life.

Source: Information provided by Suez Environnement

[4] For example, Goldman Sachs invests in smart water solutions storm water management, as well as treatment systems for small communities. Similarly, the Swiss private bank Pictet Asset Management has financed activities in water reuse and recycling, smart water grids, storm water management and decentralised integrated systems such as rainwater harvesting.

1.4.3. Property developers

162. As risks of floods intensify in some parts of the world, property developers are gaining influence over decisions related to land use. Indeed, spatial development generates long term liabilities and financial implications in terms of water management, such as compensations for the loss of nature values, green areas and water amenities. Up to now however, disaster risk reduction related to flooding has been often driven by politicians and emergency planning professionals with little discussions with city planners, urban designers and other professionals in the field of built environment (i.e. human-made surroundings such as. buildings, green space, supporting infrastructure), such as water engineers. Property developers who build in flood-prone areas generate liabilities with regards to water management and as such, they must bear the costs. Thus, they can play an important role to harness new sources of finance and contribute to the development of non-technical solutions to manage floods (see example in box 20).

Box 20. Co-decision-making with spatial planners

Westergouwe, which is located in the Zuidplaspolder in the western part of the Netherlands, lies more than six metres below sea level, which makes it one of the deepest polders of the country. It is also a polder characterised by weak peaty soils and water seepage, thus providing poor conditions for urban development. Nevertheless, in the early 2000s, the municipality of Gouda planned the construction of about 4,000 new homes, by designating this polder as an urban extension area. At the time, the consequences of possible floods were practically disregarded in the urban planning process and the municipality did not consider flood defence to be its responsibility, but rather the responsibility of the regional water authorities, the province of South Holland and project developers. As a consequence, the urban development project was unsuited for such unfavourable conditions and the initial plans did not include any measures for reducing possible risks of flood or of deterioration of the water system.

Despite negative feedbacks from regional water authority in the area, the proposed Westergouwe development was accepted by the province. However, following this decision, regional water authorities got further involved in the process and proposed requirements for the execution of the project to ensure housing would be safe from flooding (e.g. minimum flood levels, water retention standards,) and to ensure the sustainability of ecosystems.

This "water assessment", requested by the regional water authority, provided an opportunity for water managers and spatial planners to work together to manage the mutual impact of water and spatial development, to help discourage urban development in unfavourable locations and, in the case of Westergrouwe, to stir the project towards a more sustainable and resilient development. It was also used as a communication mechanism whereby both parties advised each other to limit negative outcomes. The "water assessment" contributed to changing path dependency in decisions about spatial development to move toward long-term horizons that also consider the costs incurred for the next generations, which is crucial for the financial sustainability in the water sector.

Source: Case study submitted by the Dutch water authority of Schieland en de Krimpenerwaard

163. Today, strategies to help attain improved social, physical and institutional resilience to flooding are likely to include revision of building codes, planning policy and developing good practice guidance on a number of measure (e.g. flood affected buildings, flood prone areas, etc.). It is therefore important that the wide range of built environment professionals be actively involved in these adaptation measures to make place for resilience in the face of increasing flood risks.

1.5. Unheard stakeholders

164. Some categories of stakeholders often get omitted and remain unheard. These include women (as the primary users of water in many parts of the world, for domestic consumption, subsistence agriculture, and health), youth (as the future generation that will need to solve issues related to water), the rural and urban poor (as the main consumers in informal urban and rural settlements) and indigenous and aboriginal communities (see box 21 on engaging unheard stakeholders in Cameroon).

Box 21. Engaging under-represented stakeholders

In the eastern rural region of Diang, Cameroon, the association *Aide aux Familles et Victimes des Migrations Clandestines* engages with local authorities, associations of women and young people, diggers and water users as part of training activities on groundwater management. In a region where access to drinking water is very limited, it has

become critical to better inform rural population about distribution practices for groundwater resources as well as water supply technology such as traditional hand dug wells.

These trainings take place in villages where a new well is envisaged, or an existing one needs to be renovated. Local stakeholders such as builders and community leaders are trained and, following the construction of the well, its management is monitored by the community users (e.g. students, women, patriarchs, etc.). These trainings have contributed to increase information-sharing across a broad range of actors at local level (e.g. public authorities, farmers, local media, donors, etc.) regarding water resource management, safety measures for building wells and hygiene.

Source: Case study submitted by the Association Aide aux Familles et Victimes des Migrations Clandestines

165. Women play a central part in the provision, management and safeguarding of water for domestic purposes and, in many instances, agricultural use. At the same time, women often play a less powerful role than men in the management, problem analysis and decision-making related to water. There is an important link between gender equality and sustainable water management.

166. Young people constitute a vital force and a critical age group capable of contributing actively to water-related decision-making and implementation. However, they often struggle to find a voice and remain at the margin. Current water management generates important liabilities related to surface and groundwater abstraction, pollution discharge into water resources, etc. and young generations of today will have to bear the related costs in the future. In the face of growing water challenges and uncertainties, intergenerational dialogue and training the next generation of water professionals need to be involved in the development of solutions to address them (see box 22).

Box 22. The Water Youth Network

The Water Youth Network is a global platform that connects and empowers young people, ranging from students to young professionals, to become agents of change in the water sector; while promoting North-South collaboration. Founded in 2012, it relies on an advisory board and four working groups encompassing 300 active members around the world, all volunteers between 15 and 30 years old.

The Water Youth Network contributes to continuity and coherence across different youth initiatives in the water sector. For instance, it created the "Water Youth Continuity Plan" to register existing youth groups, foster experience-sharing and bench-learning, and build momentum. It also encourages innovation with, for example the launch of an online platform for young people to share ideas on water and better share information, especially with under-represented groups. It also facilitates meaningful youth participation in major water events such as the *Budapest Water Summit* where it contributed to drafting the final statement, or the *Young Water Leadership Forum* at the Singapore International Water Week.

Source: Case study submitted by the Water Youth Network

167. The poor lacking access to safe water and sanitation represent an important share of the world's population but remain largely unheard in water-related decision-making processes. Their knowledge of on-the-ground realities could help guide decision-making and implementation to tailor strategies to the needs, but large informal surroundings make it difficult to get organised effectively (box 23).

Box 23. Stakeholder engagement to support rural water system change in Ghana

Stemming from the recognition that rural water systems were failing and falling apart at an alarming rate in Ghana, despite new investments, the NGO IRC launched the *Sustainable Services at Scale* ("Triple-S") initiative in 2009 to foster new thinking, policy and practice among key stakeholders and has implemented it in the Ghana rural water sector among other countries.

In that framework, IRC has worked with the Community Water and Sanitation Agency (CWSA), the government body responsible for overseeing the community water sub-sector in rural Ghana, which has led to its transformation from an organisation largely driven by divergent donor practices with a focus on infrastructure coverage to one that is taking the lead in championing sustainable water service delivery in a proactive and visionary way. These changes are set against the complex and challenging environment in Ghana and rely on a collaborative process of action research, reflection and on-going learning.

The "Triple-S" initiative is structured around 3 stages:

- Phase 1 corresponds to an initial period of building partnerships and a common recognition of the problem (poor functionality of rural water systems) and creating a shared vision of the future or ideal end-state;
- Phase 2 is the central phase of learning, testing and searching for practical, actionable solutions to long-term, underlying problems that have prevented the sector from moving towards its ideal end state;
- Phase 3 is the stage where outputs of the change process are starting to materialise through the impacts of systemic improvements to both policy and practice and the adoption and replication of good practice. The desired outcome is to scale-up solutions through a holistic work approach as opposed to focusing only on very ring-fenced parts of the problem and/or solutions).

A number of legal and policy frameworks have been modified during the course of this system change process. These underpin and have helped to cement the transition towards a more service delivery orientated way of working in Ghana. At the highest, global level, there was a political commitment to supporting service delivery made at the Sanitation and Water For All, High Level Meeting, Washington D.C., USA in April 2012 by the Minister for Finance and Economic Planning. This political commitment has been supported by a number of important policy and strategy changes, including the passing of a new legislative instrument to operationalise the regulatory role of CWSA under the Act of its establishment (Act 564 of 1998). The subsequent passage of the CWSA Regulations Legislative Instrument (LI 2007) in March 2013 strengthens CWSA with the legal mandate to regulate the sector. The key sector standards and benchmarks are all itemised in the legislative instrument and its schedules.

Source: Case study submitted by IRC.

168. Indigenous and aboriginal peoples are seldom recognized as legitimate stakeholders in water-related policy decisions at national and international levels. Moreover, they often lack the institutional structures and capacities to promote their water interests outside their communities. They are critical actors to consider as water is often central to their cultural and physical well-being. Bringing indigenous peoples into water policy discussions requires active interest and commitment to better understand indigenous cultural and spiritual understandings about water, and the recognition of the customary access and rights to water (box 24).

Box 24. Engaging indigenous communities in integrated catchment management in New Zealand

The Canterbury Regional Council has launched an engagement process with district councils and the Maori tribal authority to develop and implement the new Canterbury Water Management Strategy. The latter aims to: i) deliver environmental, economic, cultural and social outcomes together; ii) shift from individual effect-based management to integrated catchment management; and iii) develop a collaborative governance framework whereby « local people plan locally ».

Identification of tribal, and in particular sub-tribe members, as legitimate stakeholders was a fundamental aspect of the governance framework The region was divided into 10 areas with a dedicated committee in each zone, made of representatives from district and regional councils and local *runanga* (i.e. sub-tribe). The *runanga* representation on these committees depended on their definition of their *rohe* (sphere of responsibility). Most committees have on average 13 members with the number of *runanga* representatives varying from 1-6, depending on *rohe*.

Each committee is tasked with developing solutions to deliver on the targets of the strategy by 2040, and developing implementation programme and recommendations related to drinking water, irrigation, ecosystem health, water-use efficiency, energy security, etc. By involving indigenous communities, the engagement process aims to improve water management that meets their aspirations as well as social and cultural cohesiveness. It also aspires to develop a new collaborative approach to decision-making in which people from a variety of interests in water come together and develop solutions that meet all expectations. For example, one of the targets of the strategy is *Kaitiakitanga,* which requires both a role in decision making and the achievement of environmental outcomes. Thus, for indigenous people, it is about "having a seat at the table" (i.e. related to the governance) and delivering "tangible improvements in water quality" (i.e. related to the outcomes). Capacity remains an issue, with a small number of indigenous people having a large workload and responsibility. The Canterbury regional council has employed a specific *tangata whenua* (people of the land) facilitator to work with the *runanga* representatives to assist them in contributing and participating. Also, the tribal authority organises bimonthly sessions for all the representatives across the region to share their experiences and strengthen their capacity.

In four of the water management zones, a comprehensive integrated "Zone Committee Solution Package" has been developed as a basis for water quantity and quality regulation. For instance, in the case of the Selwyn Waihora Zone Committee, the Package was developed based on the feedback from 13 different focus groups, which include between 4 and 10 participants, which met 14 times throughout the decision-making process.

Participatory decision-making is monitored in a number of ways. Central government observers participate in regional

committees and provide feedback at national level. The mayoral Forum receives regular reports from the regional council. Within the regional council, the facilitation team receives regular reviews of their work. Finally, zone committees exchange on the effectiveness of the different engagement mechanisms they used and share lessons learnt. This comprehensive evaluation has shown that participatory decision-making had very positive consequences on the sustainability and resilience of water management in the region. This has enabled indigenous people to be recognised as legitimate stakeholders in water decision making, and has led to better community understanding of cultural values, and better outcomes for water management.

Source: Case study submitted by the Canterbury regional council

169. Nature, which needs are often defended by environmental groups, is also frequently omitted from engagement processes. Water needs to ensure environmental flows are seldom considered as an interest to consider when weighing in the expectations of various categories of stakeholders. However, better knowledge about biodiversity and ecosystems, the threats they face and the conservation measures that can be taken can help drive policy actions on water.

170. Additional efforts and innovation are needed to contact and engage with these groups or individuals, who do not always come forward on their own. Including these minority or "less-vocal" stakeholders is important to obtaining a more balanced picture from the engagement process. Stakeholder strategies need to go beyond the "usual suspects" represented in the formal engagement channels to pay greater attention to the "unheard voices" that are likely to sway over future strategies. Looking towards the future, some optimistic initiatives emerge to foster the involvement of under-represented groups in the water sector (box 25)

Box 25. Fostering women and youth involvement in the water sector in Portugal

In October 2013, the Portuguese Association of Water and Wastewater Services (APDA) founded the "Women for Water" group to:

- Contribute to quantify the presence of women in various areas of intervention;
- Assess women's participation in terms of age, the positions / functions performed, seniority, academic and professional qualifications, etc.;
- Share knowledge, experiences and best practices and benefit from participation in a group of excellence;
- Establish relationships and partnerships with similar groups that is or could be created at the international level, in particular those from Portuguese-speaking countries and international organizations

That same year, APDA also launched the "Young Water Professionals" group with the aim to develop the capacities of young professionals under the age of 35 years, with the objective to:

- Train young professionals and prepare future generations of leaders and technicians in various fields of knowledge, helping them to meet the growing challenges facing the water sector at present and in the future;
- Transfer new approaches to the problems of the sector to a wide range of professional, academic and geographic diversity;
- Share knowledge, experiences and best practices.

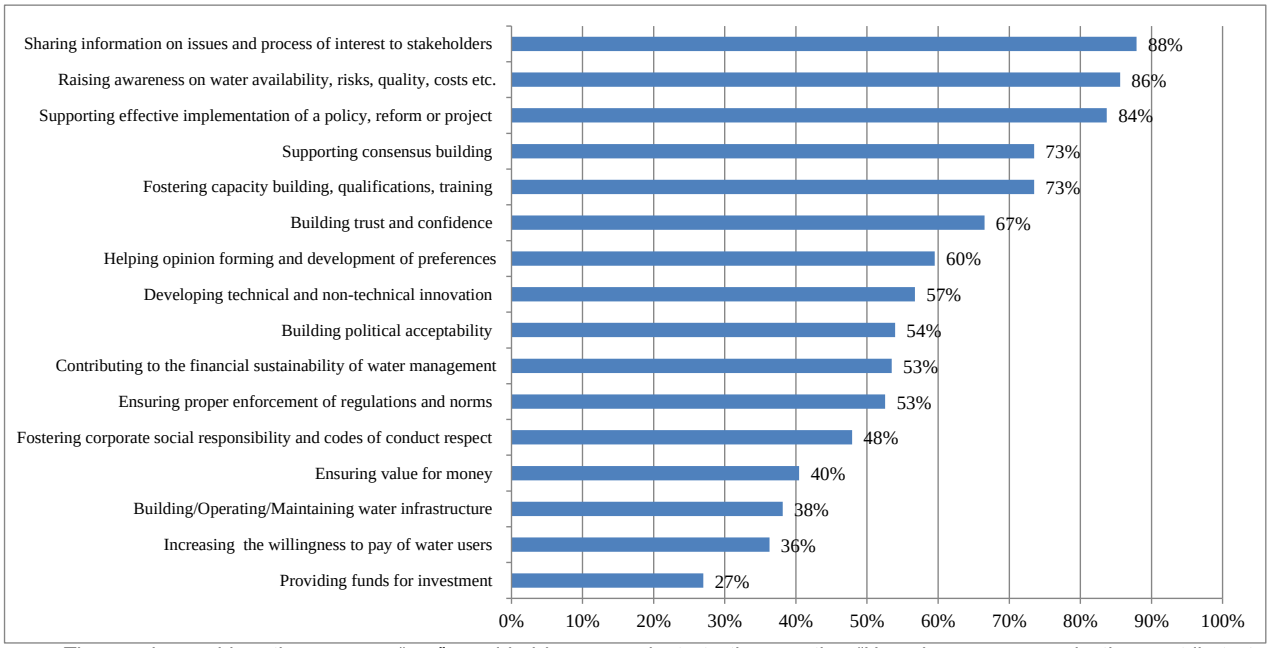
Source: Case studies submitted by ADPA.

2. What matters for whom: different motivations for different stakeholders

171. Stakeholders have different motivations, needs and interests. They aspire to different goals when it comes to water governance, which in turn affects what they expect to obtain from engagement processes. Engagement strategies related to the development of dam projects will by definition engage different stakeholders than those of a water tariffs reform. Based on their core motivations, and often their mandate, stakeholders have different governance concerns which affect Whether it concerns improving how water resources or services are managed, ensuring readiness in the face of water-related disasters, or protecting the environment, the way stakeholders contribute to water governance can influence their expectations of the engagement process and their willingness to get engage. 2.1. Stakeholders' contribution to water governance

172. Stakeholders contribute to water governance is different ways, and pursue different objectives. Results from the survey (figure 15) show that stakeholders' contribution to better governance covers a variety of activities. All contribute to improve water governance through information sharing (100% of respondents surveyed); by raising awareness on water availability, risks, quality and costs as well as by supporting the effective implementation of water policy, reform or project (both with 94%). Supporting consensus- and capacity-building is considered as an equally important contribution (94%). Less so are providing funds for investment (25%) and building and operating water infrastructures (13%).

Figure 15. Stakeholders' contribution to better water governance



Note: The graph considers the answers "yes" provided by respondents to the question "How does your organisation contribute to better water governance?"

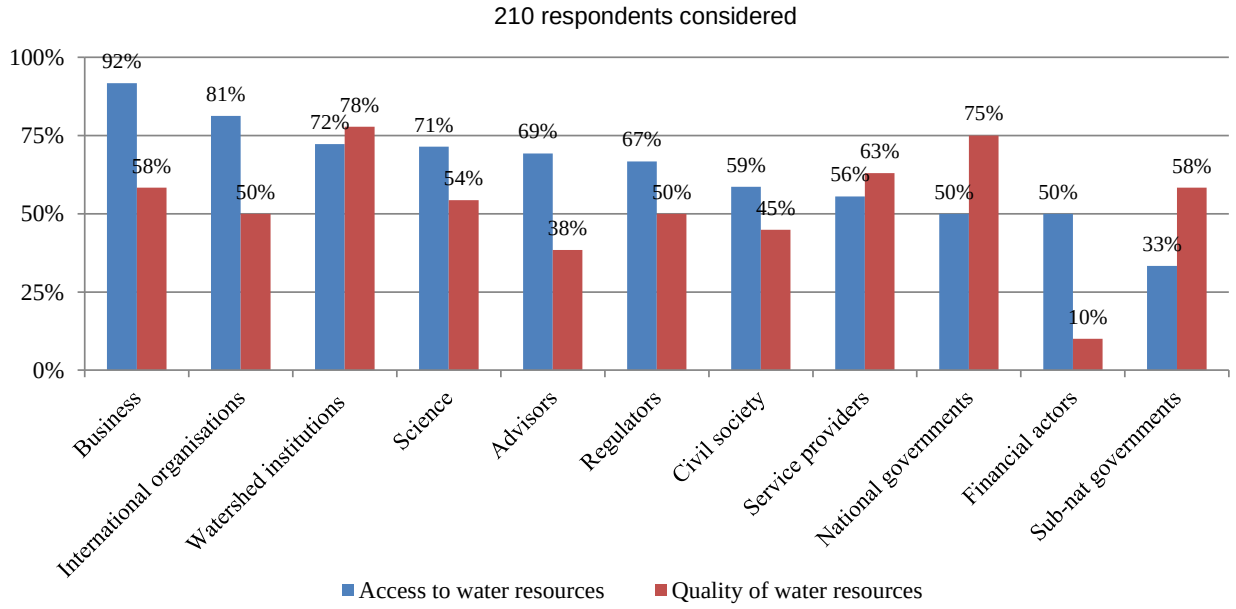
Source: OECD Survey on Stakeholder Engagement for Effective Water Governance (2014)

173. Key words most often associated to engagement processes among categories of stakeholders also highlight differences in perceptions. A majority of actors including international organisations, sub-national governments, service providers, watershed institutions and business, primarily perceived good governance as closely linked to stakeholder engagement (see word clouds in Annex A). In the case of national governments, the word "law" stands out and underlines the important legal dimension they associate with stakeholder engagement. For civil society, stakeholder engagement resonates rather with the multitude of "actors" in the water sector, while for financial actors and donors, "information", to be shared for instance, in a critical dimension of engagement processes, and for regulators "consultation" stands out primarily.

2.2. Water resource management

174. Access to water resources is a high priority for 92% of business surveyed. It can be explained by the fact that most companies depend on water for their supply chain (e.g. beverage company); production process (e.g. gas extraction through fracking techniques), or the use of their products by customers (e.g. dissolvable products such as soap). Also, 81% of international organisations surveyed consider it as a key area of interest and 72% of watershed institutions (figure 16).

Figure 16. Importance of water resources management across categories of stakeholders



Note: The graph considers the areas of interest rated between 1 and 3 on a scale from 1 to 6, by each category of stakeholders
Source: OECD Survey on Stakeholder Engagement for Effective Water Governance (2014)

175. The quality of water resources is a main area of concerns for watershed institutions (78% of all surveyed), which core mandate is ensuring the sustainability of water bodies, and national governments (75%). Identifying the interested parties in decision-making related to access to and quality of water resources is important when dealing with water resources management since it often implies negotiations and consensus-building (box 26). Decisions related to drawing-up river basin management plans or designing water allocation regimes can be sensitive as they entail managing trade-offs between different water users' needs. An interest-based stakeholder engagement process can help to align views, reach consensus, and also serve as an early-warning tool to anticipate some conflicts.

Box 26. Stakeholder engagement for better water quality

Intensive textile industry in the northern region of Portugal has greatly contributed to the economic and social development of the area. However, in the Ave valley, multiple untreated discharges led to important degradation of the quality of surface water which became unfit for pubic supply, aquatic ecosystems, irrigation or recreational areas.

As a response, in 1975, a working group was formed by the association of municipalities of the Ave valley, the state authority, and the licensing authority on water resources with the objective to test a model of an integrated water management. It led to the creation in 1985 of a **Commission for the integrated management of the Ave river basin** (CGIBHA in its Portuguese acronym) which also included academics and representatives of the industrial sector. The Commission was in charge of designing multi-phase management plans which included solutions at the river basin scale. These plans included i) integrated drainage and treatment measures for domestic and industrial wastewater treatment measures, with the construction of treatment plans; ii) the establishment of wastewater dischargers regulation; and iii) the polluter-pay principle.

The implementation of the management plans was partly financed by the European cohesion fund, as well as by the national and municipal authorities. As a result, ten wastewater treatment plans were built and treat about 45 million cubic meters of sewerage water yearly. New leisure areas were recently created along the river, encouraging more tourism and broader economic development (navigation, fishing, etc.).

Source: Case study submitted by Aguas de Noroeste S.A..

176. Key words most often associated with water resource management by the participants surveyed can also shed light on common concerns across stakeholders. The word cloud (figure 17) reveals that,

beyond a general consideration for good governance, stakeholders refer to "co-operation", "partnerships", "shared-understanding" and "consensus" as important terms related to the access and quality of water resources. It resonates with the concept of integrated water resources management which promotes the coordinated development and management of water, land and related resources, in an equitable manner.

Figure 17. Key terms associated to stakeholder engagement in water resources management

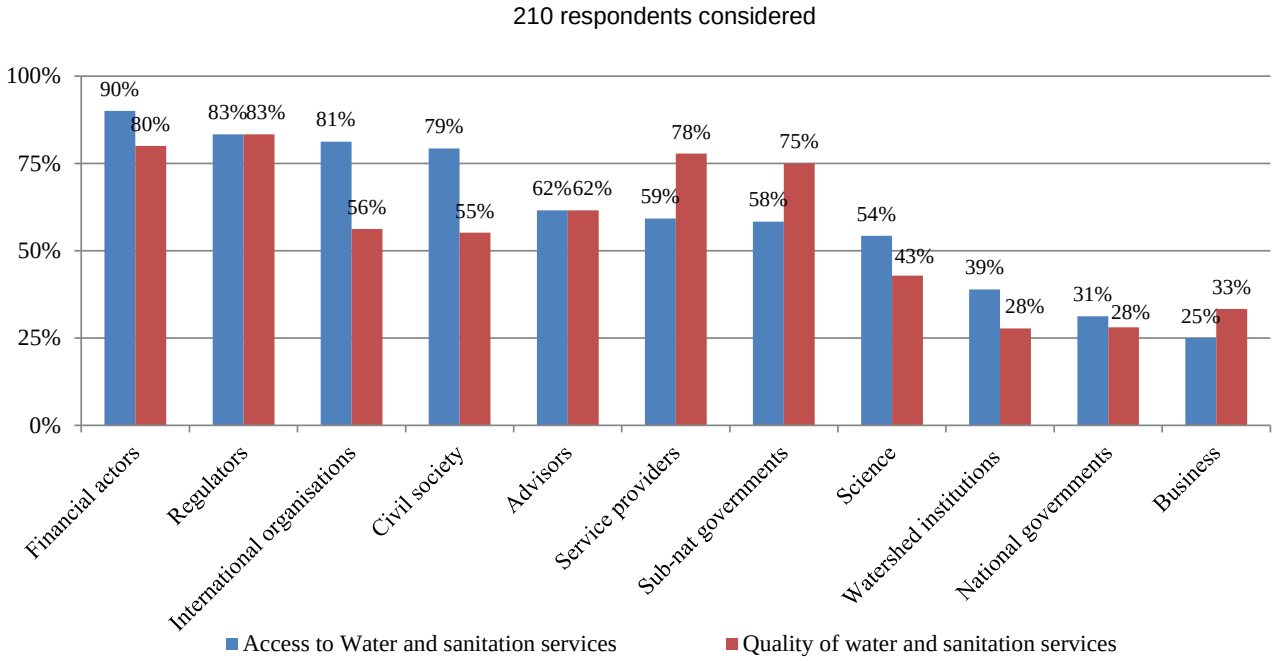
Note: The word cloud was created based on the key terms that were ranked first on a scale from 1 to 5, out of a list of 50 suggested in the questionnaire.

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance (2014)

2.3. Water supply and sanitation

177. Access to water and sanitation services is the primary motivation reported by 90% of financial actors and regulators (83%). (Figure 18). For regulators, interests in water and sanitation services relate to setting tariffs, quality standards for drinking water and wastewater treatment, defining public service obligations and technical industry standards. Their activities also concern analysing water utilities' investment plans and monitoring service delivery performance. In some cases, they supervise contracts with private actors and handle consumer protection and dispute resolution. Financial actors are also highly interested in water supply and sanitation (80%). Many donors, philanthropic foundations, grants, development programmes and financial aid flows commit to alleviate poor access to safe water and sanitation. National development agencies also have initiatives aiming to expand water supply and sanitation to promote better hygiene and fight preventable disease, especially to vulnerable communities. Box 27 provides an example of customer involvement in water supply and sanitation to contribute to price setting in Scotland.

Figure 18. Importance of water and sanitation services across categories of stakeholders



Note: The graph considers the areas of interest rated between 1 and 3 on a scale from 1 to 6, by each category of stakeholders.

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance (2014)

Box 27. Customer Engagement in setting water prices and investment priorities in Scotland

In Scotland, a Customer Forum was launched in September 2011 in an effort to give water customers a voice in setting water prices and service performance levels, hand in hand with the Scottish Water industry. In particular, the Forum was created in the midst of negotiations regarding the 2015-2021 business plan of Scottish Water, the publicly owned water and wastewater corporation that serves 5 million inhabitants. Indeed, the service provider was determined to include detailed customer inputs into the price setting process and investment priorities.

Throughout 2012-2013, the Customer Forum met on a regular basis with the support of the service supplier to discuss information from a range of sources and share their views and priorities across a wide range of expertise. The engagement process culminated in January 2014 when the Forum and Scottish Water reached an agreement on a business plan, which was followed by a statement from the Water Industry Commission for Scotland (the regulatory authority in the sector) in support of this plan and all the customer input it contained.

The agreement over Scottish Water marked the completion of the first cycle of engagement for the Customer Forum. An assessment of the overall engagement process has been conducted in an academic report to guide decision whether it would be beneficial to include customer involvement into performance monitoring processes to ensure that customer demands are met. The results Indeed, the Customer Forum is in effect a temporary body created for a particular purpose of contributing to set prices and investment priorities on water. Going forward, the Customer Forum is currently being examined closely by the Scottish government and regulator to decide whether it can stand the test of time or whether it can only work as a time-limited tool introduced to influence particular events or strategies.

Source: Case study provided by the Scottish government

178. Key words most often associated with water service provision are “efficiency”, “customers” as well as “capacity”, in addition to “good governance”. They relate to the concern of providing high-performing services and ensuring customer satisfaction. “Right” is also a term often selected which resonates with the human right to water and sanitation (figure 19).

Figure 19. Key terms associated to stakeholder engagement in water and sanitation services

Note: The word cloud was created based on the key terms that were ranked first on a scale from 1 to 5, out of a list of 50 suggested in the questionnaire.

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance (2014)

2.4. Water disaster management and environmental protection

179. The protection against water-related disasters is a primary concern for 78% of watershed institutions, 56% of international organisations as well as business (50%) and national governments (50%) surveyed (Figure 20). In many countries, legislations in place require institutions and companies to draw-up flood management plans and strategies to assess and manage the risks related to water disasters, such as the 2010 Flood and Water Management in the United Kingdom, the Flood Control Act in the United States, or the EU Flood Directive. Water-related disasters, which have occurred with greater frequency and magnitude in recent years, such as the Millennium drought in Australia, damaging floods in the United Kingdom, and hurricanes in the United States (e.g. Sandy in 2012, Katrina in 2005) have triggered a massive wake-up call for awareness-raising and early warning systems (box 28).

Box 28. Community engagement in post-disaster contexts

Founded as a response to Hurricane Sandy's devastation, *Rebuild by Design* has been dedicated to creating innovative community- and policy-based solutions to protect U.S. cities that are most vulnerable to increasingly intense weather events and future uncertainties. Initiated by the Presidential Hurricane Sandy Rebuilding Task Force and a partnership between U.S. Housing and Urban Development and the Rockefeller Foundation, Rebuild by Design's aim was to connect the talented researchers and designers with the Sandy-affected area's active businesses, policymakers, and local groups to better understand how to redevelop their communities in environmentally- and economically-healthier ways, and to be better prepared for the next storm.

The Rebuild by Design competition spanned from June 2013 to June 2014 and addressed the structural and environmental vulnerabilities that Hurricane Sandy exposed in communities throughout the region, and developed solutions to better protect residents from the dangers posed by future climate events. Due to the enormity of this challenge, the Rebuild by Design process was developed to find better ways of implementing designs and informing policy. The competition included a year of thoughtful engagement by the design teams who formed strong local coalitions, tailored to specific geographies, to develop fundable, implementable solutions that will inform new policies on every level. These coalitions, comprised of local and state government officials, government agencies, businesses, community members, advocates, etc. worked intensively with each team to develop their final design proposals but also continued to convene and connect beyond the design competition timeline, developing local resiliency networks that continue today.

Beyond developing strategic partnerships in their communities, design teams were required to host public workshops to ensure they were designing solutions that were embraced by their constituents. Considering the differences in projects, communities, and designers, Rebuild by Design partners did not set a specific format for how these workshops should be implemented. Instead, Design Teams were asked to work with local community partners in order to develop workshops or public programs that would attract the broadest audience, and allow for the greatest participation.

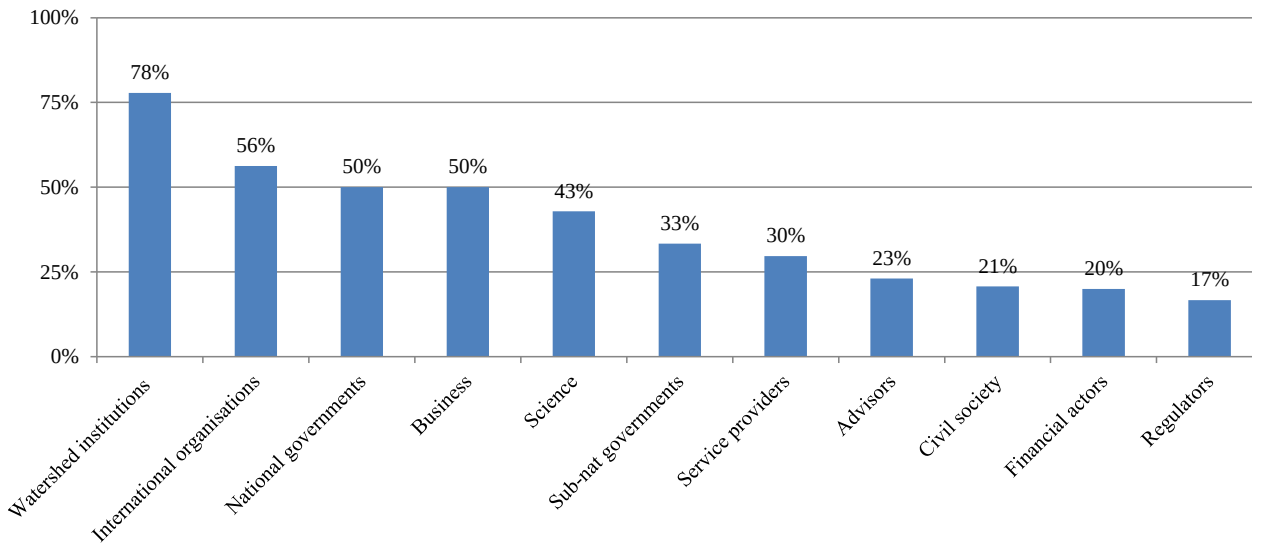
During the competition, the Urban Institute completed a rigorous evaluation of the entirety of the competition, including the engagement process. The evaluation process consisted of interviewing over 100 individuals involved in the competition year, from the teams to community stakeholders and funders. The evaluation showed that stakeholder coalitions and groups on the ground have taken on the ownership of the project. The model created a network of hundreds of leaders that are invested in the outcome of these projects and are now working to ensure the government implements the projects with the same level of innovation and community-based design. 535 organisations throughout the Sandy-affected region, 64 communities, 141 neighbourhoods and cities, and 181 government agencies were involved, have become educated, and are now owners and advocates of the implementation.

Rebuild by Design and its partners have demonstrated that by working together in this regional design process, ambitious, realistic, more resilient standards of development and infrastructure can be set and respond to communities' needs within a new, changing world.

Source: Case study submitted by Rebuild by Design

Figure 20. Importance of protection against water-related disasters across stakeholders

210 respondents considered



Note: The graph considers the areas of interest rated between 1 and 3 on a scale from 1 to 6, by each category of stakeholders:

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance (2014)

180. However, progress is still needed to interest the public in issues such as flood defence. Indeed, only 21% of civil society reported being primary concerned by water-related disasters. It denotes an "awareness gap" whereby citizens take current levels of water security for granted and tend to be less involved in water policy debates. Positive developments are taking place in the Netherlands for instance, where a national campaign through media and public debates will aim to educate the citizens on the need for evacuation policies and investments (box 29 and 30).

Box 29. Consultation for the development of flood defence infrastructure

Following damaging floods in the early 1990s, the Dutch government conducted studies to improve river flood defence and adapt water management to climate change. The programme « Room for the River » included 34 planning projects for flood safety and spatial quality for rivers, to be implemented by regional water authorities, provinces and municipalities with the support of central government. To gain support and acceptability from stakeholders likely to be impacted by the various projects, a wide range of actors (e.g. residents, farmers, etc.) were invited to participate in discussions during the design stage, as part of workshops and « design tables », in order to develop acceptable options and compensations measures. Stakeholders were also involved during the development and realisation stages, which fostered a sense of co-design and co-responsibility among the various actors. As a result, only a small number of legal procedures were started while overall, stakeholders accepted the various projects and measures related to deepening floodplains, digging side channels and lowering dikes to build polders where necessary.

In the Netherlands as well, an « ambition agreement » was signed in 2008 between representatives from the Ministry of Infrastructure and the Environment, the Ministry of Agriculture, Nature and Food Safety, the province of South Holland, several municipalities, the regional water authority, an environmental NGO, research centres (Deltares and the Ecoshape innovation programme), academia (Delft University of Technology) and consultancy firms. The objective of the agreement was to work on the realisation of the « **Sand Motor** », a multi-functional and large-scale sand nourishment infrastructure project aiming to protect the area from flood by compensating for sand losses from coastline erosion, to create recreational and natural areas, and to contribute to natural dune formation. The project was co-designed by the signatories throughout workshops and its location was commonly decided to avoid any negative impact on the stakeholders engaged. Beyond the parties to the agreement, civil society was also consulted and had the possibility to ask questions and formally object through legal procedures, especially during the planning phase. The agreement for the implementation of the Sand Motor had agreed-upon goals and ambitions and led to broad commitment across stakeholders, without any delays and additional expenditures. « Sand Motor » was successfully completed in 2011 following close monitoring and resulting in a positive nourishment of adjacent coasts.

Source: Case study by submitted the Ministry of Infrastructure and Environment of the Netherlands and Deltares.

Box 30. Engaging with farmers to manage risks of floods, droughts and water pollution

In the Netherlands, 34 projects have been carried as part of the programme « Room for the River », among which the **Overdiepse Polder**, in 2000, where farmers actively took part in decision-making related to **flood defence**. As public authorities (mainly the national agency Rijkswaterstaat, the Dutch water authority of Brabantse Delta, the Noord Brabant province and several municipalities) were envisaging flood management measures, farmers decided to form an association, supported by an official representative to take part in discussions that would greatly impact their activities. Informal meetings took place between project managers and farmers to discuss arising issues; a working committee comprising representatives from the national government, the province, the regional water authority, municipalities and the farmer association met four times per year and a steering committee with a similar structure that gathered twice a year. By structuring their involvement and agreeing on common expectations, farmers were able to offer an agreed-upon proposal to policy-makers suggesting to build their farms on dwelling mounds so they would be protected from high water levels, or voluntarily leave the designated flood area following financial compensations. All propositions were accepted by the authorities and the project is currently implemented and will be completed in 2015/2016;

In the same area of the Netherlands (Noord Brabant), the Dutch water authority of Brabantse Delta conducted in 2010, a pilot project in the **Rietkreek (Reed Creek) to restore creek watersheds** that played a crucial role in supplying freshwater to farmers, as well as holding water in times of drought. It required working hand in hand with local farmers and the Dutch federation of agriculture and horticulture to discuss issues of freshwater conservation in the polder area. Large and small-scale meetings took place early in the process between the regional water authority, farmers as well as the Federation, which played an important role of mediator to ensure that the farmers' interests were well-included in the project. Clear objectives for engagement were formulated at the beginning of the process with the intention to jointly decide what activities the farmers would take on to contribute to water conservation activities such as providing lands, installing pumps and contributing to managing water levels. Although communication on the responsibilities of farmers was considered somewhat insufficient during the pilot phase, resulting in some farmers under-estimating their contribution, overall, farmers accepted their role and the costs associated with conservation activities as long as they benefited from the project outcomes, i.e. guarantied water supply during dry periods and security against high water levels risks.

In Thailand, the Sai Na Wang community of the Kalasin province is located in one of the driest region in the country. A project was designed to develop adaptation activities to cope with water scarcity affecting farming, and to design alternative and resilient farming system in a context of severe droughts. The project, led by the **Chi River Basin Committee**, engaged local farmer groups to co-design such an adaptive system. The first completed phase of the

Box 30. Engaging with farmers to manage risks of floods, droughts and water pollution *(cont.)*

project (2011-2013) aimed to find strategies and practical ways for farmers to cope with and adapt to dry climate. Study results showed that during this first stage, some farmers, called « climate champion », successfully moved away from mono-crop culture to integrated farming with mixed plants and animals as well as built a water pond. The second phase of the project (2014-2015) consists in scaling-up these results, exploring ways to mainstream climate agriculture-based adaptation practices into local government policy and planning framework, and to establish and deliver adaptation activities at the local climate adaptation Knowledge Sharing Centre that could act as a market place for exchanging ideas, sharing experiences and learning between farmers.

In Belgium, the **inter-municipal water service provider of Liège** (CILE in its French acronym) has been working with farmers implemented on the Crétacé de Hesbaye aquifer, which is crucial for the supply of drinking water for the provision of the city of Liège and its surroundings, in order to prevent risks of pollution of groundwater resources by nitrates. The approach stems from the establishment of NITRAWAL, a management structure which strategy is jointly defined by water suppliers and the farming community, in close cooperation with competent authorities of the Wallonia region and with the supports of scientists from the universities of Liège and Louvain-La-Neuve. NITRAWAL agronomists provide on-the-ground assistance and capacity development to farmers to advise on legal requirements and promote good practices for the sustainable use of fertilizers among farmers. CILE provides farmers with monitoring and evaluation results of nitrogen levels so they can assess their own performance, and also communicate results to public authorities to support prevention programmes and foresee changes in long-term contamination levels of groundwater.

Sources: Case studies submitted by the Brabantse Delta river basin authority; the Chi River basin committee: and the Compagnie Intercommunale Liégeoise des Eaux (CILE) /Société Publique de Gestion de l'Eau (SPGE) /NITRAWAL

181. Key words such as "awareness", "information" and "coordination" stand pre-eminently in water disaster management (figure 21). These terms echo the generally low perception of water risks, especially among citizens who consider levels of water security for granted. As a consequence, they tend to be less involved in water policy debates.

Figure 21. Key terms associated to stakeholder engagement in water-related disaster

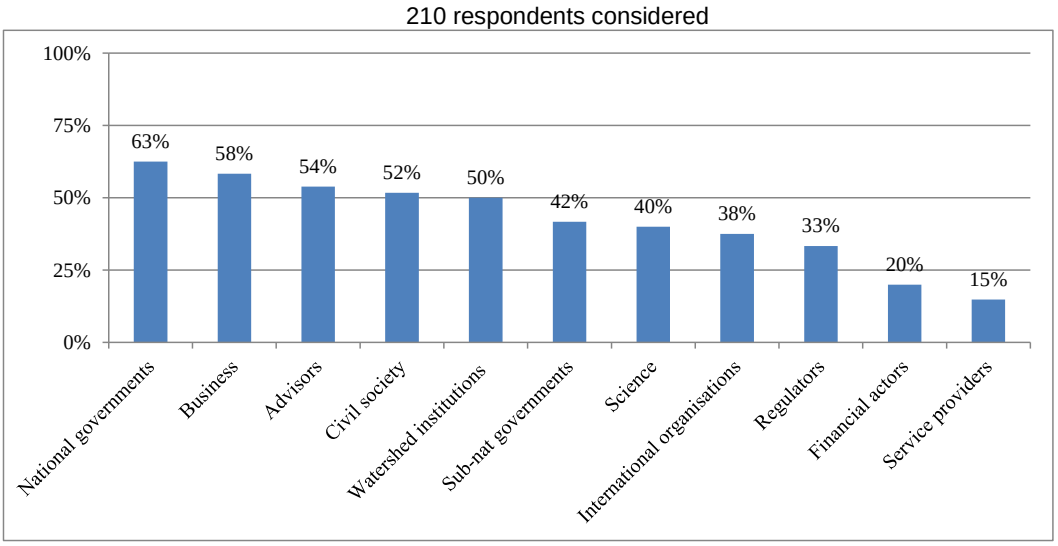
Note: The word cloud was created based on the key terms that were ranked first on a scale from 1 to 5, out of a list of 50 suggested in the questionnaire.

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance (2014)

182. Environmental protection was ranked as a high priority by central governments (63%), considering that responses from central governments to the questionnaire came in large majority from ministries and central agencies on environment and sustainable development (see stakeholder profile for national governments in (Annex A). For 58% of business companies surveyed, environmental protection is a centre issue as well (figure 22). They are often under legal obligation to follow environmental laws and

should submit to environmental impact assessments (EIA). These consist in reviewing the possible impact both good and bad of a company's project on the environment, and should be carried out up-stream in project planning. EIA can have high financial stakes for business as they can lead to important delays if their results are not satisfactory, or to costly mitigation measures. Box 31 provides an example in the United States on the contribution of stakeholder engagement in environmental restoration.

Figure 22. Importance of environmental protection across categories of stakeholders



Note: The graph considers the areas of interest rated between 1 and 3 on a scale from 1 to 6, by each category of stakeholders:
Source: OECD Survey on Stakeholder Engagement for Effective Water Governance (2014)

Box 31. Stakeholder engagement for environmental restoration and sustainability

The South Bay Salt Pond Restoration project, located in the southern region of San Francisco, **United States**, was initiated in March 2003 by the *California Department of Fish Game*, the *United States Fish and Wildlife Service* and the *California State Coastal Conservancy*. It is one of the largest wetland restoration projects in the U.S and works toward restoring former industrial salt ponds to nature, while providing flood control and public access. The project provided an opportunity for a variety of actors to get engaged in decision-making including among others:

- Local businesses with a commercial interest in the development of the project;
- Environmental organisations working for the protection and defence of the local environment and habitat; and
- Flood management and public health/public works districts that have a stake with regard to flood protection and water quality issues.

Through formal bodies such as local government groups, regional working groups and annual Stakeholder Forum meetings, a wide range of actors provided feedbacks on the progress of the restoration project and contributed to building a sense of openness, honesty and accountability with regards to the project benefits and implications.

In **Spain**, the city of Sabadell committed to improve its environmental sustainability and partnered with Samcla, a company specialised in the field of remote irrigation network to optimise the use of water resources and improve water and energy efficiency in public parks. Together, they developed a remote irrigation management system which uses a control software accessible online and communication equipment (GPS) to monitor water consumption at any given point of the irrigation network to detect and manage possible leak in real time.

Since its implementation in 2008, Sabadell's remote irrigation system has been the subject of technical article and presentation in national and international conference (e.g. Smart city Congress) to highlight the positive impact this approach has had on the city's water consumption for public parks, namely up to 56% of water saving while return on investment was estimated to 3 to 4 years. The remote system has also contributed to saving time previously allocated to public park maintenance.

Source: Case study submitted by Deltares (Chatzidimopoulou and Seijger, 2014), www.southbayrestoration.org, and Samcla, SL

2.5. Managing stakeholders' expectations

183. Managing stakeholder expectations is a critical part of managing engagement processes. Because they pursue different aspirations for water governance, and have different interests, stakeholders do not always expect to have the same contribution or attain the same results from the engagement process. Stakeholders might engage in decision-making and policy/project implementation thinking they are entitled to a certain degree of influence of the policy or project under development, which does not always match what the promoters of the process have planned. Also, stakeholders might get involved hoping to reach certain outcomes at the close of the engagement process, which do not necessarily meet the promoters' objectives.

184. Misplaced expectations can lead to frustration, disappointment and demotivation. By providing opportunities for stakeholders to take part in decision-making, engagement processes inevitably create expectations, whether they concern the degree of influence stakeholders may have over decisions, or the expected outcomes. There is the possibility that gaps appear between what stakeholders perceive they will get from the engagement process and what decision-makers expects to get from stakeholders' involvement. In turn, it may lead to frustration and demotivation, therefore making the process of engaging similar stakeholders in a new process more difficult.

185. Often, one of the reasons for participation initiatives not matching up to the expectations is the rhetoric or practice gap. This embraces situations where the expectations and advertising that accompany an engagement process are not matched by the actual opportunities to participate or the eventual influence of the process (Involve, 2005). This gap can be explained for instance by overenthusiastic marketing and advertising; by overly ambitious objectives for the process as compared to the individual or organisational capacity to carry it out effectively; or by the mismatch between the interests in engagement with the actual level of motivations to make change happen.

186. By accurately mapping stakeholders' expectations from the outset, the chances for a more effective engagement process are greater. Making sure that stakeholders' expectations fit promoters' expectations is a fundamental facet of stakeholder engagement. It can be achieved for instance by facilitating meetings of stakeholders concerned by a policy or project, where practical, to discuss and come to mutually satisfying agreements of what is to be expected. Taking the needed time to evaluate stakeholders' expectations at the start of the engagement process also helps to adopt appropriate and flexible engagement mechanisms early on.

3. The importance of *connectivity*

187. Understanding how stakeholders interact and the connectivity[5] dynamics is important to assess their level of influence and engagement in water-related decision-making and implementation. Highly connected people exert a certain influence over one another. More connections often mean that stakeholders are exposed to more and more diverse information which can spread more quickly. More connected stakeholders are better able to mobilise their resources (financial, human) and bring multiple and diverse perspectives to solve water problems. The level of connection between stakeholders can vary from places to places and such difference can help understand questions related to diffusion of information, trust, consensus-building and solidarity. The closer stakeholders are, either through interactions in person (e.g. via regular meetings) or through regular communication channels (e.g. online discussion platform), the more likely information will flow easily among them. Similarly, proximity among actors can foster a sense of community that is favourable to negotiations and the collective solution forming.

[5] *Connectivity* refers to the number and intensity of interactions taking place among stakeholders. It encompasses all dynamic, changing sequence of social actions and exchanges taking place between individuals or groups and how they influence each of their actions and reactions.

3.1. Stakeholders' interactions

188. Stakeholders cannot be viewed in isolation but as embedded in webs of interrelations. They operate in formal and informal settings, with interactions of different nature, degree and frequency. Depending on their responsibilities and interests, stakeholders interacts more or less often with one another.

189. Social network analysis can provide a reading template to understand interactions between water actors. It consists in applying network theory to analyse social networks. It views relationships in terms of nodes, representing each stakeholder within the network, and ties which represent their interrelation. Social network analysis can help evaluate the location of stakeholders in the network to find the centrality of each actor. As such, it can provide insight into the various roles and groupings of stakeholders in the water sector: who are the actors "leading", who are the actors "connecting" other actors, and who are the actors isolated. It can also identify clusters and who is in them, who is in the core of the network, and who is on the periphery.

190. In the United States for instance, sociometric analysis has been used to analyse the critical role that channels of exchange among peers and opinion leaders play in the process of innovation diffusion and knowledge sharing in municipal water industry (box 32). As an innovative and evolving field of management practice, sociometric network analysis has allowed organisations to leverage seemingly invisible networks for the harnessing of knowledge, dissemination of new and forward-thinking ideas, and acceleration of performance impact. In Quebec for instance, the Association of basin organisations partnered with academics to develop a manual to train local NGOs working on water how to use social network analysis tools for identifying network of actors relevant to their activities.

Box 32. An example of sociometric network analysis

In *The Water Resources Utility of the Future: A Blueprint for Action,* the US National Association of Clean Water Agencies, the Water Environment Research Foundation and the Water Environment Federation make the case for a paradigm shift in the U.S. water industry. Utility professionals are acknowledged to be experiencing a transformative change in how they view themselves - from the manager of a technical engineering entity to the manager of a progressive water resources system, fully integrating the delivery of economic, environmental and social benefits to a local, regional and national audience.

In this context, researchers and academics from the University of Pennsylvania carried out primary sociometric research focusing on water industry executives from the 200 largest cities in the US with the objective to determine the characteristics of peer communication networks, peer leadership and knowledge-sharing pathways of the largest US public water systems. The research also examines sources of acquisition of information and knowledge available to water managers.

Research results indicate that the most valued sources of information and knowledge across all water professionals surveyed are on-the-job experience and peer interactions. The preference for peer-to-peer learning suggests the advisability of strengthening industry-wide and organization-wide opportunities for peer information exchange.

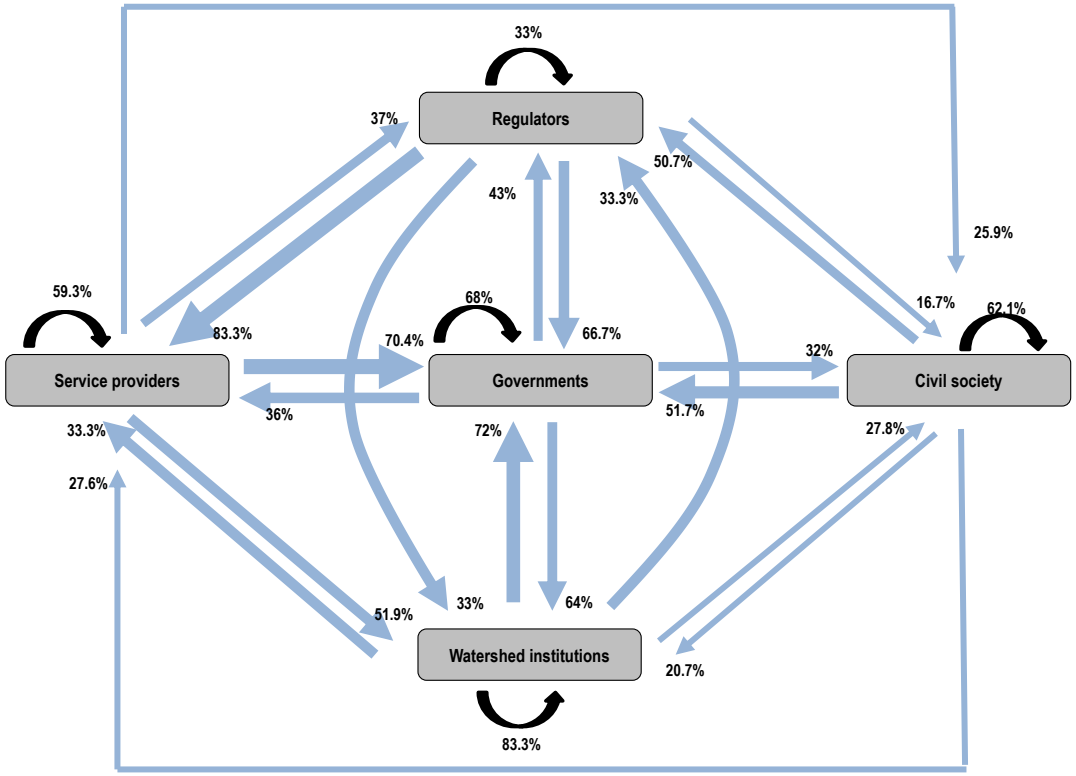
The conclusion of the sociometric analysis recommends a focus on building, analysing and leveraging organisational network data in order to drive change, diffuse innovation and respond to current challenges faced by the U.S. water industry. The underlying hypothesis for this recommendation is the notion that a more connected water management community will be better able to meet the shared challenges the industry must address.

Source: Case study submitted by the University of Pennsylvania and H2OGo, LLC

191. The examination of interactions among stakeholders helps to identify collaboration pathways and communication preferences in the water sector. Results from the survey show important variations in how frequently categories of stakeholders interact with one another in the water sector (figure 23). For example, government officials are most frequently in contact with watershed institutions in policy implementation, strategic planning and financing. Regulators primarily interact with service providers, for instance to

ensure compliance with service standards, as well as with governments such as for the development of new laws and legal requirements.

Figure 23. Most frequent interactions across stakeholders in the water sector



Note: The figure shows the interactions across governments (national, regional, local), service providers, watershed institutions, regulators and civil society considered as "very frequent".

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance (2014)

192. Interactions among stakeholders also reveal that they tend to take place in silos, relying essentially on peer-to-peer exchanges. Indeed, results from the survey interestingly show that stakeholders in the water sector mostly interact with actors belonging to their own category, as it is the case for governments, watershed institutions, civil society, as well as business and academics. They often prefer collaborating with their own peers, to share information for instance (box 33), before reaching out to other types of actors.

Box 33. Information-sharing on water among policy-makers

In Asia, water resources quality and quantity have deteriorated due to the increasing demand on water and polluted water resources caused by inadequate management. Rooted in the belief that information-sharing among policy-makers dealing with similar challenges is a key point to learn from similar experiences and scale-up good practices, the **Water Environmental Partnership in Asia** (WEPA) was launched in 2004 as a commitment from the government of Japan (ministry of environment) following the 3rd world Water Forum (2003, Kyoto).

WEPA is managed by the Institute for Global Environmental Strategies and aims to facilitate peer-to-peer information-sharing among policy-makers dealing with water environmental management in Asian countries. The three-step programme i) encourages knowledge-sharing to strengthen water environmental governance; ii) fosters water solution information platforms through workshops and dialogues; and iii) creates policymakers' networks for the improvement of water environmental governance. WEPA contributes to facilitate mutual understanding on water issues between 13 member countries, each appointing a focal point who discusses solutions for environmental management challenges. The current members are Cambodia, China, Indonesia, Lao, Malaysia, Myanmar, Nepal, Philippines, Korea, Sri Lanka, Thailand, Vietnam and Japan.

In 2013, evaluation surveys showed that WEPA workshops and meetings were considered as beneficial by participants. They also suggested the importance of maintaining an up-to-date database on existing water regulation.

Source: Case study submitted by the Institute for Global Environmental Strategies http://www.wepa-db.net/index

3.2. Interaction gaps

193. There are some interaction gaps among certain categories of stakeholders. While the analysis of interrelations between actors reveals the most frequent interactions, it also sheds light on the limited, or absence of, contacts among certain categories of stakeholder. For instance, a very low proportion (16.7%) of regulators surveyed interacts frequently with civil society on water-related issues. Similarly, 20.7% of civil society organisations surveyed are in frequent contact with watershed institutions.

194. Some categories of stakeholders are considered more difficult to interact with. Survey respondents pointed out to certain actors as harder to collaborate or engage with. Agricultural actors are considered as pursing economic interests (i.e. profitability of the activities) rather than protecting water resources, which often put them at odds with other stakeholders such as environmental NGOs. Parliamentarians are also considered to be little interested in water-related issues, or lacking some knowledge and specialisation. To improve their understanding of the sector, the World Water Council is currently working on the creation of a Parliamentarians Helpdesk to provide specialised technical services on water legislation and budget allocation; enable knowledge-sharing between parliamentarians from different countries, and with water legislation experts; and develop a community of practices around water legislation[6]. Also, national government authorities are perceived as still favouring top-down approaches to decision-making and implementation, and reluctant to be exposed or vulnerable in engagement processes. Civil society can also be challenging to engage because it is considered as a broad and little structured audience that is difficult to target, and can lack awareness and knowledge on water-related issues.

195. There is a communication gap between policy-makers and scientists on water-related issues. Among the categories of stakeholders considered difficult to interact with, survey respondents identified researchers and academics, mentioning differences in vocabulary, level of technicality and expectations. While there is little debate that project management and policy making is most effective when informed by science, the water sector, as other policy fields, still suffers from a divide between science producers and science users, such as project managers and decision-makers. Potential remedies for bridging this gap exist but need to be put into action. For instance, science knowledge should be customised and targeted to the preferences of user audiences to improve uptake and use in making decisions. Also, mechanisms should be developed to sustained interactions between the two groups to ensure both a push of science knowledge, and opportunities for policies to inform the research agenda.

196. Coordinators can help facilitate collaboration between different stakeholders and as such contribute to bridging interaction gaps. Some institutions in the water sector play a "coordinator" role in bringing different types of actors together to deepen mutual understanding. Umbrella organisations such as networks of river basin organisations, federations of water utilities, as well as national water agencies or councils (Mexico, Brazil, Japan, France etc.) play an important role in fostering interactions and information-sharing between various stakeholders, (local authorities, government agencies, irrigation users, domestic user, industrial user, power producers, watershed institutions etc.).

[6] The World Water Council Water Legislation Parliamentarian Support Survey is available at: https://docs.google.com/forms/d/1f9FWszmBEWEeKpCnoivJeFRuKAK7DVw5Za9dL3cKP6w/viewform. The Parliamentarian Helpdesk is to be launched at the 7th World Water Forum (April 2015, Korea)

197. Mapping networks of communication and co-operation in the water sector can help stakeholders to understand the frameworks within which engagement initiatives are to be accomplished. Examining the state of interactions among actors can reveal specific network connectivity and permits a realistic analysis of collaboration pathways and the existing "climate" of stakeholder engagement for a given water policy or project process. Understanding who frequently communicates with whom can also help to identify optimal ways of disseminating knowledge, information and innovation, and foster engagement of stakeholders across levels of governments and related sectors.

4. Getting the scale right

198. Water is a field particularly sensitive to issues of *scale*. Water logics and hydrological boundaries cut across administrative frontiers and perimeters. Water governance and water resources management takes place at various spatial scales, both in their ecological and political dimensions. First, the hydrological system with its different levels from small catchments to large river basins plays a prominent role, from the individual water body to the global climate. Second, competencies of political interventions have shifted both towards the national and supranational levels in the form of international agreements or the growing influence of the European Union; and towards the regional and local levels, in the form of decentralisation of water decision-making and implementation involving a diversity of local non-state actors.

4.1. The multi-level nature of water governance

199. Water governance is inextricably linked to territorial considerations and scale issues. Decentralisation of water policies in the past decades has resulted in a dynamic relationship between actors at all levels of government. Complex and resource-intensive competences were allocated to lower level of governments while sub-national actors do not always have the authority over the financial allocation required to meet these needs. At the same time, central governments may be constrained when promoting and assessing water resources and services strategies if they do not obtain information from sub-national governments. This kind of mutual dependence requires ways to facilitate multi-level relationships.

200. Effective co-ordination and implementation of water policies is compromised by multi-level governance gaps. The OECD Multi-level Governance Framework "Mind the Gaps – Bridge the Gaps" (OECD, 2011) offers a framework to diagnose vertical and horizontal co-ordination bottlenecks between levels of government, across policy areas and between local and regional actors at the sub-national level (figure 24). It provides guidance for decision-makers to diagnose and bridge gaps in a systemic way as they are strongly inter-related and may reinforce each other.

Figure 24. The OECD Multi-level Governance Framework: Mind the Gaps, Bridge the Gaps

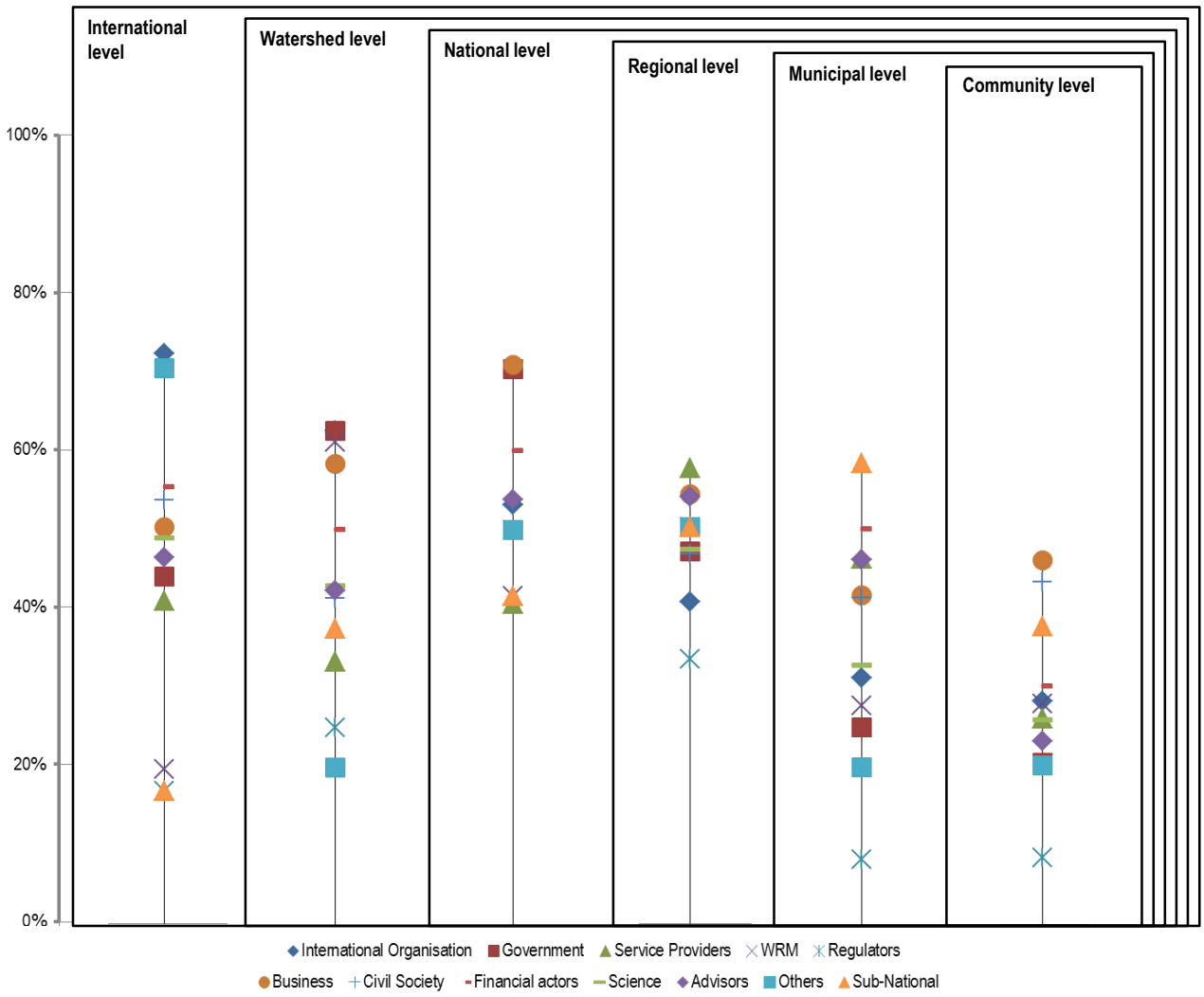
Source: OECD (2011)

4.2. Defining the appropriate scale for stakeholder engagement

201. Assessing stakeholder engagement effectiveness raises the question of scale in decision-making. Engagement processes range from local watershed groups negotiating about allocation practices, to national committees debating priorities, or international meetings seeking consensus about the management of transboundary basins between sovereign states. The issue of scale also relates to questions of democratic legitimacy. The higher the level of decision-making is, the lower the possibilities for comprehensive participation of all relevant constituencies are and thus the more likely conflicts may arise (Moss and Newig, 2010). Inversely, the lower the government level, the more difficult it is to effectively address water-related problems, in particular those that are not strictly local, without having the big picture. The literature refers to this scale trade-offs as a democratic dilemma between "inclusive participation" and "system effectiveness" (Dahl, 1994).

202. Different stakeholders intervene at different territorial scale depending on their activities and mandates. For instance, as their scope entails, international organisations are mostly active at the global level, central governments primarily carry out their activities at the national level. Regional and municipal scales are the primary fields of action of service providers, and the basin unit is the primary level of intervention of watershed institutions (see figure 25).

Figure 25. Most frequent territorial scale of intervention



Note: The graph considers the average rate of responses as "yes" to the question "at which territorial scale does your organisation primarily intervene?"

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance

203. Stakeholder engagement can provide platforms to address the mismatch between administrative and hydrological scales. Water-related projects and policies can be driven by local livelihoods tied to local ecosystems, or by energy producers making long-term production and investment choices at the national level. Thus, some stakeholders promote hydrological scales that correspond to manageable units in which they operate (e.g. river basin organisations). Others promote conventional administrative levels, arguing that this is where capacity, accountability, and legitimacy already exist (Dore and Lebel, 2010). An example can be found in the interpretation of sovereign rights to develop national waters that collides with shared responsibilities across transboundary river basins (box 34).

Box 34. Transboundary participatory management in the Niger, Senegal and Congo rivers

The **Niger** Basin Authority (NBA) was established in 1964 by the nine States sharing the Niger river basin: Benin, Burkina Faso, Cameroon, Chad, Ivory Coast, Guinea, Mali, Niger and Nigeria. In 2005, the Authority initiated a dialogue with regional organisations and associations from riparian states to discuss the participation of civil society in developing a shared vision for the management of the basin. All parties worked to identify and involve non-state stakeholders such as farmers and irrigators as well as unorganised water users in decision-making. As a result the Niger Basin Authority adopted in 2008 an *Action Plan for Sustainable Development* and a *Water Charter* to better manage the river.

The Organisation for the Development of the **Senegal** River was created in 1972 and gathers Guinea Conakry, Mali, Mauritania and Senegal around common goals, including food self-sufficiency for the basin people, economic development of the Member States and preservation of the ecosystems balance in the region. The Master Plan for Water Development and Management of the Senegal River was drafted in a participatory manner, through knowledge-sharing and meetings with key stakeholders, including illiterate people using illustrated informative guides. It led to the adoption of a *Water Charter*.

The International Commission of the **Congo** - Ubangi - Sangha Basin was established in 1999 across the states of Cameroon, Central African Republic, Congo, Gabon, and Democratic Republic of Congo. It has responsibilities in inland navigation and integrated water resources management. In 2013, the Commission started some activities to raise awareness among partners and discuss the involvement of non-state stakeholders in future activities and mobilise the need support to encourage stakeholder participation in the development of the river master plan.

Source: Case study submitted by the International Network of Basin Organisations

204. Stakeholder engagement at the relevant territorial level has the potential to address the issue of scale more efficiently. Stakeholder views and interests are shaped by their roles in organisations at various levels, from sub-basin to international. Decisions taken at one level can positively or negatively affect decisions at another level (e.g. subsidies to farmers for irrigation at national level can be detrimental to groundwater bodies at the aquifer level). Stakeholder engagement can help build consensus on how to reconcile different views and manage associated trade-offs to trigger policy and behavioural change and reconcile decisions within and across spatial scales (box 35).

Box 35. Stakeholder engagement at the watershed level

Tecocomulco lagoon is considered a natural relic of ancient lake ecosystem which prevailed in the Valley of Mexico river basin contributing to regulating water levels and recharging aquifers in the basin. However, it is facing storage capacity challenges and high levels of sedimentation related to different production systems and accelerated erosion in the basin. The **River Basin Commission of the Tecocomulco Lagoon** was created in 2005 as an auxiliary structure of the Mexico Valley river basin council with the objective to reverse these serious risks of deterioration. It is composed of representatives from different levels of government (federal, state, municipal), water users and civil society organisations. It has responsibilities in land and water conservation, as well as sanitation and training activities to foster integrated water resource management and water conflict resolution in the lagoon. The Commission builds on constructive dialogues across sectors that had been historically antagonistic. Regular and dynamic meetings as well as monitoring agreements since its creation have positioned the Commission as an instance of trusted social participation. It is taken as a reference by consulting regional government for the implementation of their development programs at basin level.

In **England**, since 2011, the UK government, the Environment Agency and a variety of other organisations have been experimenting with the development of a new **Catchment Based Approach** in 2013. It aims to: better engage river catchment stakeholders; establish common ownership of problems and their solutions; build partnerships that balance environmental, economic and social demands; and align funding and actions within river catchments to bring about long term improvements. The purpose of the new approach is to do three main things: 1) generate more coordinated 'on-ground' local action; 2) generate more evidence for buy-in to problems; and 3) look for innovative, more cost effective solutions. Following a 12 month pilot phase in 2012, a formal independent evaluation of the 25 catchment scale trials across England was carried out to assess how catchment level planning and collaboration can better inform planning and delivery of the EU Water Framework Directive. The UK government formerly announced the launch of the Catchment Based Approach in June 2013. Since then, the Environment Agency has worked with public, private and not-for-profit sectors to set up over 100 collaborative 'Catchment Partnerships' in the 87 management catchments across England (plus 6 cross border catchments with Scotland and Wales). The Environment Agency now employs over 60 dedicated 'Catchment Coordinators' to support these independently-led groups and enhance engagement and

Box 35. Stakeholder engagement at the watershed level *(cont.)*

partnerships for effective catchment governance across England. A Guide for Catchment Management has also been developed as a 'how to' handbook to translate lessons learned from the pilot phase into useful guidance and reference materials. A national support group has also been established to help transition and mainstream the approach in England.

In **South Africa**, the **Inkomati Catchment Management Agency** was established in 2006 as part of the National Water Act to implement operational and participative integrated water resource management. Between January and March 2010, the Catchment Management Agency engaged in extensive stakeholder participation (including business, farmers, mining companies, municipalities, civil society, etc.), on a very limited budget (R 500,000), to draft a broadly accepted catchment management strategy. The strategy was then submitted, with full stakeholder acceptance, to the Department of Water Affairs for the Minister's approval. Following this approval, implementation started in 2011 at the catchment scale, mostly through the work of 5 sub-catchment management fora which are currently the main platforms for stakeholder engagement. Each falls under the mandate of a specific community officer who is also responsible for public awareness (e.g. in schools and community groups). There are also River Operations Committees that meet regularly to decide on the management and allocation of water flows. Finally, an annual report by the governing board of the Catchment Management Authority is sent to all stakeholders involved to inform on the progress achieved towards integrated water resource management in the river basin.

Sources : Case studies submitted by the National Water Commission of Mexico; the UK Environment Agency; and the University of Witwatesrand

205. Stakeholder engagement that is sensitive to multilevel interests is a critical way for coping with the multi-scalar complexity of water decision-making and policy/project implementation. It can ensure that multi-level perspectives are heard and opposing views are examined, but this implies a clear authority taking the decision and committing to action. The emergence of multi-level approaches to decision-making can create new opportunities for actors, particularly at the local level, to become actively involved in the decision-making processes and can contribute to reinforcing local power and local opportunities (Majoor and Salet, 2008). Box 36 provides an example of multi-level stakeholder engagement in Canada.

Box 36. Multi-level stakeholder engagement in the Great Lake region

The deteriorating ecosystems in the Great Lakes under the pressure of growing population, changing climate and new invasive species have spurred a call from concerned scientists and citizens to engage in decision-making processes related to the management of water resources in the area. In response, the **Ontario's Great Lakes Strategy** was established as a commitment from many provincial Ministries to support the long term protection of the Lakes. This strategy has included an engagement process across the various stakeholders in the region at different levels.

At the Great Lakes level, the engagement has involved longer term, moderately paced processes. The Great Lakes encompass a large geographic scale with many different environmental pressures that need to be addressed, and includes a wide diversity of Great Lakes stakeholders (i.e., rural and large urban municipalities; non-governmental organisations; industrial and commercial sectors) as well as First Nations and Métis communities that are partners in protecting the lakes.

At the local watershed level of Lake Simcoe, within the Great Lakes Basin, stakeholders actively participated in an intense engagement process to develop the Lake Simcoe Protection Act and the Lake Simcoe Protection Plan, and remain actively involved in implementing them.

This Great Lakes Basin multi-level engagement process has proven to be an appropriate mechanism to set policy direction and inform the development of a long-term strategy for water protection on a large geographic scale. The more intense process demonstrated in Lake Simcoe, shows how a deeper level of engagement on focused issues, enables decision-makers to further develop protection policies and programs, as well as implementation partnerships within a watershed. Engagement processes with First Nation and Métis communities and stakeholders have developed strong relationships and partnerships for protecting watersheds over the longer term.

Source: Case studies prepared and submitted for the Government of Ontario

4.3. The emergence of transcalarity

206. An increasing number of stakeholders have proven not to be confined to the limit of a particular scale, but to be mobile across levels of governments, or even to by-pass certain levels in order to engage in

decision-making and policy implementation processes. This concerns the practice of transcalarity, which has largely spread in many international social and political movements. Transcalarity refers to a shift from a scalar system made up of different layers, nested together into one another, to a transcalar system that connects different layers of different scalar systems, regardless of their internal hierarchy (Garibaldo, Telljohann, 2010). It relates to the question whether it is possible for local level stakeholders in the water sector to benefit from transcalarity to promote their views and strategies for example at the supra-national level, by "skipping" the usual intermediate levels of their own scalar system (i.e. national level).

207. An important characteristic of multiscalar approaches is that local stakeholders are not obliged to move through a set of scalar levels, one within the other, from local to international, but they can directly access other similar local stakeholders across borders. For instance, associations and federations in the water sector (of service providers, irrigators, RBOs, etc.) are made up of local actors and aim to influence international water policy-making. As such, they play a role in by-passing intermediate levels of governance and government. Similarly, grassroots movements mostly act at the local level, but can have the capacity to reach out to international institutions. For instance, European Citizens' Initiatives (ECI), available since April 2012, are new tools for participatory democracy in Europe that foster transcalar engagement approaches. Citizens can put an issue on the European political agenda by means of an ECI, which involves collecting one million signatures from at least seven different EU Member States. The first successful ECI, *Right2Water*, collected 1.68 million signatures, passing minimum thresholds in 13 Member States – far above the legally required minimum. Altogether, more than 5 million EU citizens have now signed up to more than 20 different initiatives.

Conclusion

208. Stakeholder mapping is a stepping stone to understand how the water sector is organised in terms of functions and responsibilities and appropriately determine *who* should be engaged in decision-making and implementation. Identifying stakeholders, the role they play and the influence they can have over water policies and projects process is important to see beyond the traditional, and at times superficial picture. An effective stakeholder mapping should help decision-makers investigate how are roles distributed, who are the key stakeholder categories, which one is pushing for what, and which one cannot be 'heard'? In turn, it can support reflections on new ways to broaden the audience of engagement processes. In addition, it should not be assumed that all actors within one category are homogenous in their perceptions. Such perceptions depend on many factors – which need to be explored through the analysis – and each situation should be considered afresh rather than jumping to conclusions about the stand that different stakeholders are likely to take.

209. Stakeholder engagement processes tend to be issue-centered, and so are related stakeholder mappings. Indeed, in many cases, stakeholders are involved on specific issues in which they have a stake, on which they have specific knowledge, or to which they may contribute funding. Therefore, as stakeholders' interests and expectations may change from one situation to another, it is important to keep in mind that stakeholder mappings provide only a static snapshot at a particular time and need to be considered in a dynamic way.

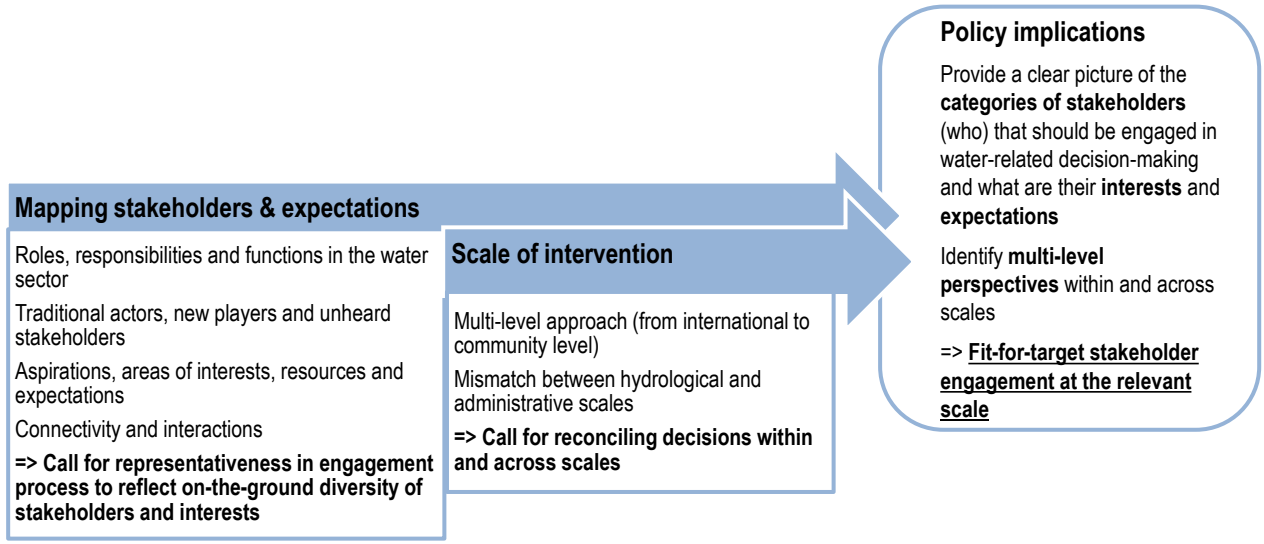
210. A deeper understanding of stakeholders' aspirations in water governance can help manage their expectations of engagement processes. Identifying *how* different categories of stakeholders are contributing to improving water governance can shed light on *why* they should or wish to be involved in decision-making and implementation, and with *what level* of expectations. In turn, it support decision-makers in managing stakeholders' expectations to avoid misunderstanding on the extent of influence stakeholders have over the decision-making process; and limit disappointment

211. Analysing who interacts with whom can also help to draw a clear picture of how different stakeholders are connected. Decision-makers should analyse the networks within which actors are embedded to understand their interrelations, assess the degree of cohesion among them as well as determine who are the integrators', who are the 'dividers' and who remains secluded. In turn, it provides some indication as to their degree of influence on one another. Stakeholder mapping is therefore a strategic tool for decision-makers to assess the full range of actors at play and to design fit-for-target stakeholder engagement processes.

212. Finally, beyond the *who* does *what*, engagement processes should also take into account at *which level* stakeholders intervene. For stakeholder engagement to truly reflect the inherent multi-level nature of water management, it is critical for decision-makers to assess at which scale stakeholders are carrying their roles and responsibilities and diagnose key governance gaps hindering their effective coordination. It turn, it should then guide the design of inclusive approaches that involve actors within and across different scales, from international and national to sub-basin and community, according to the issue at hand. Transcalar approaches also need to be considered when identifying the "right" scale for stakeholder engagement as they can challenge the usual conception of levels of governance and governments and shed light on stakeholders that are active alternatively at different scales. As a result, it can contribute to making stakeholder engagement more inclusive and implemented at the relevant scale so it effectively contributes in formulating sustainable water policies and projects.

213. Mapping stakeholders, aspirations, interactions and scales is a critical diagnosis tool for policymakers to identify potential overlaps, duplications, grey areas or multi-level governance gaps, and thus a stepping stone to set the foundations for engagement processes. But mappings are specific to given places and times, across which targets change and adapt. Such exercises should therefore be iterative, transparent, regularly assessed, and adjusted each time targets change to allow actors to leave, and new ones to join, including from outside the water sector. Therefore, formulating rules on how to ascertain that engagement processes remain "fit-for-target" is important to guide decision-making and implementation (figure 26).

Figure 26. Towards fit-for-target engagement at the relevant scale



CHAPTER 4. OBSTACLES TO STAKEHOLDER ENGAGEMENT

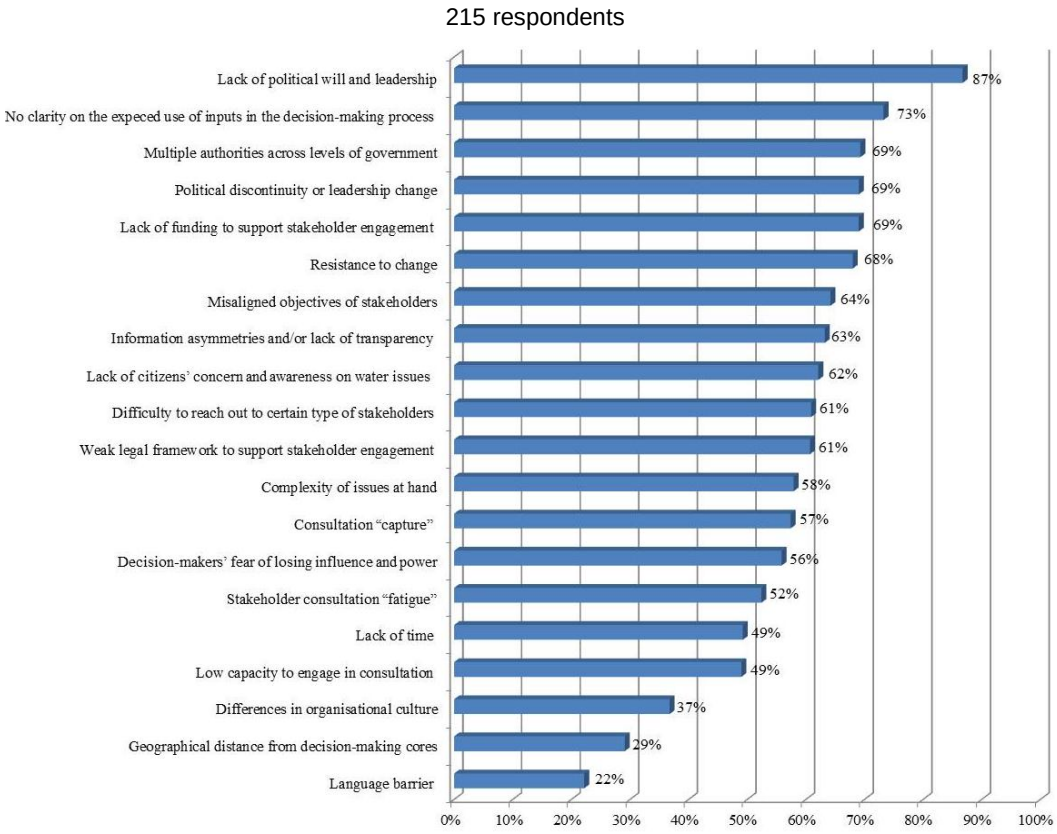
Introduction

214. Engagement processes vary across places and stakeholders but common barriers can be identified. Depending on the issue at hand, the stakeholders involved and the level of intervention, hindrances to inclusive decision-making and implementation can take several forms. Identifying these obstacles and categories of stakeholders facing similar challenges can help to mediate their effect and learn from other stakeholders' experiences when developing solutions to overcome them. This chapter provides insights and examples of such obstacles to pave the way for more in-depth analysis of mechanisms that can address them (chapter 5).

1. Highlights from the Survey

215. Mainly, the survey identified two categories of obstacles. The first category includes those hindering the *transposition of the concept of stakeholder engagement* in water policies and practices. They relate to political leaders' resistance to relinquish power to other stakeholders as well as the absence of legal framework to embed stakeholder engagement in institutional practices. These obstacles restrict instilling principles of inclusive decision-making. The second category of obstacles includes *bottlenecks that impede the effective implementation* of the engagement processes. They concern the lack of clarity on the use of stakeholders' inputs, the lack of funding, misaligned objectives as well as the lack of transparency (figure 27).

Figure 27. Major obstacles to stakeholder engagement in the water sector



Source: OECD Survey on Stakeholder Engagement for Effective Water Governance, 2014

2. Obstacles to the integration of stakeholder engagement in water policies and practices

2.1 The lack of political will and the shift of power

216. For nearly 90% of the participants surveyed, the lack of political will and leadership is the primary obstacle to effective stakeholder engagement in the water sector. Political will broadly refers to the sustained commitment of politicians and administrators to invest the necessary resources to achieve specific objectives and their willingness to make and implement policy despite opposition. The determination of political actors to adopt and enforce engagement principles is an important factor to introduce the concept of stakeholder engagement in water related decision-making and implementation. Leaders can help create incentives to persuade other actors, political or not, to pursue stakeholder engagement, even if they do not always share the same willingness. However, elected officials may perceive that they have been mandated to do what they feel is appropriate, as they were elected by the people, and thus there might not be a need for consultation with other actors.

217. Stakeholder engagement implies a shift in the balance of power. Rich engagement processes mean that more political power is transferred to stakeholders and imply some trade-offs for decision-makers who may be reluctant to relinquish power. Engaging stakeholder in water decision-making and implementation processes empowers them. It implies providing an opportunity for them to influence the outcomes, thus transferring some power away from decision makers and placing it in the hands of actors that may not share the same intentions, perspectives and interests. The greater the level of engagement (i.e. representation, partnerships, co-decision), the more the power-balance is equalised. Mutual relationship and power sharing between promoter and targets is an important factor for a successful engagement process. The challenge is therefore to strike a balance between maintaining governments' leadership regarding water policy design and implementation all the while releasing some power to other stakeholders so they can contribute as well. Therefore, the correlation between political will and stakeholder engagement should rather be seen as a two-way process whereby engagement processes can help to promote and strengthen policy-makers' commitment to set-up more inclusive governance frameworks in the water sector.

218. In technical sectors such as water, it can be considered that decision-making and policy/project implementation be left to experts who understand technical details and political realities. The model of the expert-led democracy advocates 'efficient' democracies which works by limiting the involvement of other parties, such as the public, to the act of voting, enabling experts to get on with the work of government (Involve, 2005b). Today's societies are more highly educated and less deferential, and it is recognised that "non-professionals" can be experts on specific water issues, especially at the local level where they are best placed to understand the context and needs. Expertise is needed as much as ever, but the role of "professionals" and "experts" is changing and a much wider range of stakeholders are called upon to provide expertise on water issues. This implies managing different forms of knowledge (e.g. on-the-ground experience, formal education) while making sure they all remain rigorous and useful.

219. Although political will can be a key force in driving greater stakeholder engagement in the water sector, it is not the sole factor for change. When national and sub-national political wills are directed towards the same goal, they can be mutually reinforcing. However, when multiple local political wills are moving against the outcomes promoted at the national level, they can be neutralising or even undermining it. Careful consideration of political will at the national and local level is needed to secure the necessary support for instilling the concept of stakeholder engagement in water policy and projects. Therefore, ensuring that policy-makers at different levels are well-involved rather sooner than later in water policy or projects is key to ensure that they support the process and the implementation of its outcomes.

2.2. Institutional fragmentation

220. Institutional fragmentation across levels of government is also a challenge to implementing the concept of stakeholder engagement. It was identified as a main obstacle by 69% of respondents surveyed. It creates fissures in water governance with sub-areas administered independently or responsibilities scattered across a multitude of actors. Ministries tend to act within their area of expertise without coordinating water policy initiatives, potentially without adequate consultation on the needs of other related sectors, or sub-national levels. The impact of institutional fragmentation is therefore often played out at the sub-national level, with overlapping responsibility and little accountability. In this context, mapping stakeholders to be involved in a water policy or project process becomes a daunting task. It can result in more complexities and potential delay in policy or project calendars.

221. Institutional fragmentation precludes the efficiencies and synergies that can be obtained through co-operation across authorities, water-related sectors and scales (OECD, 2013d). It can lead to policy outcomes focused on a specific issue or territorial area with little spill-over effect than can benefit the broader water sector. It also makes the identification of the appropriate interlocutor more difficult and can lead to incoherence, for instance between sub-national policy needs and national initiatives (OECD, 2011).

2.3. Weak legal frameworks

222. The absence of sound legal framework hampers stakeholder engagement in water policy and management. Weak legal frameworks were ranked first in terms of obstacle to stakeholder engagement by regulators surveyed, and 11th by stakeholders on average. The lack of sound regulation for stakeholder engagement was often pointed out as a brake to regulatory agencies' capacity to apply standards for inclusive decision-making and to assess the compliance of decision-making with these requirements.

223. As stakeholder engagement becomes more formalised, it is likely that regulatory frameworks to support them will be clarified. As said previously (chapter 1), stakeholder engagement in the water sector has been carried out largely on an incidental basis, rather than as an obligation mandated by law. However, current efforts show some progress towards more formalised and institutionalised forms of inclusive decision-making. This is likely to be accompanied by a change in rules and legislation to introduce new requirements for engaging stakeholders in decision-making related to water resources management (e.g. in river basin organisations); water service provision (e.g. to define strategic orientations, consult customers on tariff setting, etc.) and water-related disasters (e.g. consultation for drawing up flood management plans) It would facilitate the development of a common set of minimum standards and procedures in watershed institutions and water utilities, and help to better monitor compliance and how institutions are performing in this regards.

3. Obstacles hindering the effective implementation of engagement processes

3.1. Lack of clarity on the use of engagement processes' input

224. The lack of clarity on the use of stakeholders' inputs is the second obstacle hindering effective engagement (73%). If those with interest or influence do not understand how their input will contribute to the decision-making and the implementation of policies and projects, and in the absence of a clear strategy, the process may lack a reference point and stakeholders will not know what there are getting into. Often, stakeholders participate without knowing how the views they expressed or the information they provide will be pragmatically included in shaping a water policy or project. They may then feel misled or manipulated, tend to lose interest and their motivations deflate, resulting in a sort of "consultation fatigue".

225. Satisfying all stakeholders' interests is a daunting task. While stakeholders seek the legitimate right to take part in decision-making on water issues, they are not always willing to assume joint

responsibility for the resulting action (Tortajada, C., 2007). Therefore, a critical challenge is to commit to making constructive contributions all the while being willing to support the outcomes of the engagement process, even when they fail to coincide with vested and partisan interests.

226. Clarifying the engagement process is one way to secure support and buy-in. Defining clear objectives can help establish a commitment to change from the start by recognising that new responses are needed to solve or address a specific water issue. It can also ensure that mechanisms are in place to deal with the outcomes from the engagement process, and that these outcomes can be dealt with effectively and within a given timeline.

3.2. Lack of funding

227. The lack of funding can impede the implementation of engagement processes. Insufficient or unstable revenues to implement engagement processes were ranked as the fifth most important challenge among all stakeholders surveyed. It often concerns a mismatch between the revenues of stakeholders and the expenditures required to set up engagement practices. Logistical expenses related to meeting venues or support material (e.g. publication of brochures, launch of online platforms, etc.) can be a challenge to many. Implementing engagement processes also often require hiring dedicated and competent staff. Some initiatives may only last the time of a meeting (e.g. expert panel, consultation workshop) while others may run on a longer period depending on the issue at hands (e.g. lengthy water reform process or large infrastructural project). Therefore, securing funding is also important to sustain engagement processes in the long term, which has become all the more crucial when government funding has been slashed in times of economic and financial crisis. The lack of funding was considered the primary bottleneck to stakeholder engagement by civil society, which is often solicited to take part in engagement efforts but has limited operational and development capabilities to secure the needed funds, staff and time.

3.3. Information asymmetry

228. The information gap between stakeholders is ranked as the second most important obstacle by science and academia (71%), while it is only considered as eighth by all stakeholders surveyed. This uneasy access to quality information hinders their ability to study and analyse water-related issues and make informed contributions to decision-making processes.

229. Information asymmetries occur when one or several categories of stakeholders have more or better information than the others. Government authorities, service providers as well as researchers all dedicate significant resources to collect and produce data on water resources (quality, quantity, etc.), water services (service performance, state of infrastructures, etc.) and risks of water disasters (meteorological projections, etc.). However, compiling and sharing meaningful and consistent information at various levels can be problematic for several reasons. For instance, the use of different and sometimes incompatible data-collection and analysis methods can prevents certain stakeholders from using the data produced by others. Also, the quality of the data is sometimes questionable if the necessary control mechanisms are not integrated into monitoring programmes, or if the information is not well-documented. Without attention to these areas, stakeholders cannot optimize the use of the information, resulting in duplication of efforts and an underutilisation of available water knowledge.

230. Overcoming information asymmetries can help bridge the gap between science, policy and action. Overall, policy-makers rarely use the research results and the science-policy interface remains rather week in terms of guiding decision-making and implementation. Both types of stakeholders often have different goals, different ways of working and different languages. This contributes to creating a gap between policy and science and threatens to render scientific inputs in decision-making and policy/project implementation irrelevant. Focusing efforts towards more adequately generating and sharing information

between decision-makers and scientists can contribute to better align science contributions and policy aspirations in decision-making arenas, providing a robust foundation for evidence-based decision-making.

3.4. Too many or too few voices

231. Conflict of interest and capture of the process by certain groups of actors and lobbies within and outside the water sector represent a critical or important obstacle to stakeholder engagement (57%). Consultation capture by often better organised groups (e.g. irrigators and their associations, large hydro-electric companies, etc.) with high financial stakes and political ramifications can sometimes influence decision-making and implementation processes. These decisions can concern for example water resources allocation to secure the necessary volumes of water for their own benefits, or the adoption of less exigent water quality standards that do not compromise their activities. In some EU countries, farmers overrode engagement initiatives related to the implementation of the WFD to protect their interests, leaving insufficient water for the environment.

232. Stakeholder engagement can also be subject to unethical practices. Stakeholder engagement processes might be set-up to create the appearance of inclusiveness. In practice however, there are situations where underlying incentives are for personal economic or political gain. For instance, candidates running for office may organise consultations on key water issues (e.g. improving the provision of water services and tariffs, building new infrastructures) without actual concerns but to secure support for their own political agendas. Companies may invest in improving water-use efficiency or facilitating aquifer recharge schemes in order to benefit by appearing to be environmentally friendly (also known as "greenwash"). Related benefits might take the form of higher stock market, more customers or favoured partnerships with green environmental organisations.

233. The growth of inclusive decision-making may also be seen as a threat to the role of elected representatives. There are various theories about how stakeholder engagement can supplement or fundamentally change representative democracy, such as 'empowered participatory governance', with new roles for governments and civil society (Involve, 2005b). There may also be a sense that legitimacy can only be conferred on a decision-making process if it involves formally elected representatives. It can be explained by the lack of clear systems to link engagement activities and representative democracy. Stakeholder engagement should be seen as a complement, not a replacement for representative democracy. There is a need to explore the ways forward to bring together the new dynamics of stakeholder engagement with the long experience of decision-making from representative democracy.

3.5. Lack of interest and concern

234. Stakeholders also have to confront their own lack of interest in seizing the engagement opportunities available to them. Setting up avenues to involve different actors in water policy and projects does not necessarily mean that they do so. Not all stakeholders may be in a position to, or interested in, contributing to water-related decision-making or implementation. This can be explained, amongst others, by a frequent awareness gap affecting stakeholders' motivations to participate, as pointed out by the 62% of responses. More particularly, the lack of citizens' concerns about water was flagged as the primary challenge to stakeholder engagement by 82% of national governments surveyed.

235. With a growing number of issues being the subject of engagement initiatives, and stakeholders lacking interest, stakeholder *fatigue* is a concern. In addition, stakeholders may have limited resources (time, people and money) to engage and there may be competition between institutions for stakeholders' time. Also, there can be situations where stakeholders do not feel concerned about water issues because they consider that these are already well-managed. These factors can result in low engagement rates and contribute to engagement fatigue.

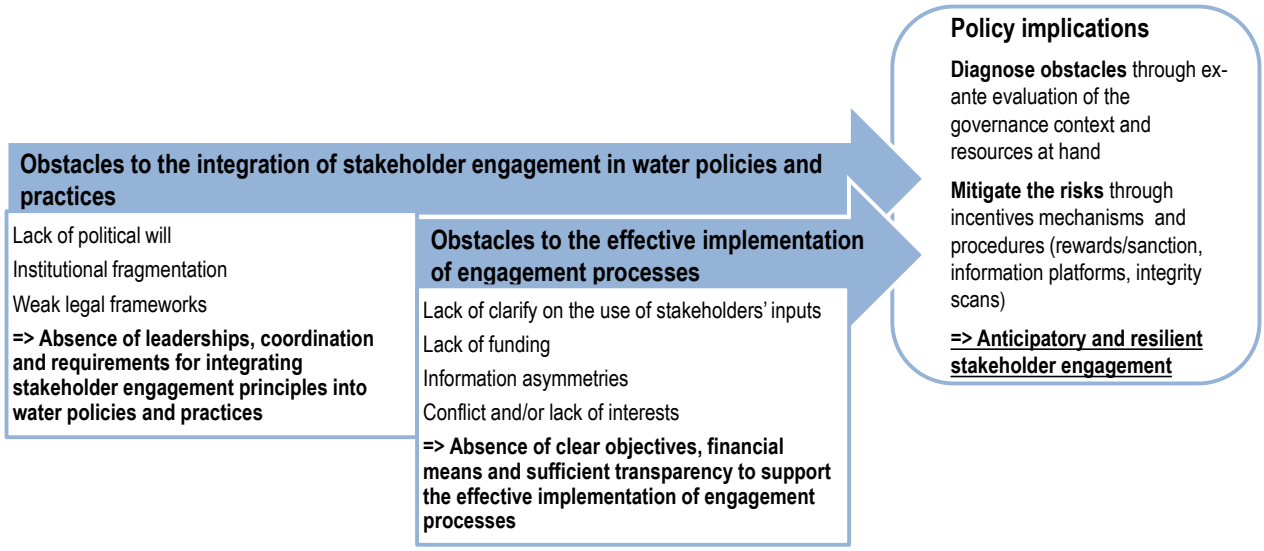
236. Measures can be taken to avoid and overcome stakeholders' lack of interest and fatigue. To ensure that engagement opportunities are seized, and that stakeholders take part in dialogues, even "excellence" debates, on water, decision-makers must take action. This places greater importance on good delivery of concise and accurate information regarding policies and projects and why they should be of interest to stakeholders. Being aware of the resource constraints of stakeholders and making sure flexibility (in time and approach) is built into the engagement strategy are ways to avoid engagement fatigue. Coordinating the timing of engagement initiatives with other institutions working on similar water issues can also avoid duplicating stakeholders' efforts to contribute. Therefore, it is essential to gauge the level of engagement needed, and to ensure that stakeholders are engaged on relevant issues to both the decision-maker and themselves. It is in the interest of the institution leading the engagement process to benefit from the involvement of stakeholder, i.e. the prevention of unexpected objections later in the planning process and to gain trust and support, and a lack of responses by stakeholders will reduce such benefits. There is a risk that a false sense of support and acceptance could result. Therefore, demonstrating that engagement was worthwhile is important in preventing fatigue and calls for careful evaluation of the process and its outcomes (see Chapter 6).

Conclusion

237. Decision-makers need to carefully anticipate bottlenecks to the integration of stakeholder engagement in water policy and project, and mitigate related risks. Different tools and procedures can help doing so. Translating existing standards for inclusive decision-making into legislative frameworks can contribute to developing legal requirements for stakeholder engagement in the water sector. In turn, it can provide some incentives for policy-makers and leaders to support the integration of stakeholder engagement into water policy and practices. Setting-up coordination mechanisms such as inter-ministerial bodies or contractual arrangements between authorities can help address institutional fragmentation. Regarding obstacles to the effective implementation of engagement processes, decision-makers should define upstream strategies that set out clear rationale of how to use the contribution of stakeholders for the final outcome. These strategies should be made available to all participants, along with all relevant information needed to effectively engage in discussions. Setting-up information water systems and platforms can be a useful option in that direction. Properly securing funds will also be critical to sustain engagement processes in the long run. Engagement efforts should be allocated the same staffing and budget as other components of a water policy and project development process. Integrity pacts and social witnesses can also help reduce the likelihood of conflict of interest and consultation capture, while ex-post surveys on motivations can investigate levels of interest on specific water issues to set-up the right incentives.

238. Understanding and overcoming obstacles to stakeholder engagement requires a holistic approach as challenges facing inclusive decision-making processes are often interrelated and can exacerbate each other. For instance, a context where roles and responsibilities are fragmented across multiple agencies and organisations at different levels of governments may also suffer from the unclear strategy of how to use the inputs from engagement processes between these multiple authorities. Because of unclear objectives, policy-makers may not support the engagement process. Therefore, there is a need to understand these interdependencies between obstacles and devise the appropriate solutions to overcome them to ensure that stakeholder engagement processes are anticipatory and resilient (Figure 28).

Figure 28. Towards anticipatory and resilient stakeholder engagement



CHAPTER 5. STAKEHOLDER ENGAGEMENT MECHANISMS

Introduction

239. There is a wide variety of mechanisms for engaging stakeholders, but they work differently according to places, time, and objectives. Dozens of different "techniques" have been inventoried in the literature, from structured procedures such as taskforces, workshops and citizens' referenda, to broader concepts such as public information programmes and mechanisms that may be uniquely applied by particular organisations. Navigating this diversity and selecting the right mechanism(s) for the engagement process can be a daunting task for decision-makers and a tentative taxonomy of such instruments can provide some guidance.

1. A tentative taxonomy

240. The OECD Survey has inventoried 24 mechanisms for stakeholder engagement in water governance. These mechanisms can be classified into two types. On the one hand, *formal* mechanisms refer to tools that have institutional or legal ground. They often stem from an official agreement or contract between parties, or charters with clear operating rules and priorities. On the other hand, *informal* mechanisms are not institutionalised but rather can be implemented for a large variety of issues and at the discretion of the convener of the engagement process (see table 1). Both formal and informal mechanisms have advantages and disadvantages that need to be carefully weighed prior to selection of the most relevant mechanism[7].

Table 1. Typology of mechanisms identified in the OECD Survey

Definition	Example
Formal mechanisms	
Citizen committee: group of representatives from a particular community or set of interests appointed to provide comments and advice on an issue	Tucson Citizens' Water Advisory advises the Mayor and Council regarding water system planning, water resource planning, water rates and fees
Consensus conference: public meeting, which allows ordinary citizens to be involved in assessing an issue or proposal. The conference is a dialogue between experts and citizens	In 2009, the City of Paris organised a consensus conference to decide upon the future of its non-potable water supply system
Decentralised assemblies: group of representatives from local authorities and civil society with discretionary powers in the management of affairs	In Ghana, district assemblies are by law, solely responsible for the delivery of water and sanitation services at the local level. Their functions include the promotion of development opportunities, facilitating public participation, information sharing and mobilising human and physical resources.
Stakeholder democracies: stakeholders are elected by their peers to represent their interest in boards of water institutions	In the Netherland, stakeholders (domestic users, farmers, companies and managers of nature reserves) are directly and indirectly elected every 4 years to compose the assembly of regional water authorities, with a fixed number of seats per stakeholder category.
Innovative contracts & partnerships: formal agreements between different parties to produce an agreed-upon outcomes	In 2011, the State of South Australia signed Suez Environnement an innovative Alliance contract, to supply water and waste water services to the city of Adelaide. The contract is a co-operative model characterised by risk-sharing with definition of target performance to drive pain-share / gain-share mechanism; no-blame / no dispute principle; and unanimous principle-based decision-making on all key project issues.

[7] *Involve 2005a and 2005b* provide further development on the costs of public participation, and how to put citizens at the centre of decision-making, as well as an assessment of selected engagement mechanisms

Table 1. Typology of mechanisms identified in the OECD Survey *(cont.)*

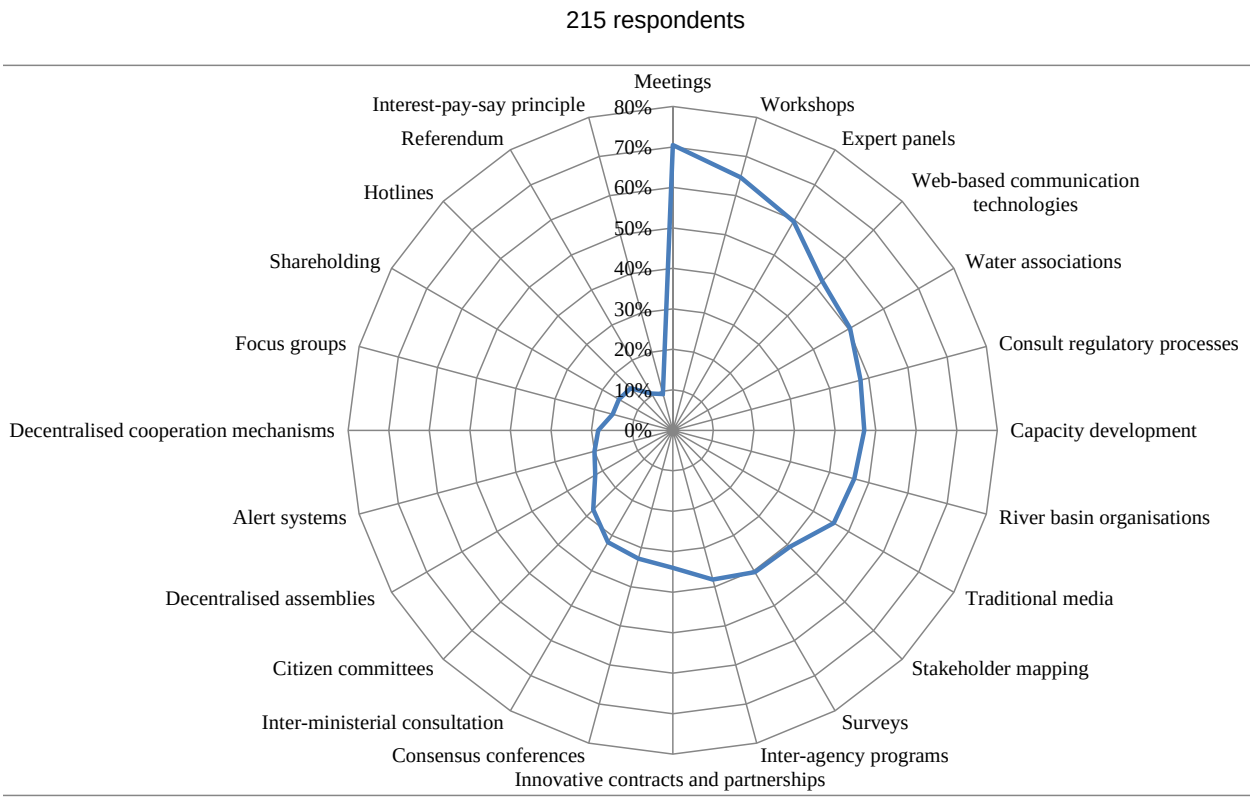
Interest-pay-say principle: principle according to which the beneficiaries pay for water management and have a say in the local water authority (e.g. Dutch water authorities' board assembly).	Local water management in the Netherlands has been organised on the basis of those who have interest (stakeholders) pay for water management and have a say in the local water authority (water authority assembly).
Polls / Survey: methods used to collect information from a specific population. Surveys and polls are used to gauge the level of public information about an issue and provide a 'snapshot' of attitudes and ideas at a particular time. They can be used to determine community attitudes or target a particular group	In California, a 2014 poll was conducted on the issue of water management and drought and revealed strong public support for the use of state water bonds.
Referendum: direct vote in which an entire electorate is asked to vote on a particular proposal.	In Italy, a national referendum was held on 12-13 June 2011 regarding the participation of the private sector in water management
River basin organisations/councils: specialised organisations set up by political authorities, or in response to stakeholder demands to deal with the water resource management issues in a river basin, a lake basin, or across an important aquifer.	The large number of OECD countries has set up a form of watershed institutions (river basin organisations, councils, agencies, etc.), in particular EU-member countries who are to comply with the requirements of the WFD.
Shareholding: shareholders or stockholders are individuals or institution that legally owns a share of stock in a public or private corporation.	An alliance contract exists between the State of Australia, Suez Environment subsidiary Degrémont in partnership with Transfield services in order to manage the water network. Both parties share the benefits and risks, joint decision making and all members are integrated in the decision making process.
Water associations: member-based groups of stakeholders invested in similar activities (e.g. association of water utilities, network of water researchers, association of water regulators)	In the water sector, associations can concern utilities (e.g. Aqua Publica Europea, EUREAU, AquaFed), irrigators (European Irrigation Association) as well as watershed institutions (INBO, NARBO, Association of Dutch water authorities, etc.).
Informal mechanisms	
Meetings / workshops / fora: coming together of people for a specific purpose / structured forum where people are invited to work together in a group (or groups) on a common problem or task.	Examples of large fora are the World Water Forum, the Stockholm World Water Week or the IWA World Water Congress. Examples of smaller meetings and workshops are regional and national meetings on issues such as water security, water-energy-food nexus, etc.
Web-based technologies: internet tools and platforms can contain project/policy information, announcements and documents. The array of web-based technologies can be used as an information source, forum for public input or electronic democracy	Water information systems such as WISE [Water Information System for Europe]
Traditional media (press release, newspaper inserts): media releases circulate project or policy information to various media outlets.	National and local newspapers, TV and radio programmes, etc.
Focus group: used for exploratory studies. The issues that emerge from the focus group may be developed into a questionnaire or other form of survey to verify the findings.	In June 2013, UN International Telecommunication Union organised a Focus Group on Smart Water Management.
Expert panel: engaged when highly specialised input and opinion is required for a project. Generally, a variety of experts are engaged based on various fields of expertise to debate and discuss various courses of action and make recommendations.	In the UK, the Institution of Civil Engineers has set-up on expert panel on water that provides the technical expertise and knowledge which underpins the Institution's activity in the water sector.
Stakeholder mapping: exercise that helps to identify stakeholders depending on their degree of influence, power, legitimacy and collaboration	The OECD conducts stakeholder mappings as part of national policy dialogues on water (e.g. Mexico, Netherlands, Brazil)
Information hotlines: offer information on a project via the telephone and/or access to project team staff members who can answer questions or provide additional information and assistance	The US EPA has set up a the Safe Drinking Water Hotline which provides the general public, regulators, medical and water professionals, academia, and media, with information about drinking water and ground water programs authorised under the Safe Drinking Water Act

241. Stakeholders use some mechanisms more often than others. Meetings, workshop and expert panels were identified as the 3 most often used mechanisms by respectively 71%, 65% and 60% of respondents surveyed (figure 29). Innovative web-based instruments, such as ICT tools, are becoming a regular option and are the preferred choice for 52% of respondents along with water associations and networks (51%). Stakeholder consultation as part of regulatory processes is used by 48% of respondents as

a means to contribute to improve the design of regulation. River basin organisations are also a considerable platform for engaging stakeholders through their consultative or deliberative bodies for 46% of respondents.

242. Engagement processes can rely on a single mechanism or a combination of instruments depending on the intended objective (e.g. information sharing, consultation, deliberation) and the stage of the policy/project cycle (e.g. design, implementation, evaluation). For instance, a web-site may be set up at the early stage of the process to raise awareness and share information on a water project in development, and be followed by the creation of a multi-stakeholder committee in charge of supervising the development and implementation.

Figure 29. Use of stakeholder engagement mechanisms



Note: the graph considers the average of "yes" responses provided from the perspective of both targets and promoters to the question "which stakeholder engagement mechanisms does your organisation use or take part in?"

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance, 2014

1.1. Formal engagement mechanisms

243. Formal mechanisms of engagement bring about some advantages. In the case of water associations and river basin organisations, they generally benefit from a strong sense of legitimacy as they are often based on the principle of representative democracy which makes them crucial partners to engage with other stakeholders, such as government authorities, at different levels, and convey the interests of many actors. In addition, water associations encompass stakeholders invested in similar activities (e.g. association of water utilities, network of water researchers etc.) to exchange good practices and develop solutions and innovations to overcome common problems (e.g. improving water quality). In regulatory processes, it has become common good practice to develop and release consultation policy in order for key stakeholders to be aware of regulators' activities and expectations that may be placed on stakeholders

(OECD, 2012b). Structured consultation mechanisms in regulatory processes are more likely to be better informed and build confidence that regulatory decisions are cognisant of the impacts of all affected parties (OECD, 2014d). Institutionalised mechanisms also tend to be set-up and run by dedicated and qualified staff. The example of Brazil illustrates multi-level contracts that formalised stakeholder engagement in water governance (box 37)

Box 37. The National Water Pact: a contract to engage with state authorities in Brazil

In Brazil, the growing territorial diversity in terms of water availability, economic, social and environmental aspects have been a challenge to create and to keep stable institutional models adapted to the regional reality. Water-rich regions adjacent to the Amazon basin are neighbours to regions chronically affected by water shortage.

To foster an integrating vision between the federal and state water resources management, a **National Water Management Pact** was recently launched by the National Water Agency, in cooperation with water managers at state level and proposes a cooperation strategy across government levels.

The National Water Agency organises multi-stakeholder workshops to support each state in identifying future challenges and defining a management typology to address them. Following this prospective phase, stakeholders at state level (i.e. state and council authorities, representatives from civil society, water user sectors, river basin committees, etc.) are expected to develop management targets, coherently with state water resource policy in place. Upon signature of a bilateral contract with ANA, states then receive dedicated fund to reach these targets aiming to better water governance.

The process has greatly contributed to capacity development among participants involved in developing the targets. States have also requested ANA to train teachers to help formulate their own capacity building programmes. The Pact has also contributed to closer co-operation between stakeholders at state-level and within ANA across the various technical areas responsible for monitoring states' compliance with the Pact's goals.

To date, 24 of the 27 Brazilian states have signed the Pact while the remaining ones have declared, formal or informally, interest in signing it.

Source: Case study submitted by Brazil national water agency

244. Nevertheless, institutionalised mechanisms also face challenges. Instruments such as water associations can be perceived as single-minded when they solely focus on pushing forward the agenda of a singular group of stakeholders (e.g. association of irrigators) and do not encompass a wider membership that includes other players likely to be impacted by their activities (table 2). River basin organisations can raise challenges in terms of lobbying and consultation capture when discussions and decisions are "high-jacked" or monopolised by the interests of certain groups. It can generate principle-agent tensions by which the person sitting at the table voices his/her own concern rather than representing his or her broader constituency. This should be a key concern when selecting stakeholders that should take part in advisory boards, working groups or assemblies.

Table 2. Assessment of formal mechanisms

Mechanisms	Strengths	Weaknesses
Citizen committee	Allow the involvement and input of a range of stakeholders Allow development of consensus (where achievable) or directions for action on complex issues Provide opportunities for exploring alternative strategies. Stakeholders gain an understanding of other perspectives leading toward an agreed, integrated outcome.	Participant selection is a major consideration: the range of interests must be broad enough to represent all those affected, and those with relevant interests and skills. Organisers must be aware of potential conflicts. The general public may not embrace committee recommendations. Members may not achieve consensus (although consensus may not be the goal). Can be time and labour intensive if the issue is significant.
Consensus conference	Empower stakeholders to develop an informed understanding and make some contribution to the development of policy and projects Demonstrate a plurality of views on issues. Bridge the gap between experts and less knowledgeable stakeholders. Can develop new knowledge.	High costs for set up and recruitment of participants The selection process can be difficult. Mapping stakeholders is critical to predetermine who are the relevant groups.
Innovative contracts & partnerships	Foster coordination and cooperation across stakeholders and potentially levels of governments Help manage interdependencies Can solve institutional weaknesses	Unclear objectives and allocation of tasks among partners or signatories may lead to inefficiency Can be time and labour intensive
Interest-pay-say principle	Stakeholders engaged are often highly motivated to contribute in return for their financial contribution/investment	Appointing (minority) representatives is sometimes perceived as "less democratic".
Polls / Survey	Provide traceable data. Can serve an educational purpose. When properly constructed using good sampling techniques can reach a broad, representative public or targeted group.	Poorly constructed surveys produce poor results Careful sampling is needed to make sure representative samples are taken
Referendum	Provide a representative view of a population's opinion on a specific issue In context of voter apathy and disenchantment with traditional forms of democracy, direct democracy can help to re-engage voters with policy matters	Voters do not always have the capacity or information to make informed decisions about the issue at stake, and instead may make ill-informed decisions based on partial knowledge or on the basis of unrelated factors
River basin organisations /councils	Wide public and stakeholder participation in decision-making Local empowerment	Deliberative decision-making may be dominated by a small group of stakeholders (farmers, industries, etc.) Legal frameworks for setting-up RBOs do not always provides for the engagement of stakeholders in the decision-making Need for substantial financial and human resources to be sustainable
Stakeholder democracies	Stakeholder groups have a direct say in all decisions taken by the assembly, including financing issues	Risk of low participation rates in elections in context of awareness gap regarding water-related issues Stakeholder groups represented in the assembly have to be well organised
Water associations	Common understanding across members of issues at stakes Often, high-level of expertise from experienced practitioners Legitimacy of the association to represent the views of their members when engaging with public authorities and other stakeholders	Can be perceived as single-minded when they solely focus on pushing forward the agenda of a singular group of stakeholders (e.g. association of irrigators) May not encompass a wider membership that includes other players likely to be impacted by their activities

1.2. Informal engagement mechanisms

245. Informal mechanisms for stakeholder engagement present some advantages. The relatively informal nature of meetings and workshops can foster both deliberation and build a sense of community. They provide an open atmosphere which makes participants generally more willing to discuss issues and maximises dialogues on issues that may not have come to light through more structured mechanisms. For instance, *meetings* and *workshops* are flexible in terms of time frame and scale (from community meetings to international conferences) and can apply to a wide range of issues (e.g. from discussing a municipal sewer project to debating on transboundary basin management agreements). They offer an opportunity for anyone to express concerns, access and share information, and gain better understanding (see box 38).

Box 38. A 3-dimentional tool to engage stakeholders in flood defence

In 2008, the Dutch water authority of Rijnland in the Netherlands launched a project on integrated coastal works project with the objective to strengthen primary water fences near the municipalities of Noordwijk and Katwijk.

The project included the development of an innovative 3-dimensional vision game. Game sessions were organised by the regional water authority to invite small groups of stakeholders to participate. Overall, 75 people attended them including local officials, restaurant and hotel owners, inhabitants, NGOs and local business. Participants were given certain budgets and were tasked to develop innovative water fencing solutions. These exercises contributed to raise awareness among stakeholders involved regarding their respective interests. It also led the regional water authority to move from sharing messages to facilitating communication process with the objective to create ownership of the outcomes among stakeholders. Outcomes of these playing sessions showed that creative solutions had emerged which were later on considered by the regional water authority in the project. As an example, stakeholders involved in the game suggested to find additional space for an underground parking garage which was later one built to welcome 650 cars in the inner zone of the dune. The simulation game also helped regional water authorities build lasting relationship with stakeholders and foster better communication between actors working and living in the coastal area.

Source: Case study submitted by the Dutch water authority of Rijnland

246. However, informal mechanisms of engagement also have some limits (table 3). If the tools used to involve stakeholders does not have a minimal level of structure and mediation, outcomes may be difficult to incorporate into the final decisions. They also sometimes fail to include follow-up actions such as turning views and concerns voiced into actual contributions to decision-making and implementation, and are often limited to consultative purposes or information-sharing. In addition, to be effective, informal tools such as meetings and workshops require to be facilitated by skills and time that can moderate diverging opinion in an impartial way. If the relevant enablers are not in place, the representativeness of the overall engagement process may be questioned. In turn, it can raise concerns regarding the legitimacy of the engagement process and the accountability of those who set it up.

Table 3. Assessment of informal mechanisms

Mechanisms	Strengths	Weaknesses
Expert panel	Useful when an issue is complex and contentious. Useful where conflict exists to provide opinions which may have more credibility, and hence may assist in resolving the conflict.	Expertise in relevant and complementary areas may be needed to produce a credible expert opinion Skilled moderator is often required.
Focus group	Produce ideas that would not emerge from surveys/questionnaires, because the focus group allows opportunity for a wider range of comments.	Such small groups may not be representative of the community response to an issue Require careful selection to be a representative sample
Information hotlines	Offer an inexpensive and simple device for publicity, information and public input. Can serve as a link between the citizens and the municipality's government.	Must be adequately advertised to be successful. Can be time consuming to manage and update on a regular basis
Meetings / workshops / fora	Allow the involvement and input of a wide range of stakeholders. Disseminate detailed information and decisions throughout stakeholders. Can build ownership and credibility for the outcomes. Contribute to better communication among stakeholders involved.	Can be time and labour intensive
Stakeholder mapping	Provide detailed stakeholder analysis (motivations and interests, interactions, scale of intervention)	Can be time consuming Can be based on subjective data and may vary according to the person / place.
Traditional media	Can disseminate information quickly to a large number of people.	Difficult to retract, should any changes occur The size of media releases limit the amount of real content that can be incorporated.
Web-based technologies	Capable of reaching very large numbers of stakeholders with very large amounts of information. Allow participants to discuss an issue at their convenience (regardless of location or time) Anonymity of online processes can encourage open discussion	Many people still cannot access the internet Information overload and poor design can prevent people from finding what they need.

2. A zoom on the increasing importance of ICT tools

247. Innovative mechanisms and decision tools are gaining traction because of technological advances as well as greater skill and openness in the actual use of such tools for participation purposes. The practical deployment of new information and communication technologies has become a driving force of customised internet platforms and applications (Pereira et al., 2003). The function of ICT platforms has taken new and varied dimensions as virtual meetings, internet-based platforms (social media, chat rooms, online fora), and eVoting are more and more used. Their role is not only to provide the available knowledge to inform stakeholders and debates but also to constitute the common-ground through which these debates are organised, and to integrate other sources of knowledge (e.g. crowdsourcing and knowledge-sharing from community collected through apps and social media). In its various multi-lateral forms, ICT-enabled engagement can improve inclusiveness by providing a shared ground where exchange of knowledge and opinions is possible (box 39).

Box 39. Web-based information systems: The case of Italy and Portugal

In **Italy**, in the framework of the EU Water Framework Directive, the Arno River Basin Authority developed an Executive Information System called "Control Dashboard" to gather all relevant data regarding river basin management planning in a single depository and bridge an information gap hindering effective management decisions. The objectives of the information system are to:

- gather and homogenize scattered data provided by different public bodies and private parties;
- overcome planning and implementation challenges with the involvement of different public bodies across administrative levels;
- foster stakeholder engagement at different levels and planning stages;
- present the data in standard reporting formats;
- identify and present cause-effect mechanisms between drivers, pressures and water bodies' environmental status in a clear and transparent way to stakeholders to support active and inclusive decision-making;
- take account of water balances and quantitative aspects in water bodies' management decisions in accordance with the "Blueprint to safeguard Europe's Waters" policy options;
- evaluate the efficiency and effectiveness of planned measures to involve stakeholders in the measures' priorisation process;
- include in the decision making process the outputs of innovative pilot experiences. In this regard the "Pawa" project developed water accounts through recognised standards and activated an inclusive decision making process as regards to the selection of the most appropriate measures to face water scarcity and drought conditions;
- present the mechanisms that allow to set alternatives objectives and apply exemptions in a transparent way; and develop a strategic vision with links between the river basin management plan and others (e.g. flood risk management plans)

The "Control Dashboard" is a web-based, open, user-fed and exportable information system that aims at answering to public participation requirements under the WFD, not only regarding the general public but also interested institutional parties. The information system not only contributes to information exchange among different stakeholders and public authorities responsible for the Directive's implementation (i.e. regions, water utilities, etc.), but is also improves coordination among the competent authorities responsible for complying with the WFD in the Apennines River Basin District. Regular meetings take place to discuss the status of the information system and needed actions. The implementation of the "Control Dashboard" has contributed to saving costs (i.e. by shortening administrative procedures); and improving acceptability and ownership whereby a large number of stakeholders are involved and provide quality data to the system.

In **Portugal**, the Water and Waste Services Regulation Authority (ERSAR) has recently developed a mobile app aimed at providing relevant information to the water and waste services users in Portugal. This mobile app contains thorough information about the quality of service provided by each provider, so that any user living in that area has all the information to compare his service to the service provided in other geographical areas. The information is displayed for the 278 municipalities in mainland Portugal and includes data and indicators for the quality of service, drinking water quality, tariffs, as well as some practical information about water and waste services, such as news of

the sector, tips and advices on how to reduce water consumption or waste production, among other information.

ERSAR collects information from every operator, in different regulation cycles and analyses it, performs onsite audits and finally issues an annual report which is the basis for all the information published in the mobile app. This mobile app was one of the communication channels chosen by ERSAR to disseminate the 700 000 data collected annually, because of the easy to use interface and the possibility to reach the citizens anywhere and at any time.

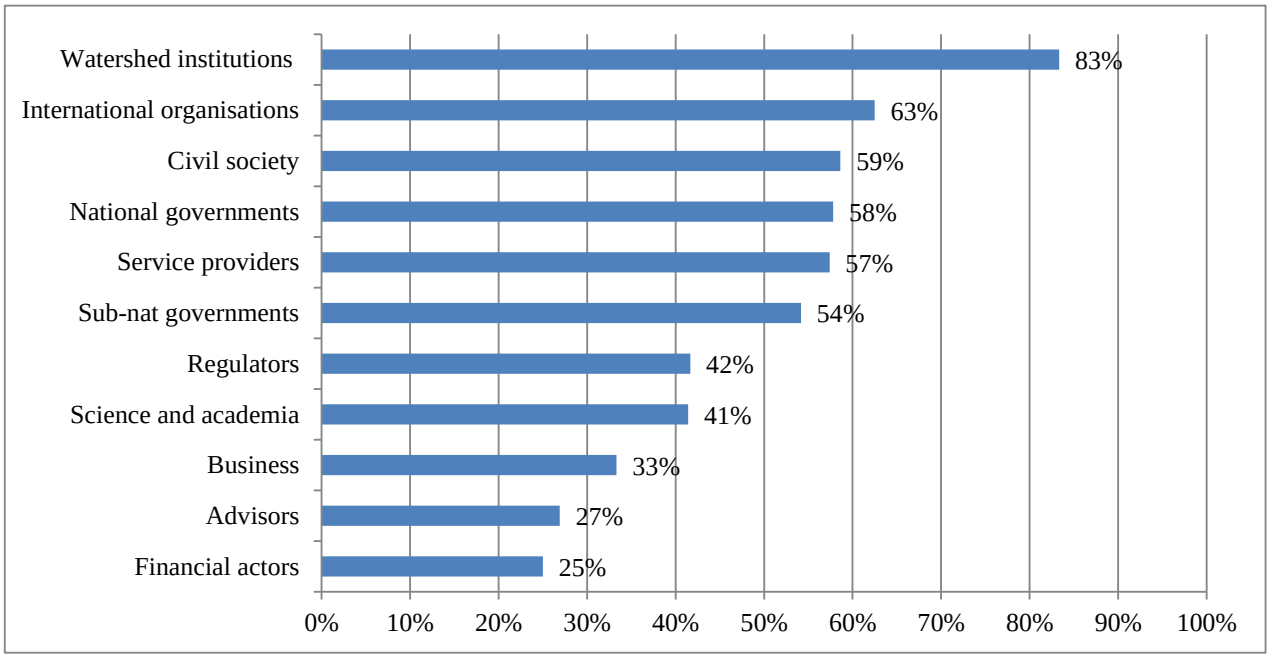
ERSAR's intention is to perform a satisfaction survey on the mobile app, integrated with the satisfaction survey of other tools used to communicate with stakeholders.

Sources: Case study provided by the Arno River Basin Authority and ERSAR

248. The concept of *electronic participation* (or e-participation) can contribute to more responsive, cost-effective and inclusive governance. Though it has been largely discussed in the literature on public sector innovation and e-governments (OECD2003), in the water sector however, e-participation remains a rather new concept. It has been used for instance to set-up citizens observatories for flood risk management in the Netherlands and the United Kingdom where it consisted in a variety of citizen groups (volunteers, elected citizens, citizen scientists and communities) and rested on a range of communication modes from listening as a spectator to expressing and developing preferences on specific issues (Wehn, U. and Evers, J., 2014).

Figure 30. Use of web-based technology tools for stakeholder engagement

210 respondents considered



Note: The graph considers the share of responses provided from the perspective of targets and promoters to the question "Which stakeholder engagement mechanisms does your organisation use or take part in?"

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance, 2014

249. ICT tools are used to various degrees by categories of stakeholders in decision-making processes. In the survey, 83% watershed institutions surveyed indicated using them to both engage stakeholders in decision-making related to river basin management and take part in decisions likely to have an impact on their activities (figure 30).[8] Inversely, ICT as a stakeholder engagement mechanism seems to be less

[8] Among watershed institutions surveyed, 89% pointed out the web-based technologies from a promoter perspective and 79% from a target perspective

critical in the day-to-day core activities of consulting and engineering firms (27%) and financial actors (25%) as stakeholder engagement targets or promoters. Efforts are still needed to generalise the use of digital tools in water decision-making. While careful consideration should be given to their appropriateness depending on the intended purpose, context and participants, as well as how they fit with institutions process and capacity, they can contribute to better connect decision-makers with other stakeholders. In spaces where these actors already exist, they can provide devices for policy-makers to be part of conversations and dialogues happening on social media and to create online communities. It can in turn increase the impact of decision-makers communications, through the multiplier effect that online technologies can have.

2.1. Open government data

250. ICTs are increasingly being used by governments to help stakeholders better understand what they do, including in the water sector. More and more, governments produce and collect a broad range of different types of data in order to perform their tasks (Ubaldi, B., 2013). The extraordinary quantity and centrality of data collected bring increased transparency. This is particularly true as a considerable amount of these government data are progressively becoming more easily accessible and can be used in conjunction with information from other sources and stakeholders.

251. A sign of the increasing efforts of government to "open their books" is the launch, in 2011, of the *Open Government Partnership* (OGP). This partnership currently counts 65 member countries and provides an international platform for domestic reformers committed to making their governments more open, accountable, and responsive to citizens. To join, each country must develop an OGP action plan through a multi-stakeholder, open, and participatory process. The action plan contains concrete and measurable commitments undertaken by the participating government to drive innovative reforms in the areas of transparency, accountability, and citizen engagement. In all countries of the partnership, government and civil society are working together to develop and implement ambitious open government reforms.

252. In addition to increasing government transparency and stakeholder awareness about government policies and activities, opening up data can also help generate insights into how to improve government performance in the water sector. Increased data transparency provides the basis for stakeholder engagement and collaboration in the creation of innovative projects and policies. Data openness is eventually expected to improve the decision-making of all stakeholders. For instance, citizens can use government data (e.g. water databases easily accessible, such as through mobile apps) to make more informed decision and improve the quality of their lives, while governments are expected to be able to more easily access a wider range of datasets to foster evidence-based decision-making and policy/project implementation on water. Open government data can also contribute to new forms of entrepreneurships and social innovation in the water sector.

2.2. The digital divide and risk of exclusion

253. Web-based tools for stakeholder engagement can raise some challenge regarding the digital divide. Stakeholders in the water sector do not have the same quality, costs and level of access to ICT and media platforms. Certain countries are far more equipped in communication infrastructures than other countries, often developing. This gap can also be observed between rural and urban areas.

254. However, scientific research suggests that tools and instruments are not the main reasons for exclusion in decision-making processes. Although some tools can be exclusionary (e.g. ITCs that restrict their use to those that can access a computer), research suggests that the risk of exclusion is due to contexts or inadequate problem framing rather than to tools and techniques designed to support a dialogue (Pereira et al., 2003).

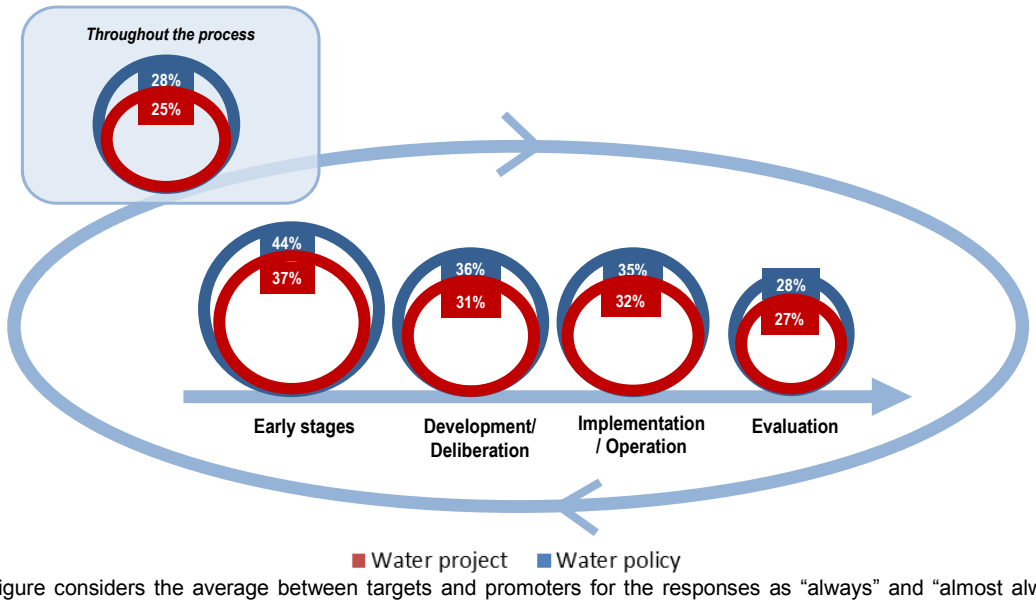
3. Tailoring stakeholder engagement mechanisms

255. Stakeholders engage at different stages of the policy/project cycle. The nature of engagement varies at each stage of a given water policy or project, and so does the likelihood of impact on the decision-making process. Similarly, selecting engagement mechanisms should take into account the categories of stakeholders targeted and the context in which they are implemented.

3.1. Matching mechanisms to the development stage of water policy and projects

256. The timeliness of stakeholder interactions (and related tools) across the policy and project cycle deserves careful attention. The early stages of conception, planning, design, feasibility studies is when most of respondents surveyed intervene, followed by the development and the implementation, for water policy and water projects alike. For 44% of respondents surveyed, stakeholder engagement in water *projects* takes place during the early stages of conception, and 37% of stakeholders surveyed considered so in the case of water *policy* and *reform*. However, only 27% of respondents surveyed take part in the evaluation and monitoring, and even less throughout the project or policy cycle (figure 31). Consequently, different mechanisms best apply to different steps of the cycle and process. The selection of stakeholder engagement mechanisms should be tailored to each context, stakeholders concerned, policy goals targeted, and local needs. Needed capacities and resources should also be put in place to implement the mechanisms effectively among all stakeholders concerned. At the design stage, initiatives such as consultations and fora are often used to identify expectations or needs. At the implementation stage, partnerships in the form of water stewardships for example can bring together the private sector and governments to work jointly on water resources conservation. At the evaluation level, surveys are common practice to assess outcomes and levels of satisfaction.

Figure 31. Involvement of stakeholders across stages of the policy/project cycle



Note: The figure considers the average between targets and promoters for the responses as "always" and "almost always" to the question "At which stage of a water-related project and/or reform does your organisation usually get involved?"

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance, 2014

257. There is still a lack of consideration for the value added that stakeholders' inputs can bring throughout decision-making and implementation processes. Indeed, their contribution remains often restricted to information-sharing and consultation up-stream in the process with the objective for conveners to present the issue at hand to stakeholders interested or likely to be impacted, gather their views and secure their support and buy-in. However, confining their involvement to the early stages underestimates their potential to positively influence the following phases. Gathering stakeholders' views during the

implementation stage could provide for a reality-check often necessary to test the assumption and hypothesis made during the design phase (see example in box 40). For monitoring and evaluation, they can also provide valuable insights on operational results and impacts on the ground and shed light on necessary adjustments and areas of improvements. The stage of progress of a water project or policy is crucial for stakeholder engagement. Efforts are still needed for stakeholder engagement to be considered as an impactful mechanism to be initiated as early as possible and sustained throughout water policy and project cycles.

Box 40. Building the evidence in support of decision-making

Water management in **Australia** is made up of complex governance arrangements with over 14 different types of legal forms of water supply businesses. To support the water allocation reform, as set out by the 1994 Council of Australian Governments reforms and the 2004 National Water Initiative, a country-wide online survey was carried out by the University of South Australia across 23 water planners selected as professional experts from various water management authorities throughout the country. Participants have years of experience in dealing with water issues and held senior positions in their respective organisations. They had been tasked with drafting the water allocation water plans and were surveyed to share views on what they considered as the best structures for water governance, management and planning, in particular between federal and state system approaches.

Survey results showed that planners overall favoured a federal system of water governance, but preferred states to manage issues of water allocation and planning. They were supportive of statutory water plans as the right way to achieving environmental sustainability development. The results of the study led to the publication of a book chapter and journal article which conclusions and recommendations could support state authorities in achieving ecologically sustainable development.

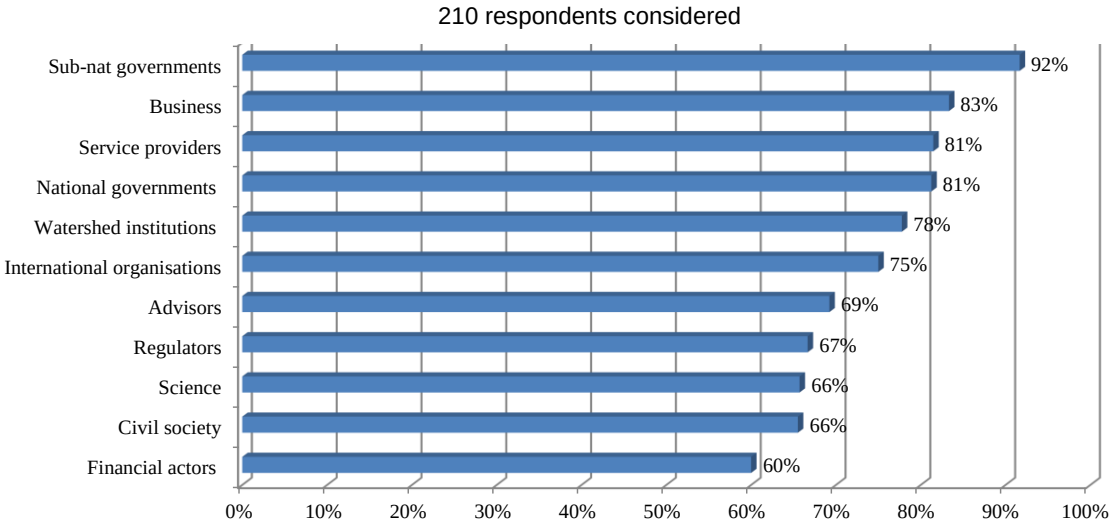
Source: Case study submitted by the Centre for comparative water policies and laws of the University of South Australia.

3.2. Aligning mechanisms with intended objectives

258. Stakeholder engagement has to be designed and managed in line with intended objectives. The different rationales that underlie inclusive approaches imply that stakeholder engagement can be a *goal* in itself (normative-democratic approach), a *means* to more efficient and legitimate water-related decision-making; and an *instrument* to fulfil objectives that go beyond the water sector (e.g. empowerment of marginalised groups). These objectives rely on different types of mechanisms and players. For instance, to harness water-related knowledge, policy-makers can set-up water information systems whereas solving conflicts over water resources allocation requires the active involvement of those affected to identify the appropriate trade-offs and build consensus.

259. Mechanisms in place in the water sector to engage stakeholder have proven useful but their implementation and their systematic use have proven challenging. Indeed, 73% of participants surveyed concurred that existing mechanisms for stakeholder engagement are sufficient (figure 32). Opinions converged that these tools have been successful to foster inclusive decision-making, both formally by making stakeholder engagement more systematic, and informally by providing channels for stakeholders to contribute freely. This result shows that all tools are in place or at hand. It is then more a question of making them effective and outcome-oriented in practice than developing new instruments.

Figure 32. Are there sufficient stakeholder engagement mechanisms? Share of "Yes".



Note: The graph considers the respective share of "yes" responses provided by categories of stakeholders to the question asking whether there all needed mechanisms already exist to support stakeholder engagement.

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance, 2014

3.3. Fitting mechanisms to stakeholders and places

260. Decision-makers should tailor existing mechanisms to specific categories of stakeholders. Indeed, young people, for instance, might be more receptive to internet-based mechanisms such as social media and online discussion platform to share their ideas, than to conferences that might require travel expenses they cannot always afford. Careful attention to cultural habits, levels of education and material means is also needed to select the appropriate tool (see box 41).

Box 41. Fitting engagement mechanisms to stakeholders: Water schools for mayors in Spain

The River basin authority of the Duero in Spain launched a project aiming to develop "schools' for mayors in order to provide local elected officials training and information-sharing activities in various aspects of water management. In particular, the schools focus on the topics of i) existing legal frameworks for managing water; ii) low-cost purification systems for small towns (e.g. constructed wetlands, peat filters, lagoon, biological filters, etc.); iii) sustainable spatial planning solutions to reduce the risk of flood damage; and iv) land management instruments for environmental protection and conservation in rural areas (e.g. land stewardship, environmental volunteering, etc.).

In early 2012, two pilot projects of schools for mayors were developed by the river basin organisation of the Duero and funded by the Ministry of Agriculture, Food and the Environment. The experiments were very well-received and the schools for mayors were supported by the Provincial Councils and the Professional Association of Secretaries of City Halls. Eleven schools for mayors were developed between 2012 and 2014, with an average attendance of 25 people per school meetings. As a consequence, 8 municipalities have shown interest in purification projects.

The schools provide local officials with information on regulatory frameworks and technologies, as well as training by experts to develop their skills in water management. NGOs also use the schools to disseminate their work and share specific examples to develop collaboration with local government towards the protection and sustainable development of ecosystems in their municipalities. At times, Schools for Mayors invite a wider range of stakeholders to participate in activities such as irrigators, fishermen associations, nature conservation association, hydroelectric providers, in an effort to create a forum for discussion and reconcile diverse and sometime conflicting interests.

Assessment surveys are conducted for each school and have revealed that attendance has remained usually low, never exceeding 50% of invited participants, but those attending have proven very active. These evaluations have also shown that the schools have been useful platform to trigger of concrete actions, such a municipality taking the decision to allocate funds for the construction of a sewage treatment plant instead of a sport facility. Finally, schools' assessment has highlighted increased consultation and dialogue among technical experts of local government, resulting in better permit applications, fewer infringements, etc.

Source: Case study submitted by the river basin organisation of the Duero

261. Some preferences in using certain engagement mechanisms can be identified across categories of stakeholders. Results from the survey (see annex A) reveal that, apart from meetings and workshops which are used by a large majority of respondents, some actors resort to certain tools more often than others. Capacity development is often used by international organisations (87.5% of responses), financial actors and donors (80%) and civil society (72%) when they are promoters of engagement. Indeed, international organisation and donor agencies focus a large part of their activities on training as well as education and empowerment efforts to strengthen capacities and skills, such as USAID's toolkit on water and conflict and training manual of hygiene and sanitation. Consultation as part of regulatory process is a tool favoured not only by regulators (83%) but also by national governments (69%) when looking to engage with stakeholders. Interestingly, sub-national governments and service providers also use consultation in regulatory processes, but from the perspective of a target of the engagement process. Finally, water associations are largely used by national (78%) and sub-national governments (75%) when they initiate engagement efforts. Indeed, these associations alone represent the interests of numerous stakeholders, be they service providers, watershed institutions or farmers, making them a preferred interlocutor for government authorities.

262. Some tools are easier to use in urban than rural areas. Stakeholders living in urban areas tend to have more access to media and ITC-based tools like websites and social platforms for instance. Urban settings can offer more opportunities to bring together groups and people from different background and more opportunities for stakeholders to have a voice. Tools such as town hall meetings, citizens juries and public hearing concerning a specific water issues are particularly appropriate for urban areas, although they have been used effectively in rural settings as well. Rural stakeholders are often disadvantaged due to the lack of communications infrastructure and the general tendency to focus more on the interests and concerns of urban actors. Tools that can be particularly useful in bringing the voice of rural citizens to the table include traditional media (e.g. radio channels) and community meetings. Box 42 provides experiences in Belgium, the Netherlands and Australia to fit engagement processes to local needs.

Box 42. Tailoring stakeholder engagement to specific local needs

Since 2013, the Belgian drinking water and sanitation service provider **VIVAQUA** has partnered with municipalities and citizens to develop a flood monitoring programme. It consists in carrying out « audits » of building conditions as regards flood risks and identifying the practical measures to be taken to reduce the magnitude and frequency of floods. The project started with large initiatives to share information and raise awareness among citizens'. Each building audit results in an assessment report that was sent to inhabitants to present possible solutions to improve flood protection. The last phase of the programme, which is optional and decided case by case, aims to supervise works that need to be carried out in buildings to be conformed to existing standards. The programme is closely monitored in terms of the number of citizens that have required an audit, the number of visits carried out, the number of audit reports produced, etc. To date, a number of visits have been realized and successfully provided inhabitants with the information they requested to take the necessary measures for protecting their business against flood risks.

Another example of operational stakeholder engagement takes place in the Netherlands. Since 2003, a « **flood brigade** » was established by volunteers, along with the regional water authority, to contribute to flood protection in Kampen. Citizens willing to contribute follow a specific training and must be in good physical condition to help maintain removable structures such as stop logs and valves. The regional water authority organises two annual gatherings for the flood brigade members: one aims to train new volunteers and encourage social cohesion among people involved; and the second aims to share information about broader flood protection issues, safety, and urban heritage. The brigade is organised in teams with clear tasks established in a manual. Team leaders' performance is evaluated every year by their colleagues. The initiative has spread throughout the country and regional water authorities provide training for volunteers to act as "dike guards" and monitor the condition of the flood protection infrastructure on a regular basis.

In Tasmania, Australia, a **participatory R&D planning** project was initiated in 2014 to identify industry and community water needs and develop a strategy that would support the expansion of irrigation while improving economic and social benefits from water resource utilisation and supporting a wider socio-economic policy agenda. Under the leadership of the Tasmanian government and the Tasmanian Institute of Agriculture, stakeholder consultations took place across a broad range of local actors (business, service providers, farmers, civil society, etc.) to discuss forsighting methods. This resulted in the establishment of a R&D coalition to deliver the knowledge infrastructure needed to compliment

Box 42. Tailoring stakeholder engagement to specific local needs *(cont.)*

hard investments in water resource infrastructure. Three divergent scenarios for future Tasmanian agriculture were presented based on climate projections to stimulate discussion and generate debate around the dynamic relationship between R&D, public policy and economic development. In response, participants supported an R&D initiative focused on achieving broad goals related to sustainability, productivity and regional development, as well as the establishment of cooperative innovation networks to implement it. In its initiative phase, the engagement process was managed by external consultants. It is now the full responsibility of the Tasmanian government which will be responsible for implementing the initiative drawn from the engagement process. A formal stakeholder advisory group was also created to steer the work in the future.

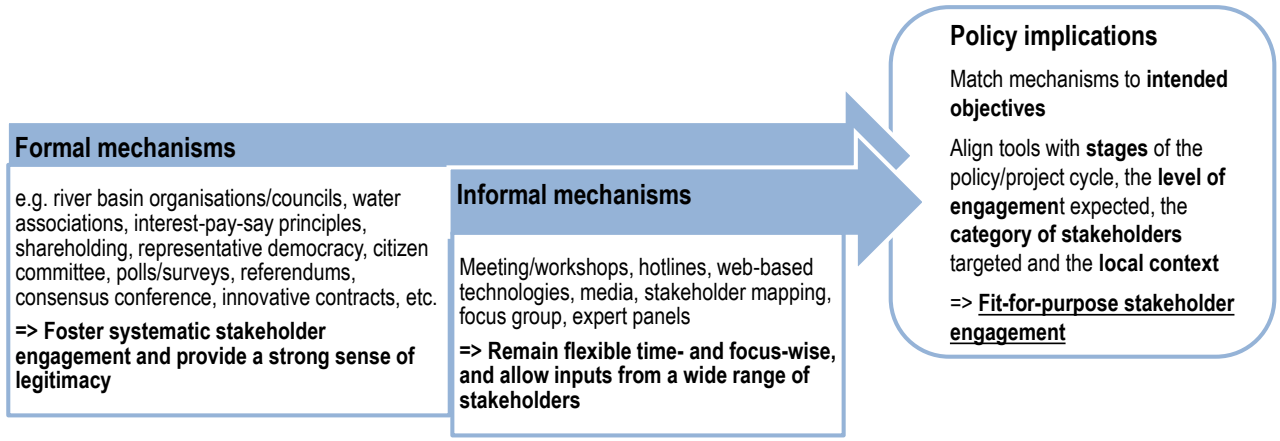
Source: Case studies submitted by VIVAQUA; Dutch water authority of Groot Salland and the Tasmanian Institute for Agriculture and Alexandra&Associates.

Conclusion

263. As water projects or policy processes are never identical, one cannot expect to replicate engagement process of one project or policy (no matter how successful) to produce the same results in another. Rather, it is necessary to consider each process separately, learning from the lessons of similar projects but recognising where there is room for improvement. The key to selecting the appropriate mechanisms is to understand the broad range of options at hand, what they can achieved, and why one might be more suitable than another in a particular context and for a particular purpose. The tentative taxonomy of formal and informal mechanisms can provide some guidance for decision-makers to identify and implement the most appropriate tool, or combination of tools, to achieve their intended water governance objective.

264. Mechanisms vary in terms of the amount of time they take, the level of decision-making involved, the number of stakeholders they involve, as well as the types and amount of resources they require. It is crucial for decision makers to carefully align tools with the level of engagement targeted and the context in which the engagement takes place. The effectiveness of mechanisms also relies on the capacities and resources needed for stakeholders to use them effectively, including knowledge, know-how, and funding (travel expenses to attend meeting, necessary technological settings). Also, new methods are being continually developed and require new skills and capacities. Thus, there is no one single optimal mechanism for stakeholder engagement but a menu of options, which pros and cons need to be carefully weighted. Chapter 4 provided a non-exhaustive review of the strengths and weaknesses of formal and informal engagement commonly associated with formal and informal mechanisms decision-makers can refer to in order to ensure stakeholder engagement is fit-for-purpose (figure 33).

Figure 33. Towards fit-for-purpose stakeholder engagement



CHAPTER 6. ASSESSING STAKEHOLDER ENGAGEMENT

Introduction

265. There has been little evaluation of the effectiveness, costs and benefits of stakeholder engagement in the water sector and at large, which can be explained by the relative novelty of cost-effectiveness and cost-benefit analyses in the public sector. Evaluation has generally remained on an *ad hoc* basis potentially because stakeholder engagement has often been carried out as an "ad-on" to conventional processes or has often consisted in a "tick-the-box" approach to comply with existing legislation and rules.

1. Why evaluating stakeholder engagement?

266. Evaluation concerns both the *process* and the *outcomes* of stakeholder engagement. First, it can provide insight on how an engagement process has, is or will function. It can take place at various stages: during the early stages of design and preparation (ex-ante evaluation), during the engagement process itself, or after (ex post evaluation). Process evaluations relate to how engagement has taken place, the quality of the *process* and the activities either throughout the engagement initiative or during a specific phase (i.e. design, implementation). Evaluations can also focus on the outcomes of the process to assess whether or not the initiative led to the expected final results. Combining the two approaches allows for a comprehensive picture of the stakeholder engagement experience and assesses more exhaustively its effectiveness.

1.1. Valued-added of stakeholder engagement evaluation

267. Evaluating stakeholder engagement can strengthen the *accountability* of decision makers, by measuring whether public and institutional resources, including stakeholders' time and efforts, are properly used. Evaluation can help determine whether the engagement process works well and learn from experience to improve practice in the future. However, evaluation can face political and practical difficulties that may influence the ability of decision makers to carry out the assessment. Therefore, in many cases it is desirable that a third-party ensures the independence of the assessment and its results.

268. A robust evaluation can also be an effective form of *risk management*. It can help to map out the different views held by different stakeholders in the water sector at the start of a process and allow for recognition and awareness of the potential challenges that the process may face (e.g. divergent perspectives regarding flood defence measures between land planners, property owners and government authorities or regarding water resource allocation between farmers, industries and environmentalist).

269. For long-term decision-making and implementation processes, for instance concerning large infrastructure projects such as dams, or water reforms, regular evaluation throughout the engagement cycle can help to check repeatedly whether the process is meeting the purpose agreed at the beginning. Water governance systems are dynamic and therefore, engagement initiatives need to remain adaptive enough to cope with unforeseen circumstances and changes. Regular evaluation can help decision-makers identify weaknesses in the process and develop alternative approaches. It is also critical to ensure that knowledge and learning are gathered as the engagement process is taking place.

270. Although evaluation can be considered a costly process, in particular if it is commissioned and carried out independently of the engagement process, a robust review process is more than just a useful tool. It is an essential criterion for the effective management of stakeholder engagement processes. The costs of not accounting for these risks, and being faced with engagement efforts going wrong, as often happens when there is insufficient time for proper reviews as the process unfolds, are far higher than the cost of ongoing reviews.

271. Evaluation of stakeholder engagement contributes to overall good governance as it provides information that can improve decision-making and implementation on a number of fronts. First, by reducing information gaps on engagement processes and encouraging greater effectiveness. Second, by providing the evidence base to select policy strategies, resource allocation, and actors. Third, by accounting for results and allowing learning, adjusting and improving (OECD, 2015 forthcoming).

1.2. Challenges to stakeholder engagement evaluation

272. Evaluating stakeholder engagement can raise some difficulties. First, there is a lack of comprehensive frameworks for analysis that could provide agreed-upon evaluation methods and reliable measurement tools. Second, there is a wide variety in the design and goals of engagement processes. Therefore, evaluation frameworks should be general enough to apply across different types of processes, yet specific enough to have value for learning and practice. Third, stakeholder engagement is an inherently complex and value-laden concept. There are no widely held criteria for judging the success and failure of engagement efforts. Some evaluations focus on the intrinsic benefits of stakeholder engagement but disregard its instrumental outcomes. Others focus on the instrumental outcomes for stakeholders, communities, policy, and governance

273. No systematic comparison of engagement processes and methods has been carried out thus far. Decision-makers need to move toward more comprehensive and methodical evaluations of stakeholder engagement to improve understanding of where, when, why, and how these processes work and do not work. Evaluation can help decision-makers understand what type of engagement, under what conditions, creates what results.

1.3. A range of evaluation tools and practices

274. More and more, stakeholder promoters are using evaluation tools to measure the success of their engagement efforts. Respondents to the OECD Survey have indicated that they most often use multi-stakeholder meetings to collect feedbacks on the level of performance of engagement processes (figure 34). Evaluation reports are the second most often used evaluation mechanism, for 46% of responses provided, and in particular for 59% of promoters surveyed. They allow analysing and keeping records of the success and lessons learnt from engagement processes (see for instance box 43). When they are publicly shared, they can also provide an indication for the stakeholders engaged of how their contribution was taken into account. Other tools can provide information for assessing the engagement process, such as levels of satisfaction, as it is the case of polls and surveys which were reported as being used by 40% of respondents. However, it is worth noticing that when they exist, evaluation mechanisms are not necessarily used in a systematic and regular fashion.

Box 43. Evaluation of stakeholder engagement

The inter-municipal public water and sanitation service provider for the **Alsace Moselle region in France** has long been involved in stakeholder engagement practices as part of its activities. It has maintained a dynamic and steady relationship with a variety of stakeholders, including domestic and industrial users, elected officials, trade unions, as well as other representatives from civil society (environmental organisation, research centres, etc.) in support of a culture of networking based on trust and transparency.

All stakeholders signed "**stakeholder cards**" that stipulates roles and responsibilities, expectations and indicators for monitoring progress. In addition, partnership agreements are signed between certain stakeholders to enhance joint activities and evaluation.

Control and regular monitoring are provided by dedicated bodies resulting in a three-tier evaluation:

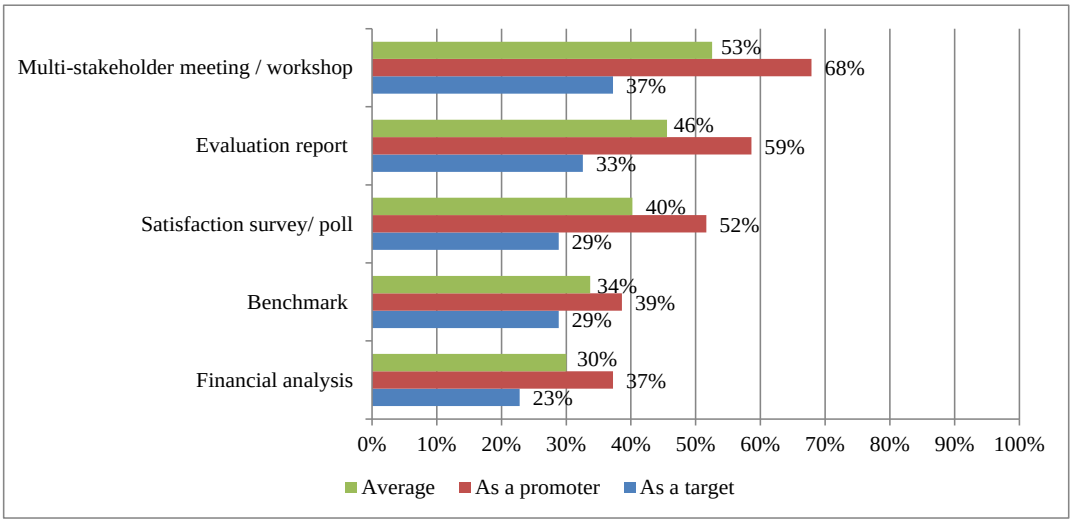
- At the partnership level, the project team meets on regular basis, measures progress and discuss results and performance against agreed-upon qualitative and quantitative targets such as stage of progress, outcomes achieved, actions carried out, expenses, etc.;
- At the level of the service provision; two types of results are provided to elected officials and key partners of the public utility: performance results (projects and policies successfully carried out, planned activities, etc.) and perception results (customer satisfaction surveys, stakeholders and staff surveys, etc.). Based on these results, the service provider sets out its priorities and new strategies when needed;
- At a broader level, complementary monitoring is carried out externally, whether they are requested by the service provider (e.g. against ISO standards for instance) or by national regulatory authorities (e.g. Regional Chamber of Counts). Stakeholder groups also provide additional feedback on partners such as suppliers and institutional actors.

Evaluation has showed a steady increase in confidence in the service providers from elected officials (95% of satisfaction rate), users (80%) and stakeholders (95%). Results also revealed that partnerships agreements are development on a regular basis (e.g. in 2014, an agreement was signed with the French research institute IRSTEA). More and more projects are developed to pool water resources and infrastructure together as well as pollution prevention activities, which are carried out at a larger scale than if the service provider is acting alone. This "360°" evaluation provides a comprehensive assessment further enshrined participatory processes in the service providers' approach. Building on national and international standards and references (e.g. ISO9001, ISO140001 ; OHSAS18001), the Alsace-Moselle water utility has gradually moved towards a strategy of co-construction, co-development and co-evaluation of policies and projects, and receives more and more demand to testify of its approach at national level.

Source: Case study submitted by Syndicat des Eaux et de l'Assainissement – Alsace Moselle

Figure 34. Evaluation mechanisms used for stakeholder engagement

215 respondents



Note: The graph considers the average between targets and promoters for "yes" to the question whether their organisation has mechanisms to assess the impact of stakeholder engagement

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance, 2014

275. Mechanisms to assess stakeholder engagement have pros and cons (table 4). For instance, evaluation tools, such as multi-stakeholder meetings and evaluation reports offer some flexibility. Meetings can take different format and can tackle different aspects of the engagement experience (the process, the impact, the conclusions, etc.) and are useful to collect feedback from a wide range of stakeholders that were involved in the process. Similarly, evaluation reports can cover a specific stage or the overall engagement process, and often pool feedbacks from a variety of sources (interviews, standard measurement, etc.). However, both also present weaknesses. The worthiness of feedbacks collected during multi-stakeholder meetings and workshops depends greatly on the time allocated and the skills and expertise of the interviewers and moderators. In the case of evaluation reports, the authors of such documents should be carefully considered as they often speak as to the legitimacy of the content. An evaluation report is more likely to be valued by stakeholders engaged in the process, and in particular those that might not be satisfied with the outcomes, if it was prepared by an independent body or an academic institution.

Table 4. Assessment of evaluation mechanisms

Evaluation mechanisms	Strengths	Weaknesses
Multi-stakeholder meetings / workshops	Allow the involvement and input of a wide range of stakeholders previously involved in the process. Flexible in format and scope	Can be time and labour intensive Require skills and expertise to be well-moderated, as it conditions the quality of feedbacks obtained during a meeting/workshop
Evaluation reports	Can pool together different type of feedbacks based on measurements and scales, interviews, etc. Can cover a number of aspects (e.g. relevance, effectiveness, efficiency, impact) Easy to disseminate to a broad audience	Legitimacy of the evaluation report greatly deepens on the author (e.g. independent expert, academic, etc.)
Satisfaction surveys /polls	Questionnaire are relatively easy to prepare Polls can cover knowledge questions (e.g. on factual information about the process and its outcomes); feeling questions (e.g. on confidence, mistrust); opinion questions (e.g. on relevance, clarity); and behaviour questions (e.g. on description of experience, activities, actions)	Need to be clear and easy-to-understand in order to collect worthy feedbacks
Benchmarks	Compare institutions using similar engagement tools, aiming for similar objectives, etc. Create incentives for organisations to outperform other institutions leading similar engagement approaches Open minds to new ideas Place organisations in a continuous improvement mode	Reveal the outcomes attained by other institutions for their engagement process but do not always consider the circumstances under which they attained such outcomes. May lead to complacency if the benchmark reveal their performed better than other institutions Should not be considered as a stand-alone activity but as a means to an end, that should be accompanied by action plans to do better
Financial analyses	Help review the financial performance of the engagement process (costs/benefits, investments and return on investments, etc.)	Require institutions to have financial statements of the engagement process Provide a myopic review of the engagement process Should not be considered as an end in itself but as one aspect of stakeholder engagement evaluation to be complemented with a review of non-monetary/intangible costs and benefits

276. Often, evaluation mechanisms help to collect a certain type of feedbacks but they do not alone provide an exhaustive assessment of stakeholder engagement. Benchmarks, for instance, are useful tool to compare engagement processes that use similar tools or pursue similar objectives. However, how stakeholder engagement processes are designed and carried out is conditioned by the contexts in which these processes are implemented, which specificities are not always well-reflected in benchmarking. Also,

financial analyses provide a review of the financial performance of engagement processes, looking at its monetary costs and benefits. As such, they only look at economic aspects of stakeholder engagement but do not take intangible costs and benefits into accounts, such as trust-building and knowledge development. Therefore, evaluation mechanisms need to be carefully chosen according to the aspects or stages of the engagement process that are to be assessed, and an exhaustive evaluation may imply combining a number of tools.

Box 44. The Hydropower Sustainability Assessment Protocol: Multi-stakeholder engagement to promote sustainable hydropower and practical implementation in Brazil

While hydropower is a major source of renewable energy worldwide for electricity generation, it had been mired in controversy because often, its potential negative environmental, social; human rights and corruption impacts had either been ignored or insufficiently addressed. In 2008, the Hydropower Sustainability Assessment Protocol was launched, at the initiative of the International Hydropower Association (IHA), as an assessment framework that evaluates the sustainability of hydropower projects.

The development of the Protocol was carried out under the guidance of the multi-stakeholder Hydro Sustainability Assessment Forum, which consisted of 14 representatives of developing and developed countries (Germany, Iceland, Norway, China and Zambia), commercial and development banks (World Bank, Equator Principles Financial Institutions), the hydropower sector (Hydro Tasmania, IHA), as well as environmental and social NGOs (IUCN, WWF, Oxfam and Transparency International). Each category of stakeholders in the Forum had specific reasons to support sustainable hydropower:

- For *developing countries*, hydropower plays an important role in meeting national electricity requirements;
- For *developed countries*, hydropower continues to be important in national electricity requirements and it also supported as part of development assistance programmes;
- *Banks* were motivated by the need to manage reputational risk in relation to financing hydroelectric projects;
- *Environmental NGOs* were motivated by the desire to design future hydroelectric projects to avoid poor practice in addressing environmental issues
- *Social NGOs* wished to ensure that future hydroelectric projects would properly address social issues (i.e. resettlement, indigenous people, etc.)

Between 2008 and 2010, the Forum met during formal meetings and webinars to discuss sustainability issues of relevance to hydropower; benefited from expert advice; evaluated important reference standards; developed progressive drafts; and monitored 2 global trialling processes and a global trialling programme. The Protocol was officially launched in June 2011.

In 2012, the Protocol was implemented in Brazil to evaluate the Jirau Hydropower Project being built by Energia Sustentavel do Brasil in the state of Rondonia. The objectives were to enhance the engagement, relationship and communication with stakeholders at local, national and international level; obtain an independent evaluation of sustainability issues; and identify possible gaps or weaknesses as a basis for the development of an action plan to optimise socio-environmental management in the operation of the plant.

The assessment team was composed of 4 accredited auditors from the IHA and an observer (i.e. the Nature Conservancy) and conducted 132 interviews with a wide range of stakeholders, as well as analysed over 1900 documents to determine the project's sustainability profile according to 20 environmental, social, technical and economic topics.

Looking particularly at stakeholder engagement aspects of the evaluation report, the assessment identifies a range of well-documented commitments, volunteer programmes and arrangement that generated significant and sustained benefits for directly affected communities and surrounding communities. The report confirmed that the energy provider has established adequate management, monitoring and compensation measures to assure that project-affected communities (e.g. miners, displaced landowners, fishermen) were well assisted. The report also assessed the project against criteria of good resettlement and concluded that high standard had been achieved. Overall, the results obtained in stakeholder engagement exceeded expectations, demonstration that the Hydropower Sustainability Assessment Protocol is a useful tool to approach and improve relations with stakeholders to discuss the sustainability of large hydropower projects. The assessment of the Jirau hydropower plant project proved to be beneficial not only to identify opportunities for improvement in terms of socio-environment management practices, but also to visualise achievement s and further opportunities to enhance benefits for the society and the environment. It is also expected that the evaluation report will support an evidence-based discussion on the socio-environmental costs

and benefits of hydropower at large.

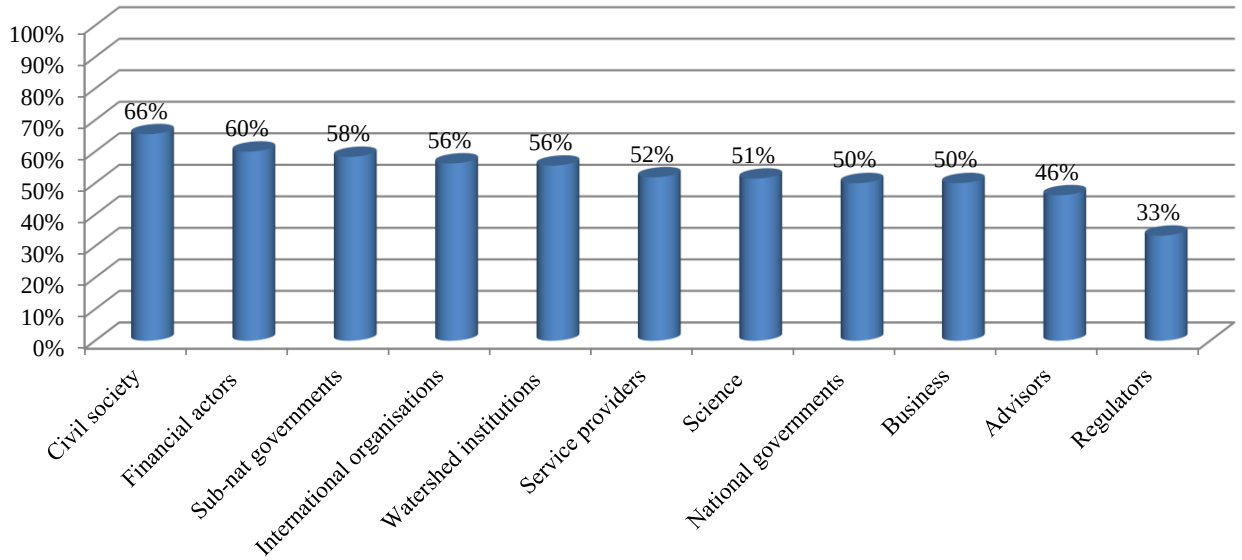
Source: Case studies provided by Transparency International and GDF SUEZ Energy Brasil

277. Some categories of stakeholders use evaluation mechanisms more often than others. Indeed, 66% of civil society organisations surveyed conduct evaluation on a regulator basis, while only 50% of business do (figure 34). Often, receiving feedback from customers on a given stakeholder engagement process, particularly in terms of complaints, can be seen as something to be wary of rather than fostered. However, complaints should not be seen as problems to be ignored, dismissed or under-valued, but as useful warning signs that the process can be improved.

278. Interestingly, although regulatory consultations are becoming common practice, their evaluation remains incidental in the water sector. Public consultations in developing draft primary laws and subordinate regulations exist in all OECD countries (OECD, 2008). Nevertheless, the assessment of the quality of these consultations needs further attention, including in the water sector. Indeed, among the categories of stakeholders surveyed, regulators least use evaluation mechanisms on a regular basis (figure 35). To support better evaluation of regulatory consultations, the OECD 2012 Recommendation of the Council on Regulatory Policy and Governance advises to regularly publish reports on the performance of regulatory policy and reform programmes, including on how public consultation function in practice.

Figure 35. Frequency of use of evaluation mechanisms across categories of stakeholders

215 respondents



Note: The graph considers the respective share of answers for "very often" and "often" by category of stakeholders.

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance, 2014

2. How to evaluate? The need for indicators

279. Indicators are increasingly advocated as a tool for measuring stakeholder engagement impact. However, existing research calls for caution as they can be highly contentious, in theory and practice. It can be argued that complex processes of social change should not be reduced to simple metrics, and the process of defining indicators and analysing the implications of the results can be highly complex and political. Some outcomes of engagement processes can be intangible (such as improved relationships or a sense of empowerment) and both quantitative and qualitative indicators should be employed to review the

engagement process. Having said this, even though indicators may be imperfect, they can certainly be informative measurements of complex systems.

2.1. Existing indicators for monitoring and assessing stakeholder engagement

280. Several sets of proxies identified from the literature review can be useful in defining a set of indicators to assess stakeholder engagement effectiveness (box 45). A tentative framework should look at: i) the effectiveness of the engagement *process* itself, including criteria on clarity of objectives, availability of data, milestones timeline attained and expenses; and ii) the effectiveness of the process in reaching intended *outcomes*, both related to social capital (empowerment, trust, accountability, legitimacy) and to water governance at large (resolutions of conflict at hand, quality improvement, implementation of the planned policy/project).

Box 45. Overview of existing indicators for assessing stakeholder engagement

Rowe and Frewer, 2004

- *Process criteria*: Representativeness ; Inclusivity ; Participation rate ; Early involvement / Obtaining input early in planning process/Continuous involvement ; Process fairness ; Process flexibility ; Subjective assessment of previous evaluator ; Perceived openness of process ; Transparency ; Structured decision-making ; Resource accessibility ; Task definition ; Independence ; Interaction ; Continuity ; Comfort ; Convenience ; Satisfaction ; Deliberation ; Fairness ; Competence ; Identification of common good ; Incorporation of values/beliefs into discussion ; Effectiveness of method process
- *Outcome criteria*: Policy/Decision Influence ; Time to develop regulations ; Reduce/eliminate judicial challenges ; Agency responsiveness to participants' policy demands ; Public views incorporated into decision-making ; Influence on public ; Social impact ; Impact on general thinking ; Effect on public and plan support ; Participants' values/opinions hanged ; Interaction with lay knowledge (impact on lay learning) ; Effect on staff and planning process ; Impact on training (learning of knowledgeable personnel) ; Staff awareness ; Conflict resolution ; Restoring public trust in public agencies ; Perceptions of consultation by MPs, public, media (i.e., perceived success/failure) ; Effectiveness and cost effectiveness ; Procedural impact of the mechanism

Community Development Foundation (2005)

Community involvement indicators:

- *Community influence*: i.e. % of adults who feel they can influence decisions affecting their local area)
- *Community cohesion:* i.e. %of people who feel that their local area is a place where people from different backgrounds can get on well together)
- *Social capital:* i.e. % of people who have helped or been helped by others)
- *Condition of the community and voluntary sector:* i.e. extent and influence of the voluntary and community sector in the locality)

Enserink, Witteveen and Lie (2009)

Performance indicators for public participation:

- *Cooperative:* During the process the balance between proponents and opponents should change; more people should support the proposed action and less people should object;
- *Respect culture and values of community*: way of addressing, handling and organising should be adapted to the culture, core values and beliefs of a community
- *Respect for social institutions*: active cooperation with local formal and informal leaders
- *Consideration of demographics*: involvement of all part taking age groups
- *Consideration of differences in power*: Involve representatives from all participating and effected power levels
- *Consideration of different values and interests*: Involvement of all stakeholders, either having a stake in the project or being affected by it
- *Meaningful involvement*: Determination of the level to which stakeholder information and concerns are taken

into account

- *Early information*: Determination of the stage of the process during which stakeholders are involved
- *All interests respected*: Mapping of all interests and cost and benefits of proposed change should be assigned to stakeholder groups
- *Equity between generations*: Addressing sustainability and long-term impacts
- *Mutual respects*: Core values should be honoured
- *Mutual understanding*: Social learning should be pursued
- *Improved proposal*: Changes in the documents based on or as a reaction to stakeholder input or concerns
- *Results accounted for*: Changes instigated by the participation made explicit in report

De Stefano, (2010)

- *Scope of the process*: Participatory processes should address the elaboration of laws, plans/strategy and specific water-related projects
- *Scope of the participants*: Participatory processes should include at least representatives of the following stakeholder groups: industry (including energy production),urban supply, agriculture (including animal breeding), green NGOs, academic sector
- *Process design*: i) Consultation objective is stated at the outset; ii) Target audience is stated at the outset; Consultation documents include a timetable for the consultation process; iii) Responses from "consultees" and the outcome of the consultation exercise are published before any subsequent change in the relevant policy, law, program
- *Capacity building*: i) Authorities ensure access to background documents related to the different water management components; ii) Documents are provided insufficient time to allow consultees to provide considered responses; iii) Financial support is provided for stakeholders to be actively involved
- *Level of empowerment*: i) Information language and form are suitable to the recipients; ii) Information is complete and timely provided; iii) Stakeholders have a real chance of influencing the process with their comments; iv) Stakeholders have a real chance of influencing the process with their involvement

Carr, Bloschl and Loucks (2012)

- *Process evaluation*: accountability; Cost-effectiveness, Deadlines and milestones; Facilitation; Knowledge inclusion; Legitimacy; Power
- *Intermediary Outcome Evaluation*: Development of social capital (interaction and network development and trust); Products of the process (agreements, end to a stalemate, innovation, institutional change, shared knowledge and information)
- *Resource Management Outcome Evaluation*: Ecological improvement; Economic improvement; Human health and wellbeing improvement; Implementation of an accepted plan; Reduction in conflict/increased harmony

2.2. Reporting on evaluation outcomes

281. Transparent reporting to stakeholders on the results and outcomes of the engagement process is essential to build support and trust. Reporting gives feedback to the participants on how their inputs have been used into the final decision. It should not be only directed at the promoters of the engagement process, or a supervisory authority, but also to the stakeholder involved. As such, it is more than an *ex post* tool for the promoters of the engagement process but also a mechanism to involve stakeholders.

282. Reporting deserves consideration not only at the end of an engagement process, but also throughout. It can concern the different stages of the water policy or project, from the way information is made accessible or how stakeholders have been targeted and involved, to the amount of human and financial resources invested (box 46).

Box 46. Reporting on participation process under the EU Water Framework Directive

Annex VII of the Directive requires that the river basin management plans cover *"a summary of the public information and consultation measures taken, their results and the changes to the plan made as a consequence"* (Annex VII.9) and *"the contact points and procedures for obtaining background documentation and information referred to in Article 14(1) (…)*" (Annex VII.11). This requirement provides information to the Commission in its role as supervisory authority over the implementation of the WFD.

The requirement from Annex VII, element 9 can be fulfilled by providing some measures taken and techniques used, the responses received from stakeholders in different sectors, and the implications of the responses for the River Basin Management Plan. Guidance documents to help river basin organization implement the WDF also recommend to take into account the reporting aspects on forehand and to include quality indicators in the reporting such as facts and figures, description of the public participation plan, and measures of participants' satisfaction.

Source: Working Group 2.9 – Public Participation, (2003), *Common Implementation Strategy for the Water Framework Directive (2000/60/EC)*, Guidance Document No 8, Public Participation in Relation to the Water Framework Directive, European Communities

3. What should be evaluated in stakeholder engagement?

283. Getting to understand stakeholder' perspectives by involving them is a way to enhance the effectiveness of decision-making and water governance, despite related costs. One can easily argue that stakeholder engagement may slow down decision-making and implementation processes or lead to inaction by taking the place of real change. However, these reflections fail to consider the quality of the decision-making and the extent to which inclusive decision-making, including inputs to mainstream decision-making, can lead to 'better' decisions, for instance when they are better aligned with local water contexts and needs. Stakeholder engagement can lead to decisions that are more fully supported by those affected, and avoid the costs of decision-making processes being disrupted with protests by those not involved. Similarly, organisations that foster inclusive approaches and openness in policy or project processes are more likely to secure the support of stakeholders concerned.

Box 47. Assessing performance in stakeholder engagement: NARBO's benchmarking system

The Network of Asian River Basin Organisation has developed a performance benchmarking system to assess the capacity of RBOs in implementing principles of integrated water resources management. It encompasses 14 indicators organised around 5 critical performance areas a related to the mission; stakeholders; learning and growth; internal business processes; and finance. For what concerns the indicators on stakeholder, they look at customer involvement; customer feedback, environmental audits and basin livelihoods. NARBO has conducted performance assessments of RBOs in a number of Asian countries including Laos, Philippines, Malaysia and Sri Lanka, which has contributed not only to improve their effectiveness in implementing IWRM principles in various river basins, but also to foster experience-sharing and bench-learning across basin organisations.

Examples of NARBO's indicators for evaluation customer's involvement in RBOs

Table – I: RBO PBM Critical Performance Area, Indicators and Indicator Values (3/14)

Critical Performance Area	**Stakeholders**
Objective	Customer satisfaction
Objective description	Customers will be fully satisfied by the services provided by the RBO
Indicator	**3. Customer involvement:** A measure of the level of customer involvement in the decision making of RBO and, therefore, their acceptance of the organizational goals and operation
Indicator values	**How to evaluate RBO performance**
1. No planned customer communication	▪ No awareness of customer communication (Indicator value = **0.0**) ▪ An awareness of the importance of customer communication but no plans to deliver. (Indicator value = **1.0**)
2. Customer information	▪ Some information are available to customers on request (Indicator value = **1.5**) ▪ Information relevant to customers is readily available and prominently displayed in a place of public access (Indicator value = **2.0**)
3. Open meetings	▪ There is an awareness of the importance of open and two-way communication with customers but so far no routine open meetings take place (Indicator value = **2.5**) ▪ There is a schedule of open meetings and evidence of invitations for customers with opportunities for customers to voice their concerns and air their views (Indicator value = **3.0**)
4. Customer contributions to decisions	▪ Customers are encouraged to provide feedback in many forms appropriate to themselves (Indicator value = 3.5) ▪ There is evidence that the customer feedback is carried forward to strategic planning and that organizational decisions incorporating customer's views are made (Indicator value = **4.0**)

In Sri Lanka for instance, the Mahaweli river basin authority provided limited opportunities for involving irrigators and domestic water users in decision-making and planning processes. A NARBO's evaluation carried in 2006 pointed to such gaps as well as to areas of improvement as regards stakeholder engagement. It provided an incentive for establishing venues to exchange opinions and involve these stakeholders in IWRM in the basin. A recent NARBO evaluation carried in 2013 according to the same indicators has shown concrete progress for what concerns customer involvement and customer feedback, while also pointing to areas where further effort is still necessary such as by introducing regular dialogue opportunities.

In the case of the Selangor Water Management Authority in Malaysia, the river basin is subject to serious droughts which put water supply for the city of Kuala Lumpur at risk. The basin authority relied on NARBO's assessment framework to evaluate their performance, including regarding stakeholder engagement. Conclusions and recommendation from the assessment were included into the business programme of the basin authority and encouraged the establishment of regular stakeholder meetings. In addition, the basin authority is focusing efforts on developing communication channels with the stakeholders concerned, and more specifically with ITC tools.

Source: Case study provided by the Network of Asian River Basin Organisation

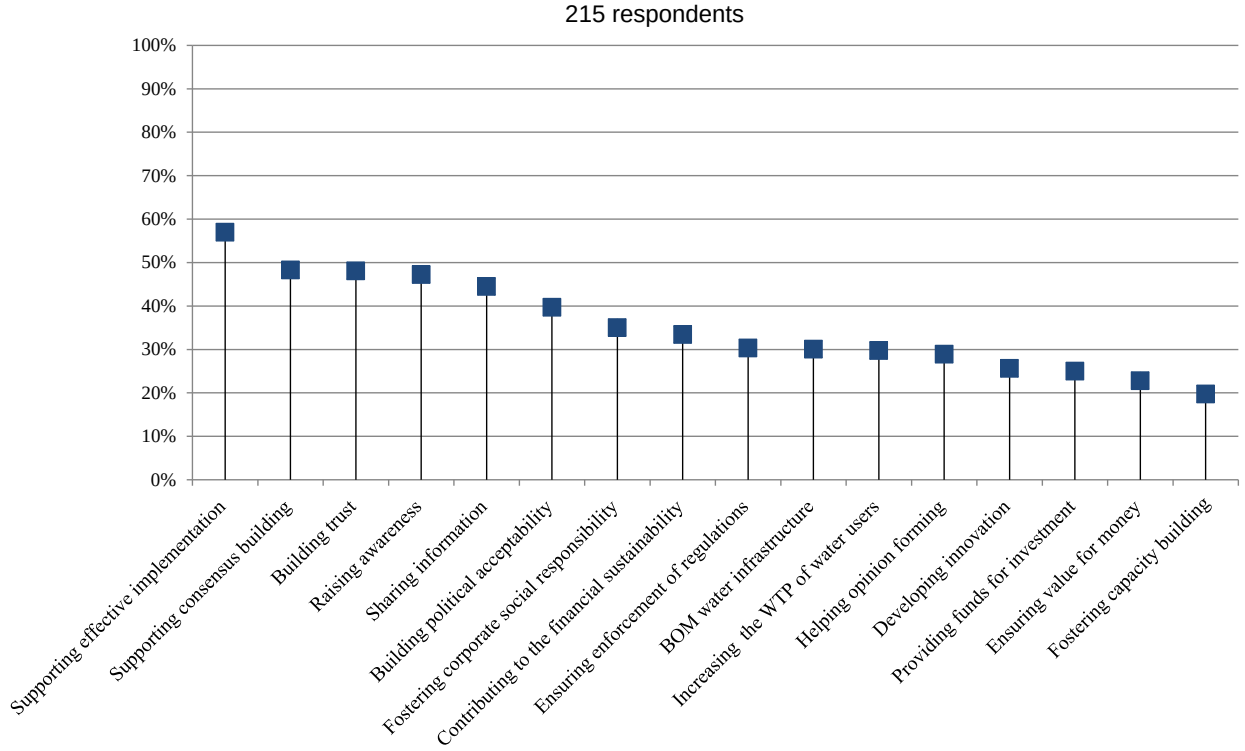
284. Evaluation also needs to analyse the costs and benefits of stakeholder engagement Involving stakeholders in water projects and policy processes can raise costs and generate benefits. There are overall positive considerations for stakeholder engagement to improve outcomes and build consensus. Nevertheless, decision makers and project leaders have begun to criticize engagement processes as too costly, expensive in time and money, and as not permeable to specific lobby groups operating for their own interests.

3.1. Effectiveness

285. Evaluating the effectiveness of engagement process and outcomes can shed light on the contribution of stakeholder engagement to better water governance. Measuring the impact of stakeholder engagement on the various aspects of water governance can help identify where inclusive decision-making is the most effective and helpful to reach the intended objectives. This resonates with the support and sense of ownership that often result from engagement process. Similarly, stakeholder engagement also makes an important contribution to building consensus, trust and confidence for 48% of respondents surveyed. It is also interesting to point out that although 73% of respondents have indicated they contribute to capacity building, only 20% have assessed that stakeholder engagement was effective in doing so (figure 36).

286. Evaluations can shed light on the differentiated impacts of stakeholder engagement across categories of stakeholders. Depending on the rationale behind, stakeholders perceive the benefit of engagement processes in different ways (figure 37). For instance, for 80% of watershed institutions surveyed think that stakeholder engagement is crucial to support effective implementation of policy and project and 60% think it is so to raise awareness on water challenges and costs. Inversely, they consider it has a lower impact when it comes to helping opinion forming (17%) and building political acceptability (36%). Civil society argues stakeholder engagement has a crucial impact when it comes to information sharing (53 %) and capacity building (50%) as opposed to ensuring proper enforcement of regulations and norms (12%). Service providers primarily see the impact of stakeholder engagement in terms of ensuring value for money (42%) and building, operating and maintaining water infrastructure (50%) while they perceive their contributions as lower when it comes to using stakeholder engagement as a vehicle to ensuring the willingness to pay (32%). Box 48 provides an example in Australia where stakeholder engagement contributed to improving water users' willingness to pay.

Figure 36. Perceived impact of stakeholder engagement on water governance



Note: The dots represent the average between targets and promoters of responses given to each water governance objectives for which stakeholder engagement is considered "crucial".

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance, 2014

Box 48. Improving the willingness to pay in South Australia

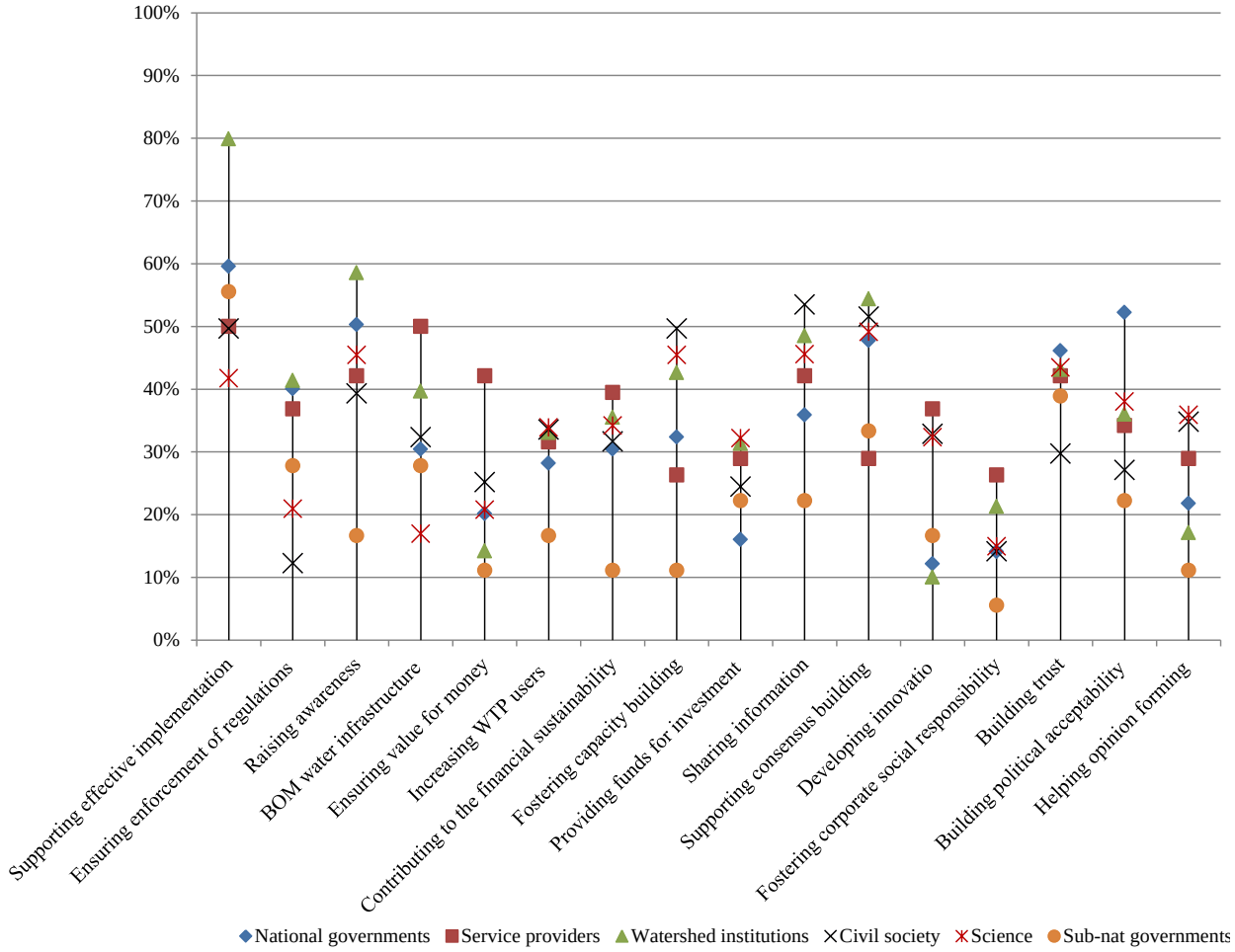
Under the 2004 South Australian National Water Management Act, councils are tasked to collect a levy four times per year at fixed interval time from house owners depending on the property value. As such, the levy is not related to behaviours that can actually access and damage local natural resources. In addition, the levy rate levels vary among council areas even within the same region causing considerable inequalities for ratepayers.

A study sponsored by the **University of South Australia** investigates an alternative method for levy collection that would improve the willingness of house owners to pay, based in the volume of water consumed and through water bills. The study explored community attitudes regarding the current levy base method and recommendations for an alternative approach that would positively encourage change in individual water consumption behaviour. The study involved the *Adelaide & Mount Lofty natural resources management* board to gather information on levy history and collection. It relied on an online Survey carried out across 770 property owners, which demonstrated an information gap among survey respondents regarding the levy structure, and indicated that better information and education of the community on natural resources and water management was needed. The survey indicated that home owners were more in favour of a levy based on water consumption rather than property value. This provided robust basis for changing the levy policy to increase the willingness of property owners to pay.

Source: Case study submitted by the Centre for comparative water policies and laws of the University of South Australia

Figure 37. Perceived impact of engagement processes across categories of stakeholders

215 respondents



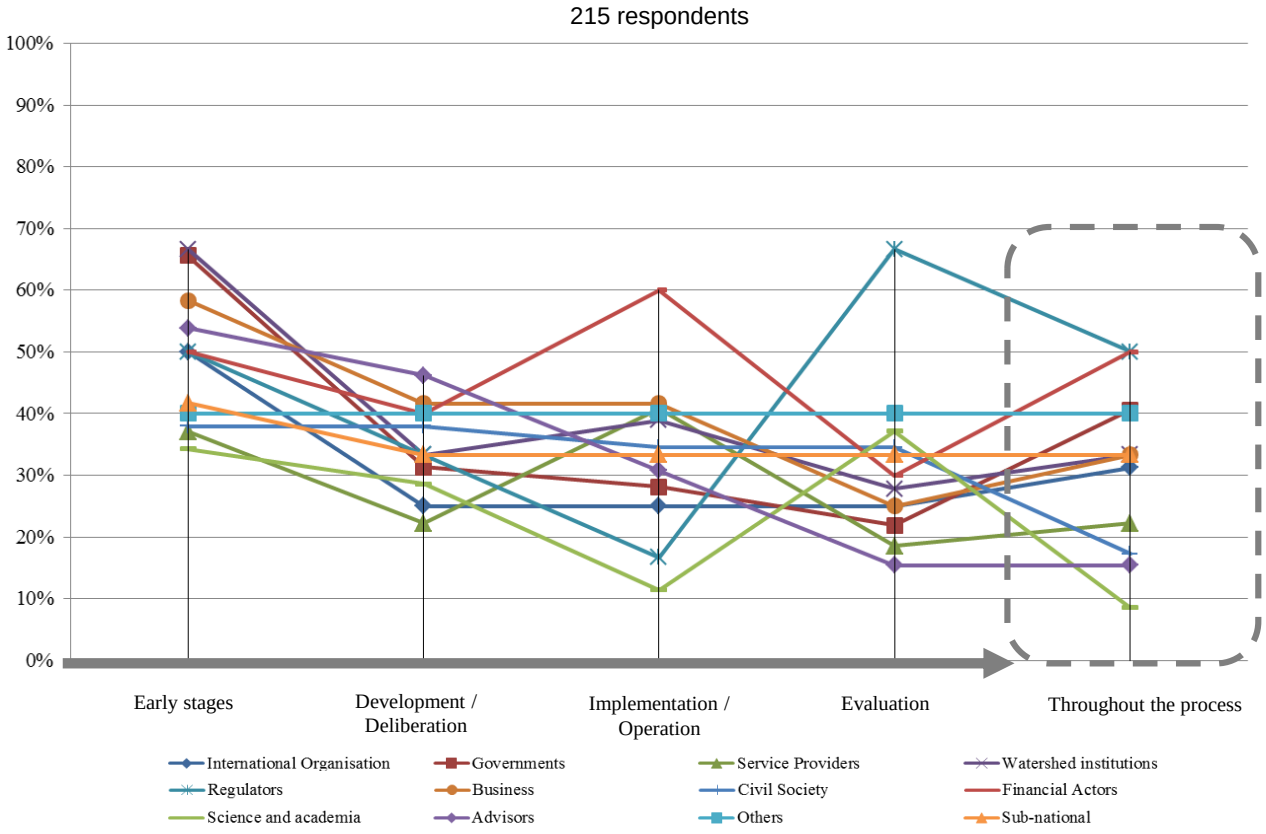
Note: The graph considers the average between targets and promoters by categories of stakeholder for responses given to each water governance objectives for which stakeholder engagement is considered "crucial".

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance, 2014

287. Assessing stakeholder engagement should not be considered as an end in itself but serve a broader purpose of improving the process and its outcomes. As an example, ex-post surveys and polls can help determine at which stage of the policy/project cycle stakeholders perceive they have the most influence over decisions. This happens essentially at the implementation stage for 66% of national governments, 67% of watershed institutions and 37% of service providers surveyed, while 67% of regulators and 37% of academia and research centres consider having a greater influence during the evaluation stage (Figure 38).

288. Evaluation of stakeholder engagement needs to take place within a systemic approach where the processes, tools and practices are improved based on the evaluation results. Stakeholder engagement cannot be considered as a linear process only guided by clear procedures and predefined objectives. Rather, it needs to consider the complexity and dynamics of water governance systems and should remain adaptive and flexible. Evaluation provides for learning and reflection throughout the engagement process in order to fine-tune expected outcomes in line with changing insights and conditions (see example in box 49).

Figure 38. Level of influence of stakeholder engagement on decision-making across stages of the policy/project cycle



Note: The graph considers the stage of the policy/project cycle at which the influence of stakeholder engagement was considered as "significant" looking at 8 categories of stakeholders, on a range from significant influence to some influence, little influence and no influence.

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance

Box 49. Improving stakeholder co-ordination through evaluation: The "MuSSAP" in South Africa

South African water services face critical challenges in terms of poor planning and prioritisation; aging infrastructure, increasing investment needs in poor economic conditions, a changing workforce with rising lack of technical skills, and shifting patterns in water demands with rising energy costs. The Municipal Strategic Self-Assessment (MuSSA) tool has been conceptualised by South Africa's Department of Water and Sanitation (DWS), to

support improved decision-making, water utility business management and effective sustainable performance by municipal water utilities.

The tool helps to convey the current overall business health of water services, flag areas of business vulnerability and indicate future likely performances of water service provision with early-warnings. The identified vulnerabilities are then addressed via the associated Municipal Priority Action Plans (MPAP) which is a high-level planning process overseen by the Department of Water and Sanitation to support effective and appropriate planning across internal and external silos and implementation of sustainable solutions. Importantly, the combined MuSSA/MPAP process allows the national government to proactively provide support to municipalities showing signs of extreme distress and resolve adverse situations before they arise. Whilst not a legislated requirement, the MuSSAP/MPAP process is supported at high governmental level and was recently included as a component of the Water Services Development Plans which submission is required by law.

Since 2006, the DWS annually supports 152 municipal water services authorities to establish the baseline vulnerabilities affecting their performance using the MuSSA through an online tool where senior municipal managers are required to indicate their performance according to 16 key business attributes. Following the consolidation of the findings and formal feedbacks, the DWS facilitates workshops at municipal level to develop the WPAP and agree on a set of proposed priority actions addressing the vulnerabilities captured. Municipalities are then expected to sign-off and implement the MPAP (which process is operational since 2013). A monitoring process is then initiated to check annually on the progress of agreed-upon strategic actions to update the vulnerability status of municipalities as well as the MPAP.

The process generates multiple outputs and actions at local, provincial and national levels. As such, multiple stakeholders participate in assessing key municipal vulnerabilities such as regional offices of the Department for Water and Sanitation, the National Treasury, the Auditor General, as well as the South African Local government Association. The MPAP contribute to align decision-making across these different actors and thereby supports managerial autonomy at municipal level, secures political support, improves performance accountability, commit top management to strong leadership, and provides incentives to enhance performance (awards and rewards, etc.).

Although no formal assessment mechanisms has been used to date to evaluate the impact of the MuSSAP/MPAP process, findings are frequently presented and discussed at national, provincial and local level to highlight the progress made (or not) and positive case studies. The findings also feed into South Africa's National Benchmark Initiative where they undergo a peer-review process, thus supporting improved efficiency and effectiveness in water services delivery via comparative performance benchmarking, peer-to-peer knowledge-sharing and iterative performance improvements.

The MuSSAP/MPAP process has encountered some difficulties related to the discontinuity of municipal official mandates, leading to delays in development. The implementation of the MPAPs also requires buy-in from municipal top management who might see the findings are a critic on their performance. The need to break-down silos within municipalities (e.g. finances, engineering, human resources), is also an on-going efforts to facilitate and achieve co-operation and cultural change in the water service sector at large. Nevertheless, since its inception, active sharing of MuSSAP/MPAP findings have helped municipal water service authorities to save time and direct limited resources to prioritised needs. The involvement of various municipal officials throughout the process has also contributed to ownership over MPAPs and has encouraged more discussions among them to agree on the appropriate ways forward. They also learn about existing legislative requirements and technical aspects.

Source: Case study provided by the Department of Water and Sanitation of South Africa

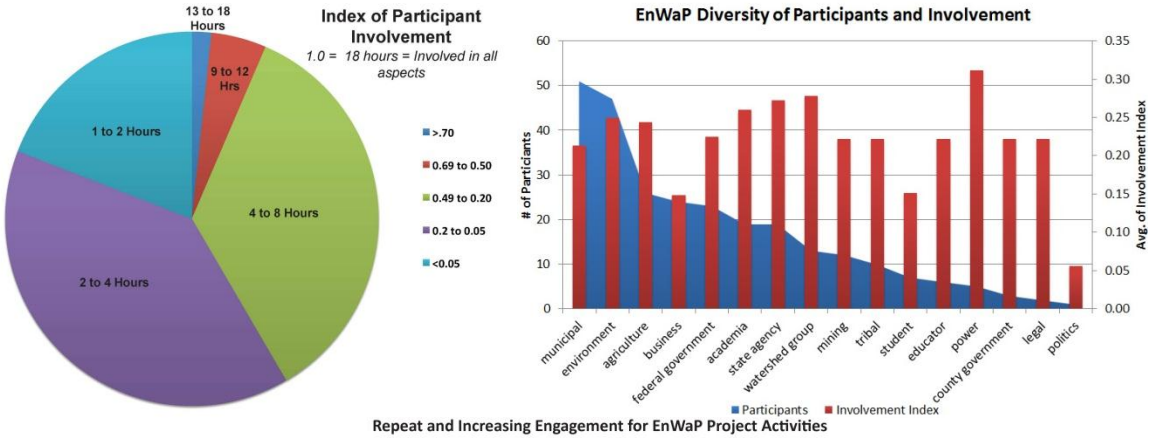
289. In light of the intended objectives, the results can provide some lessons for decision-makers to refine or intensify their strategies at certain points throughout the process. It can inform decision makers and conveners how the process performs and should be part of an evolving cycle of learning to assess the strengths and weaknesses of specific approaches and identify possible areas for improvement. As an example, the University of Arizona Water Resources Research Centre used a participation tracking system to monitor inclusiveness and interactivenes as part of a project on water planning which came to be instructive for the project managers to target future engagement towards under-represented groups (box 50).

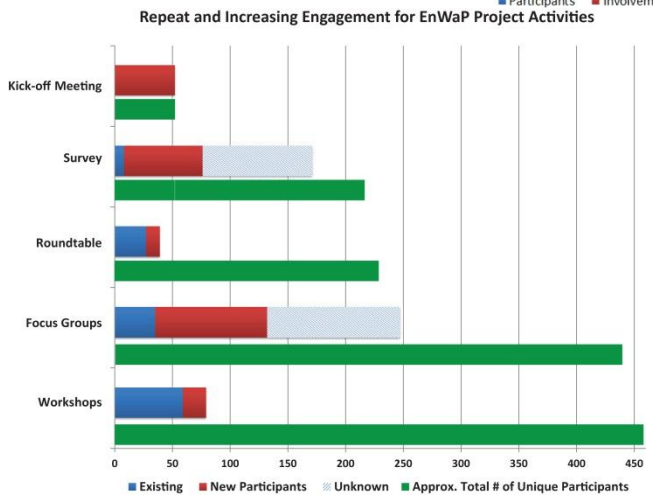
Box 50. Tracking participation to evaluate stakeholder engagement in water planning in Arizona

The project "Connecting the Environment to Arizona Water Planning" from the University of Arizona Water Resources Research Centre (WRRC) began in July 2011. Its objective is to foster dialogue among water users on voluntary, stakeholder-driven options for addressing the environment in the context of limited water supplies and existing water

rights. The programme was carried out in two phases: the first was principally geared toward information and awareness, in particular through 38 presentations across Arizona and newsletters to a distribution list of over 800 contacts. The second was more focused on consultation and co-decision across various stakeholders, including representatives from governments, service providers, regulators, researchers and academics, civil society and environmental NGOs. Parliamentarians and politicians were also invited to engage but their contribution remained somewhat minimal. In total, over 450 people took part in an online survey, regional workshops, and focus group meetings. Focus group meetings in particular were designed to reach out to water-interest groups that were otherwise underrepresented in the process.

Although evaluation of the project was mostly informal, the project Steering Committee closely monitored progress through participation tracking. The WRRC created an index of participant involvement was created to examine the degree of commitment to the project demonstrated by individuals, which was considered particularly instructive when analysing the different interest groups involved in the project. It will also be a useful tool to target future engagement of groups that were less represented (according to the number of participants) or engaged (according to the involvement index). Success of the engagement effort was also tracked through an assessment of increasing involvement and repeat involvement in engagement activities.





A formal survey targeting the 220+ participants and stakeholders of the project will be administered at the conclusion of the project in October 2014.

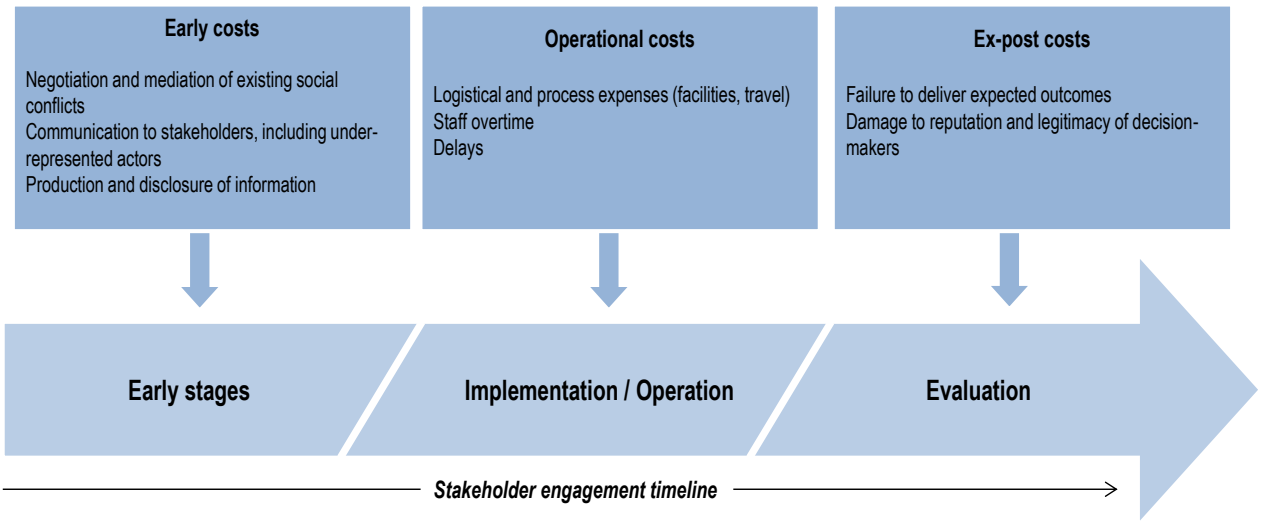
Source: Case Study submitted by the University of Arizona Water Resources Research Centre (http://wrrc.arizona.edu/Water-for-the-Environment)

3.2. Costs

290. More and more, decision-makers are encouraged to share information, increase transparency and involve more stakeholders. Discussions, consultation and exchange of opinions raise some transaction costs, be they direct or indirect, monetary or not, that relate to different phases of the engagement process

(figure 38 and 39). As such, stakeholder engagement is an investment which, when done properly, can limit the likelihood of stakeholder engagement risks to arise, and bolster water policies, reforms and projects.

291. Figure 39. Categories of costs in stakeholder engagement



3.2.1. Early costs

292. Stakeholder engagement can raise some costs in its early stages. Engagement processes do not take place in a vacuum but are embedded in specific contexts of social interactions between stakeholders that may have different aspirations and interests. Pre-existing oppositions and conflicts between certain actors in the water sector raise some early costs for institutions whereby investment in negotiations is necessary before any constructive dialogue can take place. Indeed, social conflicts were identified as primary costs by 36% of respondents surveyed (Figure 40). Similarly, in situations where strong lobbies exist, or oppositely where certain stakeholders are often ignored, promoters of engagement may need to invest ex-ante in mediations and communication efforts to avoid capture (identified as an important cost by 44% of respondents) during the process, and maintain a fair balance among stakeholders to be involved.

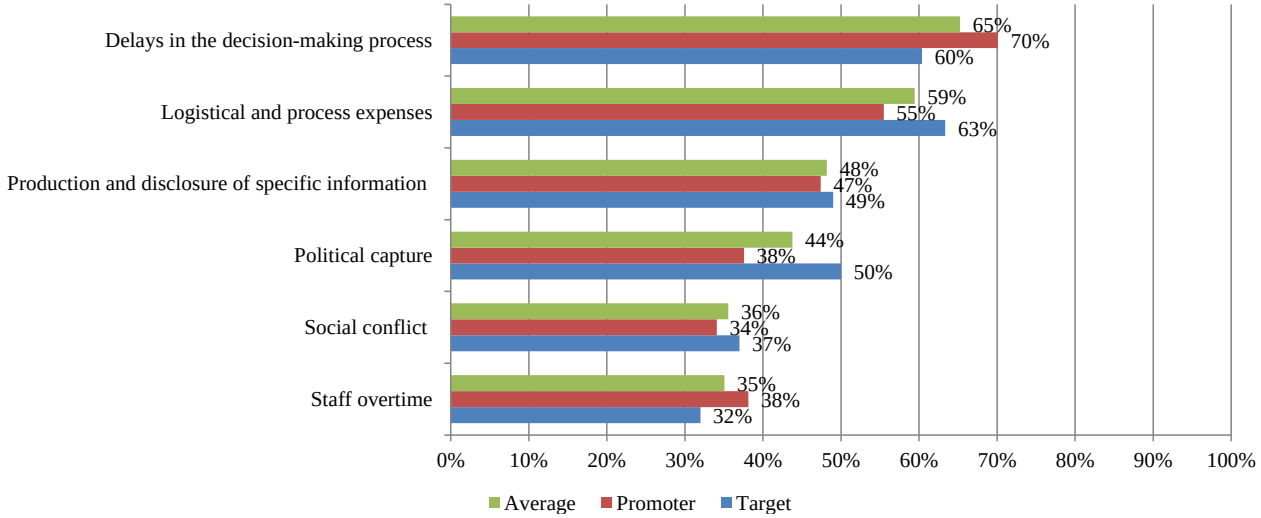
293. Early costs also concern the production and disclosure of information. Stakeholders can prove ill-informed about issues at hand resulting in poor quality contributions and sub-optimal outcomes. Therefore, promoters of engagement should ensure that the needed information is available as early as possible for stakeholders to fully grasp what is at stake for the water policy or project concerned. Costs relate to disclosing existing information to stakeholders (e.g. setting-up an online platform, conducting an information campaign, etc.) or producing new information (e.g. ordering new studies, mandating researchers, etc.).

3.2.2. Operational costs

294. The implementation and operation of the engagement process raise some operational costs. They include the monetary costs related to events (facilities, travel expenses) and staff costs generated by necessary trainings, time spent during and outside working hours, and additional expertise when needed. Stakeholder engagement might lead to quicker decisions, but might require more intensive work for those directly involved. Among participants surveyed, 55% of the promoters and 63% of targets have identified logistical and process expenses to be the primary cost of stakeholder engagement.

Figure 40. Most important costs of stakeholder engagement in the water sector

215 respondents



Note: The graph considers the average between targets and promoters for the types of costs ranked between 1 and 3 on a scale from 1 to 6

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance, 2014

295. Delay in decision-making and implementation was identified as the most important cost incurred by stakeholder engagement. It was ranked as primary in 66% of the responses provided, and in particular for national governments (79%) and business (71%). Expenses related to logistics and travel rank second for the average sample of surveyed respondents (59%) and most importantly for service providers (57%). The third most important cost identified related to the production and disclosure of information that needs to be shared with stakeholders in order for them to contribute effectively to decision-making. It is an important concern in 48% of responses provided, and especially watershed institutions (63%). 3.2.3. Ex-post costs

3.3.3. Ex-post costs

296. The outcomes of stakeholder engagement can generate ex-post costs. Once the operational phase of the engagement is over and stakeholders involved look at its performance, such evaluation can reveal that the objectives defined at the outsets of the process were not achieved. Failure to deliver raises some costs for the reputation of promoters. Mitigating the damage done to organisations' public relations and image (e.g. in terms of confidence, customer's satisfaction, trust, etc.) may imply to invest in communication efforts such as public campaigns. Also, a failure to deliver the intended outcomes can put the leadership and legitimacy of decision-makers into question. Badly managing an engagement process and not meeting the targeted goals may give the appearance that the promoters of the engagement process do not have solid leadership abilities. For instance, a company in the water sector that does not achieve the outcomes of its engagement process may raise doubts amongst its shareholders if they perceive it as a sign of weak decision-making capabilities.

3.3.4. Risks

297. Stakeholder engagement raises some risks (figure 41). They can relate to risk of conflict arising between stakeholders during the engagement process, if it is badly managed. There are also risks of opposition and litigation over the outcomes of the process if stakeholders are only involved in the final phase of the policy or project process and do not have any influence over it. Also, stakeholder engagement

processes that are set-up under false or misleading pretences (i.e. giving the illusion of inclusiveness on a particular water issue when the decision has in fact already been made) can lead to undermine the accountability of decision-makers if the participants realise their inputs was in fact never used. Capture by certain groups, inertia to change current practices, and complexity of process or over-consultation can all raise risks of frustration and fatigue among stakeholders. Mechanisms and measures exist to help decision-makers mitigate these risks (see table 5).

298. Not all engagement processes lead to successful outcomes. New officials may come into office while a collaborative initiative is underway and refuse to implement what their predecessors promised. Sometimes, as their leadership or memberships may shift, stakeholder groups that approved a final agreement change their minds and obstruct its implementation (Susskind, 2013). Water management efforts sometimes go against new policies adopted in other sectors that were formulated completely independently. For instance, a situation of energy crisis may cause policy-makers to override their prior commitments to proceed with water management in a certain way. In such cases, officials and stakeholder groups should explain why they no longer support the water management agreements they approved earlier, and look for new opportunities to collaborate.

Figure 41. Four types of risks in stakeholder engagement

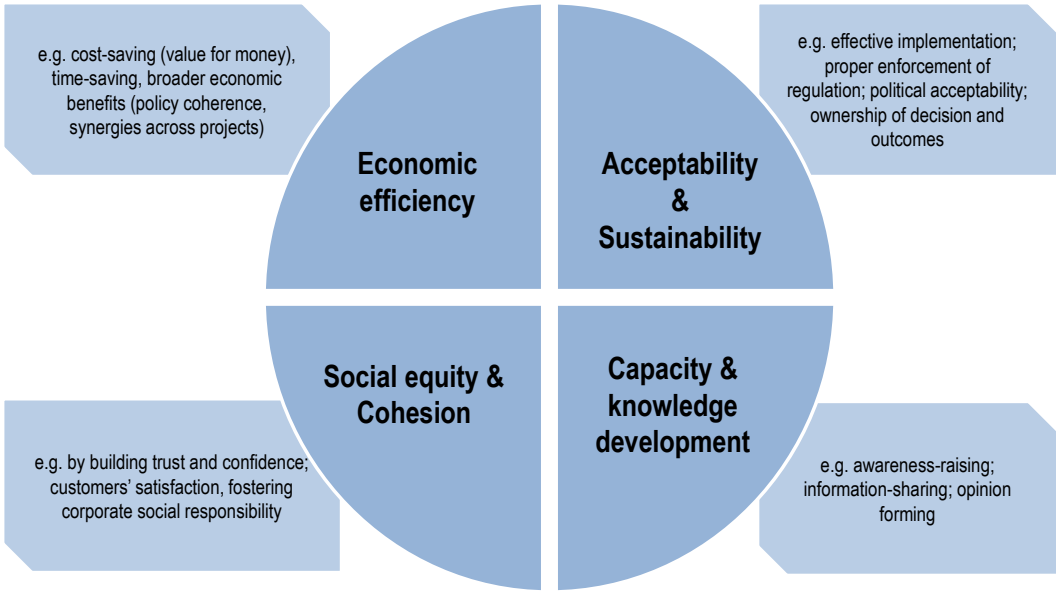
Table 5. Risks and mitigation measures

Risks	Mitigation measures
Conflicts due to diverging objectives and interests	Setting-up negotiation and mediation processes to build consensus
Opposition to engagement process outcomes	Engaging stakeholders as early as possible in the process to ensure ownership
Undermined accountability	Providing a clear rationale and objectives and ensuring integrity and transparency throughout the process
Frustration / fatigue	Defining clear objectives and expectations
	Engaging stakeholders on issues they care about
	Communicating on the impact of stakeholders' inputs in the final outcomes

3.3. Benefits

299. The process of engaging stakeholders may be more costly than the total absence of consultation, but by allowing testing and refining decisions, it is likely to yield short and long-term benefits. Short-term benefits relate to the outcomes of engagement such as better quality decision-making, increased willingness of stakeholders to collaborate to solve common water problems, or greater support for the implementation of a water project or policy. Long-term benefits relate to improved understanding and awareness on flood risks, more confidence in governments' decisions, or capacity-building. Overall, benefits can be categorised around four categories: acceptability and sustainability; social equity and cohesion, capacity development and economic efficiency (figure 42).

Figure 42. Four types of long-term benefits of stakeholder engagement



3.3.1. Acceptability and sustainability

300. Stakeholder engagement contributes to acceptability and sustainability and resilience in water projects and policies. For 62% of respondents surveyed, it contributes to building ownerships for policy and project concerned (figure 43). It also contributes to make water policy and project more sustainable and resilient in the long term (51%) Decisions relying on an inclusive approach are likely to be more future-proof (see box 51). Conversely, policy-making or project processes that fail to engage stakeholders can lead to protests and delays hindering implementation.

Box 51. Engagement to secure buy-in and acceptability for new technologies

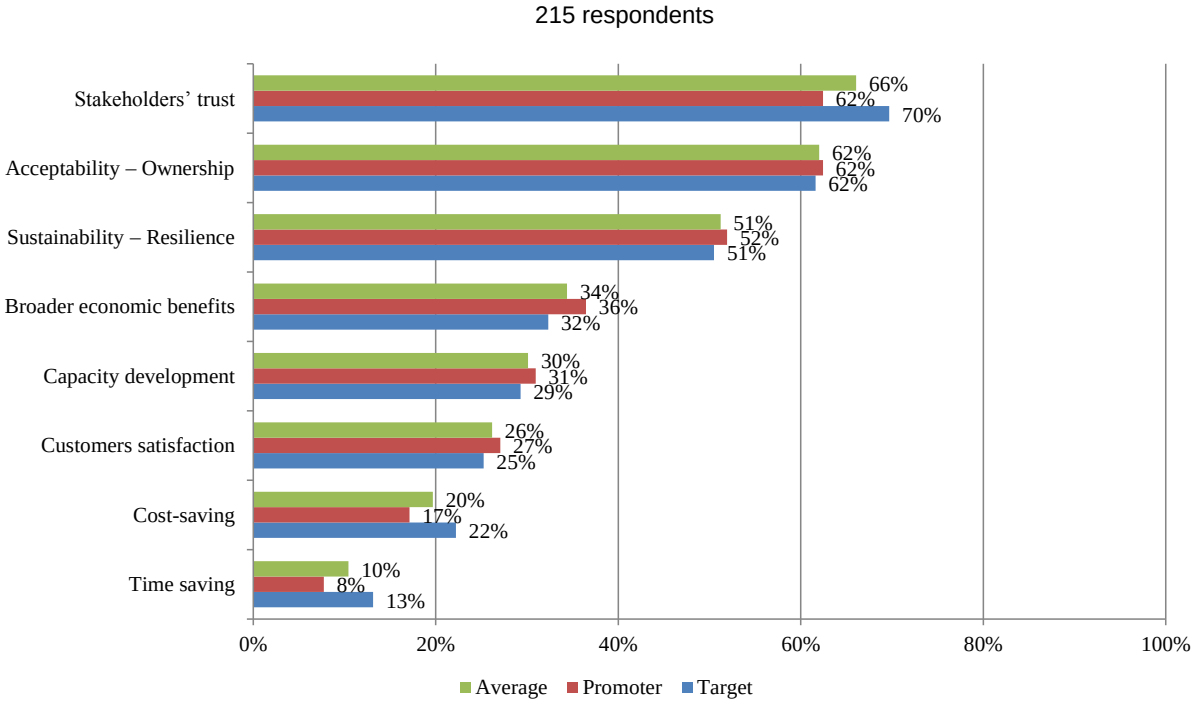
The **Virginia Pipeline Scheme** in Adelaide is one of the largest high quality water recycling schemes worldwide and the first of its type in Australia. It provides water for irrigation in a key horticulture region of the country. A study sponsored by the University of South Australia and *CRC for Irrigation Futures Australia* interviewed 128 irrigators using reclaimed water as part of the Virginia Pipeline Scheme to collect data on their practices and perceptions and investigate the role of community participation in successful implementation of the water reuse scheme. Results showed that effectively designed partnerships between key stakeholders, backed up by sound regulatory and policy measures has led to the effective implementation of the scheme and broader acceptance of recycling through greater awareness.

In Australia, stormwater has increasingly been recognized as an alternative source to augment freshwater supply and address growing water needs. However, the implementation of **stormwater reuse strategies** is challenged by concerns of public health and acceptance, largely explained by a knowledge gap regarding the substitution of treated

stormwater for potable drinking water. An online study was conducted in 2011 by the University of South Australia to gauge the attitude and intention of residents from Salisbury local government area in South Australia to use treated stormwater for non-potable use. The questionnaire was jointly developed by the National Centre for Groundwater Research and Training, the Salisbury city council and the Department of Environment, Water and Natural Resources and provided participants with extensive information on the project objective, method and ethical considerations. Results showed that residents were mostly confused about the sources of reused water and rather unclear about which authorities owned the reclaimed water, but also that they were keen to assist with water sustainability and to use fit-for-purpose water for certain uses instead of potable water. The study proved useful for governments who wanted to have a better understanding of diverging residents attitudes. Conclusion of the studies showed that policy initiatives aiming to promote stormwater use should consider upstream community's expectations and acceptance as well as communicate with residents on a regular basis and respond to inquiries in order to avoid costly policy and project failure.

Source: Case studies submitted by the Centre for comparative water policies and laws of the University of South Australia

Figure 43. Main benefits of stakeholder engagement in the water sector



Note: The graph considers the average between targets and promoters for benefits ranked between 1 and 3 on a scale from 1 to 8.

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance, 2014

301. Stakeholders involved in decision-making and implementation are provided with a unique window onto how decisions and policies are made and put in practice. Therefore, engagement processes have a key role in public scrutiny and in holding decision-makers to account. Inclusive decision-making can also prevent decision-makers from "filtering" the options considered for a water project or policy, thus undermining democratic legitimacy and the accountability of the decision-making processes.

3.3.2. Social equity and cohesion

302. Stakeholder engagement guarantees equity and democracy in decision-making and can provide solutions for conflict situations. For instance, stakeholder engagement contribute to reinforcing stakeholder's trust (66% of respondents surveyed) and improve customers' satisfaction for what concerns the quality of water and sanitation (26% of respondents surveyed). Inclusive decision-making brings

stakeholder together and contributes to strengthened co-operation towards a more cohesive water sector (see example of the Netherlands in box 52).

Box 52. Stakeholder engagement for trust building

In 2008, the Dutch water authority of Amstel, Gooi en Vecht, an important recreational region of central Netherlands, faced a trust crisis with citizens of the area following the introduction of new water level regulation (i.e. flexible surface water level management instead of a fixed water level resulted). This resulted in distorted communication and several lawsuits between the regional water authority and inhabitants, whom were worried about navigability capacity and risk of flooding.

To restore trust and confidence, a participatory monitoring network was set-up by the regional water authority with the support of Deltares to encourage stakeholders to contribute by allowing additional measuring devices to be set-up on their properties and by manually measuring surface water level and groundwater level themselves. The monitoring design and results were discussed and shared during five meetings at which all stakeholders involved were present, as well as hydrological and geotechnical experts.

The process was evaluated sequentially, after the first year and during the second year of activities, through interviews with participating citizens and staff from the regional water authority. During the first year, assessment results showed that the participatory monitoring approach yielded useful additional data and that stakeholders were active and thorough in their monitoring. Water managers and citizens also increasingly communicated water issues related to water levels, and the public developed a better understanding of the advantages of flexible water level regimes, thus expressing more trust in water managers. The Second year's evaluation showed some decrease in interest, mostly explained because participants were satisfied with the information gathered during the first year but also because there less opportunities for stakeholders to meet and discuss.

Overall, evaluation of the project has revealed that the engagement process successfully contributed to expanding the initial monitoring network and increased insights on hydrological processes and changes. More importantly, it contributed to a strong improvement of communication between stakeholders such as farmers, recreational entrepreneurs and other citizens on the one hand, and the regional water authorities on the other hand, and a shared understanding among all regarding the management of the water system. There has also been less resistance of stakeholders against flexible water levels.

Source: Case study submitted by Deltares

303. By having a say in the outcomes, stakeholders are more likely to experience a degree of responsibility regarding the outcomes the decision-making process, rather than if they were not included and perceive the final decision as being forced on them. Thus, engaging stakeholders contributes to a greater sense of ownerships regarding the outcomes of the engagement processes and the following action taken, be it the construction of new water infrastructure, or the implementation of a water policy.

3.3.3. Capacity and knowledge development

304. Stakeholder engagement helps strengthen capacity building and empowerment. It can fulfil an educative purpose allowing participants to develop their capacities to articulate their interests and concerns and providing their insights to the decision-making and implementation processes. The process of jointly designing and implementing water policy or project can reinforce local organisations, build up confidence, skills and capacity to cooperate, and raise awareness and critical appraisal. In this way it empowers people, including formerly under-represented or excluded actors and enables them to be part of the decision-making. On average, 30% of responses show that stakeholder engagement allows for capacity development.

305. Stakeholder engagement contributes to knowledge improvement and awareness-raising. Water challenges are complex and multifaceted and often require different kinds of information and expertise to be fully tackled. Encouraging communication and collaboration across different stakeholders is a useful way to pull knowledge from different fields together. Stakeholders engaged then share their insights and

together produce new knowledge (be it technical or non-technical) that improves the overall understanding of water issues at hand. By fostering knowledge sharing and production, stakeholder engagement also raises awareness among the actors involved regarding water, but also the roles and responsibilities of others involved in the policy or project process (see box 53).

Box 53. Knowledge development : A mechanism and an output of stakeholder engagement

Developing feasible, implementable strategies to address water issues is challenging. Decision-makers are confronted with problems that are interrelated and difficult to understand (such as providing water security across agriculture, industry and domestic use), with multiple interests like environmental conservation and economic growth, and with an uncertain future regarding climate change, water demands and supplies. In such a setting is the role of knowledge in stakeholder engagement vital to develop feasible strategies for water issues. Opening up processes of knowledge production to various stakeholders (researchers, policy-makers and other societal actors) enables them to contribute their knowledge to the complex water issues and proposed solutions. Stakeholder engagement and knowledge are therefore related, since it helps decision-makers to structure the complexity of the water issues they are dealing with.

Knowledge development with stakeholders can therefore be a primary intention of an engagement process. Stakeholders can be involved in decision-making for the sole purpose of either pooling existing knowledge together or generating new knowledge to support the policy/project process and impact the decisions. This is the case of expert panels in which a variety of experts are engaged based on various fields of expertise to provide highly specialised input and opinions, debate and discuss various courses of action and make recommendations. Also, crowdsourcing is an increasingly common practice according to which needed ideas or content are obtained by soliciting contributions from a large group of people. Alternatively, engagement processes can lead to secondary (knowledge) intentions of social learning and knowledge sharing. River basin organisations bring a range of actors at the watershed level together to jointly design river basin management plans and implement IWRM principles. Such participatory initiatives contribute to dialogue which leads to information and experience sharing, thus strengthening their knowledge.

Different types of stakeholder engagement exist around knowledge development to respond to water issues. Knowledge can be interactively developed with a diversity of stakeholders in the planning phase of water projects (Seijger et al., 2013). Or, knowledge can be developed across different policy domains of flood control and nature to seek multifunctional solutions (Janssen et al., 2014). Also, stakeholders can participate in monitoring water systems to enhance knowledge about the water system (Box 52).

However, knowledge can also be the cause of challenges, struggle and conflict in decision-making. Decision-making processes on water often involve different and fragmented forms of knowledge that are not always easily comparable. In addition, information and knowledge may be sensible and result in tensions between actors. Also, the capacity of stakeholders may be limited to understand the knowledge that is exchanged.

Yet when these challenges are addressed, there are various benefits of stakeholder engagement in knowledge production, both for decision-makers and engaged stakeholders. For decision-makers, these benefits include a better understanding of the issue at hand (e.g. local stakeholders have provided insights on local aspects); innovative ideas that can improve a strategy/policy/solution; enhanced feasibility of solutions and policies (in terms of finance, legal aspects, public support). For engaged stakeholders, the benefits may cover individual learning, the incorporation of their needs in the crafted policy or strategy, and an enhanced understanding of other stakeholders and their needs.

Sources: Based on Janssen et al. (2014); Seijer et al, (2013).

306. Just as for costs, categories of stakeholders do not enjoy the same benefits from engagement processes. For 56% of civil society organisations surveyed, capacity development is a primary benefit that comes out of inclusive decision-making. Citizens are offered the opportunity to learn about water issues and have access to new information. Another interesting example is customer satisfaction, which is for 33% of regulators and 30% of donors and investors surveyed a crucial positive impact of engagement processes, while only for 15% of citizens and 11% of business think so.

3.3.4. Economic efficiency

307. Stakeholder engagement contributes to economic efficiency. It can help optimise resources invested and produce better policy outcomes and cost-effectiveness in the long term. It also contributes to

broader economic benefits related to greater policy coherence and synergies across sectors and projects. In the survey, 29% of national governments pointed out cost-saving as a major benefit. Stakeholder also contributes to broader economic benefits such as better policy coherence and synergies across projects (34%).

308. Stakeholder engagement helps reducing the costs of conflict and contention. By encouraging a mutual education across stakeholders regarding their various interests and needs, it contributes to building consensus and common agreements on issues that might have raised tensions otherwise, such as water allocation across various users in a river basin (see example in box 54).

Box 54. Engaging stakeholders to solve the water conservation economic dilemma

In France, at the turn of the millennium, the challenges raised by resource conservation entailed the emergence of new expectations from local authorities and civil society. The economic model for water and sanitation services appears to be fragile, relying on water volumes sold, often benefiting large water users and threatening investment on the long term. Thus, in application of its 2006 sustainable development road map, Lyonnaise des Eaux (LdE) launched the "New Ideas on water" program in 2010. It combines various mechanisms at different scales such as a web consultation platform (100 000 visitors, 400 contributions), 3 experts fora at the national level, 15 regional fora with 700 local elected representatives and LdE managers, a targeted PR campaign (particularly towards decision makers and the youth) and 2 surveys among elected representatives and the French population at large. These various mechanisms converged in 2012 with formalising the "Contract for Water Health" that is structured around 12 commitments and which implementation is assessed yearly by the extra-financial rating agency Vigeo.

The commitments are meant to be adapted according to local issues and to be incorporated into LdE contracts with its clients. For instance:

- 194 local charters of governance have been signed with clients;
- Lyonnaise des Eaux created the joint-venture Onova with the cooperative Terrana to develop environmental services to agriculture;
- In 2013, 16 contracts included a part of remuneration based on environmental performances of LdE;

This allows a shift away from a model solely based on volumes, which does not correspond to the current issues surrounding the conservation of water resources, to index operators' remuneration on their environmental and societal performance. Innovative pricing solutions have been implemented to reconcile the imperatives of access to water for all and resource conservation. Dinkirk, Orleans, Hyeres, Laon or Dijon are emblematic contracts to this regard.

This process has deeply transformed the company, its offers just as its managerial culture. It contributed to a clear evolution of the corporate image among stakeholders and put water issues on the political agenda. To a certain extent, it even impacted the French regulatory framework as the article 28 of the 2013-312 law (April 2013, also called the "Brottes law") encourages local governments to experiment new tariff schemes to be evaluated after 5 years by the National Water Committee.

Source: Case study submitted by Suez Environnement

Conclusion

309. Without proper evaluation, stakeholder engagement cannot be improved. Evaluations should be a critical step for decision-makers to identify which mechanisms and strategies are most cost-effective so that good practices can be replicated. It can also support the development of a business case for action-oriented stakeholder engagement that incentivises decision-makers to invest in inclusive approaches. They can also provide a reality check to debunk perceptions. In particular, the costs for participants are often underestimated, while demands for them to engage in decision-making continue to grow, contributing to frustrations and demotivation in cases where they cannot anticipate their impact and actual contribution to the decision-making process.

310. Different costs and benefits accrue to different stakeholder groups at different times and require managing trade-offs to ensure successful engagement processes and outcomes. There is a dearth of knowledge on the distributional impacts of stakeholder engagement. The danger is the potentially inequitable distribution of the benefits of engagement. An efficiency-enhancing engagement process, if

successful, should deliver substantial benefits in the long term. Yet, any change that brings about benefits to the society as a whole but has negative consequences for certain groups may face opposition by the latter. If they have sufficient economic and political power and are well-organised, the "losers" may succeed to slow down or block the change.

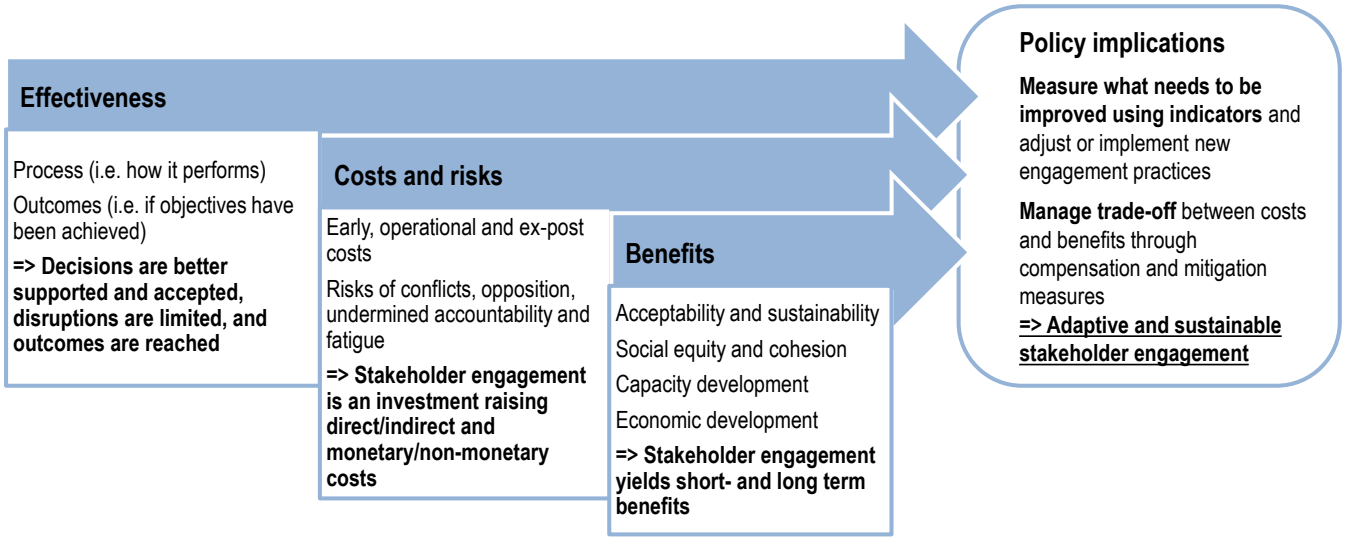
311. The sustainability of stakeholder engagement will not only depend on the net difference between aggregate costs and benefits, but also on how they are distributed between stakeholders, and on stakeholders' willingness to bear them. Also, water policy reforms and large projects can induce important adjustment costs, especially in the short term, while the benefits of such initiatives may only arise in the long term. It is crucial to critically reflect upon the ratio of costs and benefits during engagement processes, determine the appropriate trade-offs related to this dual temporality, and ensure these are communicated and well-understood by stakeholders to avoid any frustrations.

312. Whether, when and how to compensate those who will lose out as a result or a reform of project is a critical concern for decision makers. Failure to compensate the likely "losers" may reinforce opposition and increase costs, both monetary and non-monetary (delays, conflicts). Compensation or concessions to potential losers do not necessarily compromise or contradict the effectiveness of the engagement process or the end result. Some compensation strategies consist in long transition periods where, for instance, new water laws or regulations are incrementally put into practice, allowing time for adjustments. Compensations can also take the form of adoption of policies in another sector (energy, agriculture, land use) that offset the cost of reform for some groups.

313. Conducting evaluations on the costs and benefits of stakeholder engagement can provide the evidence to guide effectively decision-making and implementation with tangible data and analyses. This is especially true in the water sector where stakes are widely distributed among diverse stakeholders and perceptions vary from one category to another, with different influential power and reactive devaluation strategies. However, careful consideration is needed so as to not compare costs and benefits *stricto sensu*. The investments needed for stakeholder engagement are rarely proportional to the benefits it creates. Often, costs of stakeholder engagement are short-term (e.g. early and operational costs) while benefits may arise during the engagement, immediately after or in the long term. Therefore, an engagement process considered as costly may still yield great long-term benefits and therefore be worth investing in and conducting. The perspectives of the stakeholders involved are critical to defining the costs and benefits of engagement. It is also critical to include these perspectives in the evaluation exercise, alongside the interests of the decision makers, and to consider the wider impacts on local communities and society as a whole to understand the true costs and benefits of participation (Involve, 2005).

314. Stakeholder engagement takes place in changing environments, therefore engagement processes need be considered in a dynamic way. As mechanisms may not work or new information may arise, time must be allowed to assess whether the process should be adjusted. Due to the often long-term nature of reform processes or infrastructure projects, it is important for stakeholder engagement to remain flexible and resilient to adapt to changing circumstances. Even when all conditions are in place for engagement processes to be successful, they might still fail to reach the expected outcomes because of the dynamic, complex and systemic political economy environment (figure 44).

Figure 44. Towards adaptive and sustainable stakeholder engagement



CHAPTER 7. PRINCIPLES AND A CHECKLIST FOR ACTION

Introduction: Why are principles needed?

315. In a rapidly changing and connected world where climate change, population growth, urban development, natural disasters and water and food scarcities are likely to cause damages for societies and the environment, it is more than ever time to focus efforts and resources into enabling all stakeholders to act together shape water governance and to manage these pressing challenges. This is not an easy task but setting-up the enabling environment for collective management of water can allow actors to collectively face these struggles and meet the needs of current and future generations.

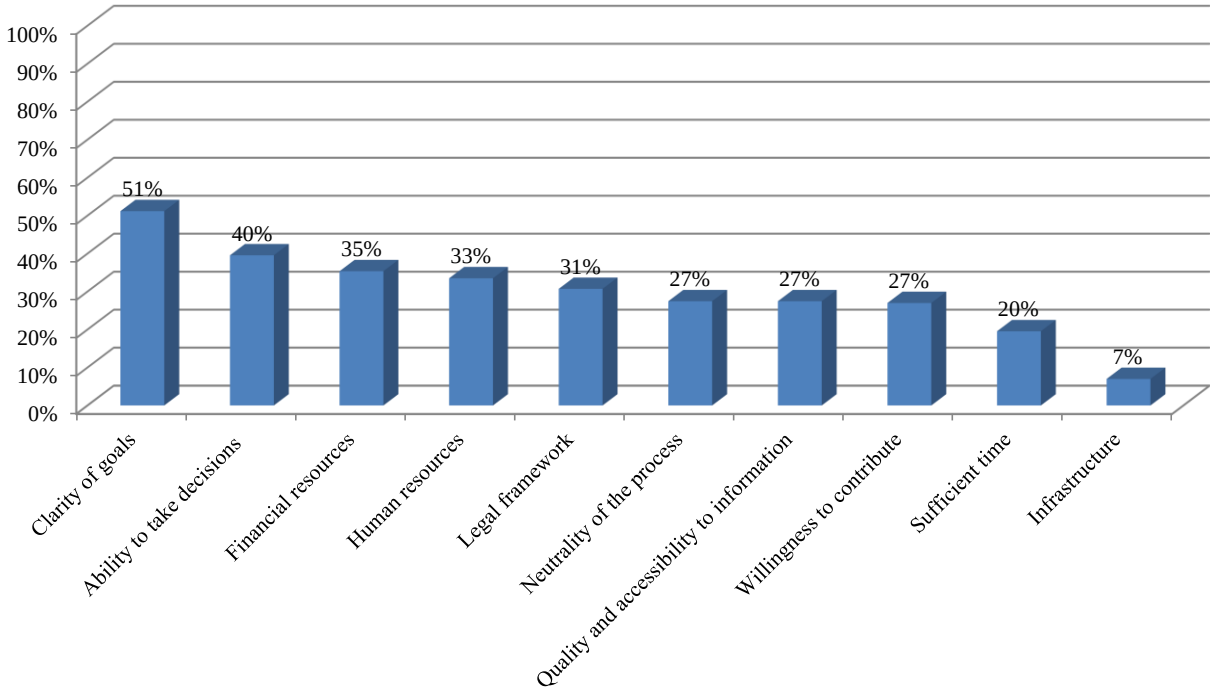
316. Inclusive and consultative policy processes are no panacea for addressing all of the challenges facing the water sector but they can contribute to more effective decision-making and implementation processes and to better water governance at large. Stakeholders that compose the water sector play a crucial role in determining the outcome of a given policy or project. They can initiate and support it, but they can also oppose these efforts, attempt to block them or to divert them to serve their own aims. Stakeholder engagement provides opportunities to share objectives, experiences and responsibilities, and be more supportive of solutions that will be reached while voicing concerns and interests. As such, stakeholder engagement is a means for groups and individuals to share tasks and responsibility in a sector where they form part of the problems as well as part of the solutions.

317. Stakeholder engagement on water has expanded, under diverse forms and for multiple purposes. It has enabled more and more actors and practitioners to get involved but it also faces some obstacles and raises some costs that hinder its contribution to and impact on the effectiveness of water projects and policies' objectives. For engagement processes to be relevant a careful balance between what they try to achieve, the resources they require, and whether they succeed in reaching the intended objectives is needed. Framework conditions have been identified and can provide the foundations for setting-up the enabling environment towards impactful stakeholder engagement in water governance.

318. Critical aspects of governance should guide stakeholder engagement frameworks. First, *equity*. Fair access to engagement opportunities is key to ensure a balanced and representative process that takes into account diverse ideas and opinions Second, *transparency.* Being transparent and open about the ways to identify stakeholders, choose engagement mechanisms, define the objectives pursued can help to raise interests among stakeholders and develop an understanding of and support for the final decisions. Third, *accountability*. It is not sufficient to provide platforms for stakeholder to share their ideas. Their inputs need to be actually taken into account by decision-makers. Procedural transparency is key to ensure the legitimacy of decision-making processes and their outcomes. Fourth, *trust*. Engagement processes may bring together groups with opposing views, which do not always trust that their views will be taken into account. Assuring participants that this is the intention of the process is important to ensure productive discussions and exchange of opinion.

1. Conditions for success: Highlights from the Survey

Figure 45. Conditions for success of stakeholder engagement



Note: The graph considers the conditions for success ranked between 1 and 3 on a scale from 1 to 10.

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance, 2014

1.1. Clarity of goals

319. Clarity on the common goals for water management as well as the objectives, roles and responsibilities of the overall engagement processes is crucial to create collaboration in stakeholder engagement for 51% of respondents surveyed (figure 45). Decision makers need to communicate on the outcomes they are trying to achieve in terms of water management and governance and the purpose of the process, and clarify ex ante what participants will actually be asked to do and how the outputs will be used. In order for stakeholder engagement to effectively create collaborative decision-making and problem-solving, all stakeholders involved in a policy/project process should know the aims, rules of the game, including what is expected of them, and the targeted outcomes. This helps avoid potential disappointment with regards to the influence of stakeholders over the process and its outcomes, and improves the credibility of the process for all contributing. In the absence of clear goals, it becomes more difficult to select the right mechanisms for the right stakeholders.

1.2. Ability and capacity to take decisions

320. Engagement process should not only involve stakeholders but ensure they have the capacity of influencing and improving the outcomes. The ability of stakeholder to take decisions was considered an important condition for stakeholder engagement by 40% of respondents surveyed. Stakeholder engagement should not be limited to the creation of avenues for actors willing to get involved, but also ensure that they have the ability to have an impact through capacity building and education. It implies for decision-makers to enter the engagement process consciously knowing they will have to share some decision-making power with other actors that might not share the same views of interests. An equitable distribution of power

among stakeholders engaged is key to provide useful and impactful contributions and to take decisions collectively. It should be fostered through trust between the parties involved and confidence in realistic results.

321. The ability of stakeholders to take decisions can be fostered by external and internal actions. In the former case, decision-makers can encourage actors engaged in decision-making to take on more power and influence using a range of incentives, grants as well as awards mechanisms. In the latter case, changes in internal organisational culture can encourage easier exchange and critique with outside stakeholders and set-up incentives that encourage decision-makers to tap into new ideas and suggestions.

1.3. Financial and human resources

322. The needed financial and human resources should be secured to support stakeholder engagement. It is an important factor for success for respectively 35% and 33% of respondents surveyed. Financial resources are also needed to set-up the appropriate engagement tools. Whether it is the creation of an online platform or the organisation of the conference, implementing them requires dedicated and qualified personnel that carry the process through and support stakeholders involved to maximise their contribution to the process. Securing the necessary resources to sustain the process of engagement often resonates with the level of competence of decision-makers to set-up meaningful and sustainable inclusive decision-making.

1.4. Quality and accessibility of information

323. Result-oriented engagement processes imply that stakeholders be aware and informed about the issues concerned and about the objectives of the decision-making process. Information is power. Some stakeholders will need to be persuaded of the benefit that they will receive from sharing information and developing a more holistic understanding of the issues. Information should be shared in an accessible way, without using complex concepts and jargon.

324. People have different levels and types of knowledge on water issues and may process information differently. Therefore, communication and decision-making cannot be purely a rational process. Information should be presented under different forms, hard facts and evidence, opinions, or as personal experience. Some stakeholders may need training and support to engage on an equal footing with the others. This may be in the form of information that enables them to contribute to the discussions, or with the provision of data on likely impacts for their area or sector.

1.5. Time and timeliness

325. Time and timeliness are two key factors for success. Lack of time is one of the most common constraints of many engagement processes. Like any conventional processes, stakeholder engagement requires time to develop, to raise awareness and to build trust. Stakeholders also need sufficient time to realistically and effectively participate (e.g. early notice of meeting to get prepared). A balance therefore needs to be reached between the need to make decision quickly and the need to involve stakeholders in making that decision. As important, meaningful stakeholder engagement needs to take place at several stages during the decision-making process, from the early steps of conception and design, to development, implement and assessment. Therefore, the decision-making process and the timing of engagement both need to be well-planned.

326. Stakeholder engagement can raise short-term costs and risks, but when sufficient time is allocated, these are often outweighed by long-term benefits. An important determinant of successful engagement processes is whether stakeholders are willing to accept incremental gains over a long period of time. The challenge therefore becomes optimising long-terms benefits while reconciling disparate

stakeholders' needs and expectations and developing a consensus across actors involved on such trade-offs.

327. Stakeholder engagement should take into account hydrological, administrative and temporal scales. Indeed, stakeholders involved should understand that previous decisions on water resources management and water provisions set the scene wherein decision-makers operate. Also, organisations involved in stakeholder engagement work on different timelines and schedules. Funding for strategies and policies may become available at different points in the future; legislation may introduce other timelines (e.g. on spatial planning or on evaluation cycles on water quality and flood control); and interests of stakeholders may pertain to different temporal scales. In addition, governments may be responsible for strategic long-term goals, yet they need to ensure that their short-term decisions are linked to long-term objectives. For instance, in the Netherlands, adaptive delta management approaches have become the leading concept to connect short-term decisions to long-term issues of water safety and freshwater supply.

2. Principles for stakeholder engagement and a Checklist for Public Action

328. Governments at all levels have a critical role to play in setting the enabling environment for result-oriented, effective and impactful stakeholder engagement. A balanced combination between government support and bottom-up efforts is needed. Central and subnational authorities can incentivise a wide range of options that can back up effective stakeholder engagement. They include enhancing legal frameworks (hard and soft law as ISO standards), supporting efforts for data collection (crowdsourcing, open data strategy with universities), innovative contracts, shareholding, interest-pay-say and capacity building (staff training in public administration). These instruments are likely to prevent engagement fatigue and provide concrete benefits while limiting the cost of engagement.

329. To guide public action in that direction, the OECD has developed a set of overarching Principles on Water Governance intended as a standard for governments to follow when designing water policy. Within such Principles, a building block on stakeholder engagement should lay down the following framework conditions for effective, fit-for-purpose and outcome-oriented stakeholder engagement.

330. The Principles are intended as a tool to transform policy frameworks related to stakeholder engagement in the water sector. OECD constituencies are policy-makers and the Principles on stakeholder engagement offer opportunities to influence public debate and actions at all levels of government while mitigating fears and resistance to change (i.e. reluctance to shift the power balance). Although engagement processes cannot be easily replicated from one context to another, the Principles can provide some indications of areas for improvement and provide for a common ground that policy-makers and practitioners can share.

331. The set of Principles is structured around 6 dimensions of stakeholder engagement (see table 6). These dimensions are interrelated and should not be considered in isolation but rather in a systemic view and require a holistic approach to deliver expected outcomes

Table 6. Principles on Stakeholder Engagement in Water Governance

Inclusiveness & Equity	**Principle 1**: Map all those who have a stake in the outcome or likely to be affected, their responsibility, core motivations and interactions
Clarity of goals, Transparency & Accountability	**Principle 2**: Define the ultimate line of decision-making, the objectives of stakeholder engagement and the expected use of inputs
Capacity & Information	**Principle 3**: Allocate proper financial and human resources and share

	needed information for result-oriented stakeholder engagement
Efficiency & Effectiveness	**Principle 4**: Assess regularly the process and outcomes of stakeholder engagement to learn, adjust and improve accordingly
Institutionalisation, structuring & integration	**Principle 5:** Embed engagement processes in clear legal and policy frameworks, organisational structures/principles and responsible authorities
Adaptiveness	**Principle 6**: Customise the type and level of engagement to the needs and keep the process flexible to changing circumstances.

332. To support the implementation of the Principles, a tentative Checklist for Public Action is suggested to help government foster inclusive decision-making and policy/project implementation on water. Developing success criteria for stakeholder engagement is a difficult task since stakeholders perceive success differently. Bearing these difficulties in mind, the following Checklist suggests some priority questions for governments to assess framework conditions for enhancing stakeholder engagement related to each of the 6 principles, and a selection of tools and country practices.

333. A set of tentative indicators is also suggested in the Checklist to monitor the effectiveness of engagement processes and identify areas of improvement (box 55). They can be tracked using a red, orange and green traffic lights system:

- *Red lights* indicate that the principle is not effectively taken into account when developing and implementing stakeholder engagement and requires urgent attention;

- *Yellow lights* indicate that the principle is somewhat taken into account and in stakeholder engagement but remains partially a challenge and requires further efforts to have the potential for positive impact;

- *Green lights* indicate principles that have been well taken into account in stakeholder engagement and have had a positive impact on the process and its outcomes.

Box 55. Water governance indicators : Challenges and ways forward

Tracking the implementation of the below-suggested principles on stakeholder engagement requires proper identification of selected indicators. As such principles target primarily decision-makers at national and sub-national level, so do the indicators suggested in the tentative Checklist for Public Action of this report.

Indicators can take the form of measurements of an objective to be met, resources to be mobilised, effects obtained, gages of quality or context variables. In the context of policy analysis, indicators can be helpful in *setting policy priorities* and in *benchmarking* processes. They are used to *monitor* and *evaluate* policies, contributing to reach different aims: while monitoring aims to track (and possibly promote) continuous progress, evaluation aims to assess if particular objectives have been achieved. In doing so, evaluation frequently makes a specific attempt to link cause and effect and to attribute changes in outcomes to programme activities.

Even when standardized metrics exist, the effectiveness of indicators might be hindered by a number of factors:

- *Technical issues related to indicators' construction*: the construction of indicators is not an easy task and it might imply several issues that limit their employment in the decision making process, such as technical problems related to measurement errors, coherence of measurements, biases in expert assessments.
- *Complexity of water governance*: the definition of water governance encompasses multiple dimensions (institutional, political, social, environmental and economic ones) and involves a multitude of actors at different levels of government, in the public and in the private sector. Being a complex concept, its measurement is not straightforward.

- *Uncertainty of the context*: policy-makers have limited control on factors that might affect the effectiveness of water governance (e.g. fiscal crisis, climate change conditions, etc.). The uncertainty of the context might require a certain degree of adaptability, affecting choices and capacity of policy-makers and planners to implement proper policies and strategies for efficient water governance at different scales.
- *Continuity*: the scarce availability of data can hinder the measurement of progress year after year;
- *Completeness*: when focused on specific aspects, indicators fail to capture the whole picture of the water governance system. However data availability represents a great challenge, leading to scarce range of choices when it comes to "what" to measure. Moreover "poor governance produces poor data" and vice-versa: generating data, even when not yet available, might favour good governance, as indicators can spot problems, create incentives for changes and trigger changes.
- *Comparability*: even when indicators on several aspects of water governance are available, comparisons across countries are not always feasible. Indicators are not necessarily standardized measures applicable to all contexts unconditionally, since the concept of governance itself may vary from country to country.
- *Difficulty in establishing causality*: as for other policies, understanding the causal linkages between policies and results is critical in the water sector. However, an established indicator system might not be able to assess whether or not benefits are the results of certain actions implemented to achieve "effective water governance". This is specially the case when indicators are not only used as a *tick boxes exercise*, but as a tool through which evaluating linkages between inputs and outputs.

The following 10 questions can help define fit-for-purpose indicators:

1. What to measure? Policy indicators will measure the implementation of the OECD Water Governance principles→ Definition of which type of indicators (de jure, de facto, perception based, etc.)
2. What is the scope? Assessment of the implementation of principles (possible stage approach) → Benchmark?
3. At which scale should the indicators be defined? Sub-national, Basin, National, International level → Difficulty of finding a solution applicable to all countries.
4. Whose views should be relied on? Survey, experts, users, others?
5. How to build up the indicator? Criteria need to be clearly stated and methodology (i.e. several separated indicators, composite indicators, assessment performance tools) needs to be chosen considering the purpose and the availability of data.
6. Who are the recipients? Governments, Civil society, Corporate sector → Identification of the audience
7. How will indicators be used? Information? Decision making?
8. Who will contribute to the monitoring of the implementation of principles? Identification of institutions/ actors
9. How to ensure the replicability of the indicators? Identification of feasible solutions for the replicablity of the indicators every 3 years.
10. How the information should be disclosed? Identification of range of options for sharing data collected

Source: *OECD, 2015 – forthcoming Water Governance Indicators*

334. Together, the Principles, the tentative Checklist for Public Action and the indicators can encourage governments, and other actors in the water sector, to catalyse efforts for making good practices more visible, and to take action towards more impactful stakeholder engagement in support of better water governance.

335. The many case studies presented in the report will be subject to more in-depth work to analyse similarities and differences, and draw policy lessons[9]. Cross-case reasoning can help identify patterns or correlation between different forms of stakeholder engagement and specific domains or contexts; and to

[9] A dedicated OECD Working Paper will be published in the first semester of 2015 to that effect.

elaborate strategies (e.g. which mechanisms work best in which situations [institutional programmes, concrete projects]) in support of effective stakeholder engagement in the water sector. This would allow including further parameters when analysing different processes of governance that apply in different countries and providing tailored policy recommendations towards more inclusive water governance frameworks.

INCLUSIVENESS AND EQUITY

Principle 1: Map all those who have a stake in the outcome or likely to be affected, their responsibility, core motivations and interactions. Stakeholder mappings should be drawn in relation to a specific issue. Such mapping should pay attention to newcomers, players outside the water sector, and traditionally marginalised groups. This is critical to ensure that all stakeholders are identified and properly involved throughout the policy/project cycle. Finding the right balance between inclusiveness and empowerment of stakeholders is also important. Engagement processes (and related mechanisms) need to accommodate the needs of stakeholders with varying levels of interests and resources to ensure inclusivity and accessibility. Careful consideration is also needed regarding the risks of potential consultation capture from over-represented categories, to the detriment of unheard voices, as well as risks of prejudice regarding a particular category of stakeholders. Equity between present and future generations in a perspective of sustainability should be promoted.

Preliminary Checklist

- ✓ Are the core water governance functions and the stakeholders formally responsible for discharging them clearly identified?
- ✓ Have all stakeholders likely to influence the water policy/project under discussion been engaged, including in other sectors, and those who can obstruct final decisions?
- ✓ Are rules in place to allow public dissent opinions?
- ✓ Are stakeholders' interests and motivations clearly determined, as regards the water policy/project under discussion (e.g. demands, aspirations, potential inputs [information, facts, financial resources])?
- ✓ Are institutional/organisational bottlenecks preventing stakeholders from engaging effectively diagnosed?
- ✓ Are mitigations measures (incentives, rewards, sanctions) in place to overcome them?
- ✓ Are incentives in place to involve less-heard groups such as women, youth and the poor in water decision-making that affect them?
- ✓ Are safeguards in place to prevent risks of conflict of interest and/or situations where certain stakeholder groups can be influenced (e.g. through economic incentives)?
- ✓ Are the results of stakeholder mappings shared with all those involved and the greater public?

Indicators

Informed and transparent identification and selection of stakeholders to be involved in the engagement process, based on a clear understanding of their roles, responsibilities, interests, motivation and interrelations	
Broad outreach to inform individuals about the water policy/project process in order for them to decide whether and/or how they want to be involved	

Completion of a situation assessment to identify options for engaging under-represented stakeholders and options for funding resource-constrained stakeholders	
Stakeholders' motivations and expectations have been clearly identified (e.g. survey, analytical study, report)	
Early assessment of the concerns and ideas of all stakeholders concerned (e.g. individual interviews with full range of key stakeholder groups by a neutral entity)	
Interrelations/linkages between stakeholders to be involved have been determined and explained to all those engaged	
Equal share of representation among categories of stakeholders involved	
Specific attention is devoted to the stakeholders outside the water sector (e.g. farmers, business, institutional investors, planners, etc.)	
Broad availability of stakeholders' mappings	

Selected tools and practices

OECD institutional mapping of roles and responsibilities in the water sector, as carried out in the Netherlands (http://www.oecd.org/gov/regional-policy/water-governance-netherlands.htm), Mexico (http://www.oecd.org/gov/regional-policy/makingwaterreformhappeninmexico.htm) and Italy (http://www.oecd.org/env/country-reviews/italy2013.htm)

Suez Environnement Stakeholder Engagement Toolkit for water utility managers (box 18)

CLARITY OF GOALS, TRANSPARENCY AND ACCOUNTABILITY

Principle 2: Define the ultimate line of decision-making, the objectives of stakeholder engagement and the expected use of inputs. Clarifying the goals and reasons for engagement is key to build mutual understanding of how stakeholders may be involved in the process, and for informed stakeholders to provide quality contributions in line with expectations. Objectives of stakeholder engagement can be contributing to the formulation of river basin plans at watershed level, service delivery, awareness-raising (e.g. on water costs, risks, future trends), auditing, risk mapping, as well as performance monitoring. Whatever the purpose, it should be made explicit as well as the authority responsible for decision and its willingness to take stakeholders' ideas on board in doing so to enhance confidence in the value of the process. Transparency and accountability in how the engagement process is designed and implemented (e.g. stakeholder mapping methods, use of stakeholders' inputs) is crucial to improve credibility and legitimacy, and build trust among stakeholders involved. Diligent work is necessary to ensure the engagement process is fair and equitable and to reliably engage stakeholders.

Preliminary Checklist

- ✓ Have ex-ante strategies been clearly designed to frame the engagement process?
- ✓ When defining the strategies, have the following elements been addressed?
  - The decision-making line (i.e. who manages the outcomes; who reports back on the inputs from the engagement process)
  - The level(s) of engagement targeted (ranging from information-sharing to co-decision-making) in line with the types of stakeholders targeted and their stakes in the process

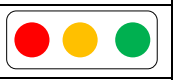
- The timeline of the engagement process, taking into account political calendar
- The intended objectives and expected outcomes
- How engagement inputs should be used and responded to
- How stakeholders can challenge decisions when the proper process has not been carried out (i.e. code of conduct for all those engaged)

✓ Are stakeholders informed of their entitlements, responsibilities and what is expected of them in the engagement process, including the level of influence, to ensure a shared understanding of the process is developed?

✓ When carrying out the engagement process, are the following accountability criteria taken into consideration:

- Inputs from stakeholders are openly considered and addressed
- No category of stakeholders is disadvantaged by the design of the engagement process (i.e. all stakeholders perceive they have a the opportunity to achieve their goals)
- The final outcome reflects a balance of the various interests and needs of stakeholders

Indicators

Clear understanding of the engagement process's framework in terms of line authority, level of engagement defined, proposed timeline, targeted objectives, expected outcomes, use of inputs and code of conduct	
Development and implementation of an engagement plan, with stakeholder input points clearly outlined and the full range of perspectives incorporated	
Clear understanding of the expectations of the stakeholders involved regarding the process and the outcomes	
Development of a master schedule with detailed timeline, key deliverables requiring inputs and expected stakeholder meetings over the course of the water policy/project process	
Consistent and appropriate communication between promoters of the engagement process and stakeholders involved (e.g. to distribute important information, to gather useful feedbacks, etc.)	
Dissemination of concise summaries of all stakeholder meetings	
Feedback to stakeholders on how their input has been taken into consideration and how that input has shaped interim and final decisions	

Selected tools and practices

In **Milan**, a memorandum of understanding was signed between stakeholders (regional and local government, civil society and citizen committees) to enhance the dissemination of information on water quality, consumption, and treatment techniques etc. This information is accessible though the online platforms of all stakeholder for greater transparency and accountability. (Box 5)

In the **Netherlands**, the Dutch water authority of Amstel, Gooi en Vecht, with the support of Deltares, set up a participatory monitoring network to encourage stakeholders to contribute in the measuring and monitoring of groundwater levels themselves. This type of monitoring provides additional clarity and can rebuild trust. (Box. 52)

CAPACITY AND INFORMATION

Principle 3: Allocate proper financial and human resources and share needed information for result-oriented stakeholder engagement. Improving the overall contribution to substantive discussions and decision-making requires access to information, technical expertise, experience-sharing and funding in the right format and sufficiently on time (planning) to realistically and effectively participate. Supporting

two-way information-sharing through consistent and appropriate communication channels, including web-based technologies, are key as is ensuring the financial affordability of the engagement process to ensure the effective engagement of all having a stake, convey accurate, trusted and accessible information to diverse sectors, foster opinion-forming among stakeholders and build support to the process. The interpretation and application of these resources and information require competences and capability development at all levels to enable sustainable stakeholder engagement (e.g. skills, social learning).

Preliminary Checklist

- ✓ Have skills and competencies of stakeholders to be engaged been reviewed?
- ✓ Are the appropriate formal and/or informal and affordable engagement mechanisms in place to engage targeted stakeholders?
- ✓ Which knowledge is needed to support the engagement process? From which stakeholders and disciplines?
- ✓ Is professional facilitation and mediation in place to organise dialogues between stakeholders involved?
- ✓ Has a detailed budget been drawn-up to support the engagement process with short, middle and long-term milestones?
- ✓ Are programmes of learning and development available to support the knowledge and skills necessary for effective stakeholder engagement, including specific training for women and youth participation?
- ✓ Are requirements and avenues in place to easily access and share information on the water policy/project under discussion? The information should:
  - Be in simple language;
  - Include visual displays;
  - Include open data to enable third parties to reuse and disseminate it;
- ✓ Have specific targets for communication been defined (i.e. types of channels/format, frequency of exchanges, frequency of up-dates, etc.)?
- ✓ Are digital tools used, if appropriate for the given purpose, context and participants?

Indicators

Establishment of a website and/or written material to educate stakeholders about how they can contribute to water policy/project process	
Options are explored for subsidizing engagement for some categories of stakeholders to be appropriately inclusive	
Meetings are conducted at sub-national level (local, provincial) and/or web-streamed to enhance accessibility	
At every meeting, stakeholders are oriented to the current stage of the water policy/project process	
Prior identification of required or available knowledge of stakeholders	
Existence of facilitation and mediation to support capacity building and knowledge exchange	
Number of training sessions carried out to support the engagement process	
Number of stakeholders attending the training sessions	
Number of channels available to exchange information	

Organisation of meetings to provide technical presentations and discuss with stakeholders about data (e.g. sources, management) and preliminary analysis, tailored to stakeholders' level of understanding	
Existence of a legal process to access information	
Implementation of existing international agreements on transparency of information	
Summary reports are prepared using non-technical language and highlighting key points of the water policy/project process	
Existence of mediation mechanisms when access to information is denied	
Share of organisation's budget dedicated o stakeholder engagement	

Selected tools and practices

Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (http://ec.europa.eu/environment/aarhus/);

Arno River Basin Authority Executive Information System to support integrated planning, management and stakeholder's' involvement in a web-based, shared environment (box 39);

ERSAR Mobile App to provide relevant information on the quality of water and waste services users in Portugal (box 39)

Province of Milan's *L'acqua in Comune* online information platform on water and sanitation service (box 5)

EFFICIENCY AND EFFECTIVENESS

Principle 4: Assess regularly the process and outcomes of stakeholder engagement to learn, adjust and improve accordingly. Such evaluation and monitoring can resort to fact-based and perception-based tools and indicators, and carried out by targets, promoters and/or third parties. Public disclosure of results to increase accountability and provide insight on success in reaching intended objectives and learn from experience to improve practice in the future. Evaluation should not be limited to ex-ante and ex-post assessment but remain an on-going process throughout the policy/project cycle. Stakeholder engagement can yield benefits in terms of resilience, sustainability, cohesion, acceptability, capacity and efficiency. But it can also delay decision-making and implementation, and generate different types of (monetary and non-monetary) material, process, reputational and social costs. Assessing the costs and benefits of engagement processes can help ensure that all interests, included those underrepresented, are respected regarding the distribution of impacts, compensation and benefits. Mitigation measures are needed to reduce costs, and set the right incentives while managing the dual short-term / long-term temporality.

Preliminary Checklist

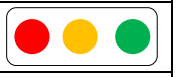
- ✓ Are regular and systematic evaluation tools in place (ratings, indexes, indicators) to assess the effectiveness, costs and benefits of engagement processes?

- ✓ Is stakeholder engagement assessed through qualitative judgments (i.e. strengths/weaknesses, advantages/disadvantages)?

- ✓ Are evaluation results used to identify priorities for adjustments in water policies/projects and to monitor progress (i.e. systemic evidence, arguments, comparative data, etc.)?

- ✓ Are stakeholders allowed to examine their own involvement in order to express their views, and develop broad-based support for water reform agendas and projects?
- ✓ Is the independence of the assessment guaranteed whenever possible?
- ✓ Are responses provided to the findings of the assessment?
- ✓ Are feedbacks provided on the engagement process?
- ✓ When an evaluation report is done, does it include the following elements?
  - the types of stakeholders engaged or not and the rationale for selection;
  - the inputs taken integrated in the outcomes or not and the rationale for selection;
  - the outcomes achieved and the factors of success;
  - the objectives not achieved and the reason for failure;

Indicators

Review of engagement process at least annually to determine what works and what should be improved (e.g. online surveys, interviews with stakeholders, meetings, etc.)	
Regular monitoring throughout the engagement process (design, development, implementation) through quantitative data (monetary costs/benefits, etc.) and/or qualitative data (e.g. stakeholders' feedback, level of satisfaction, etc.)	
Definition of performance measures to gauge the extent of stakeholder engagement at various levels (i.e. national, regional, local)	
Use of benchmarks and/or standards for assessment based on international norms and local practice as appropriate	
Communication on the results of the engagement process evaluation with all stakeholders involved	
Successful use of the inputs from the engagement process to achieve the desired outcomes	
Fulfilment of the agreed-upon purpose of the engagement process	
Careful appraisal of the indirect outcomes of the engagement process	
Careful assessment of the short-term and long-term benefits yielded by the engagement process in terms of acceptability and sustainability, social equity and cohesion, capacity development and economic efficiency, and their degree of impact on the stakeholders involved	
Development of agreed-upon compensation measures for the stakeholders negatively impacted by the engagement process	
Definition of alternative and new approaches agreed-upon by all stakeholder involved to address the weaknesses of the engagement process identified in the evaluation exercise	

Selected tools and practices

EU Water Framework Directive reporting system on participation (box 46)

NARBO Performance Benchmarking and Peer-review of river basin organisations [http://www.narbo.jp/event/ev_annc_Performance_Benchmarking.html] (box 47)

University of Arizona Water Resources Research Centre's practice in stakeholder participation tracking (box 50)

Alsace-Moselle region's three-tier evaluation system of stakeholder engagement (box 43)

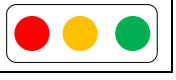
INSTITUTIONALISATION, STRUCTURING AND INTEGRATION

Principle 5: Embed engagement processes in clear legal and policy frameworks, organisational structures/principles and responsible authorities. There is no water governance without governance at large. Similarly, there can be no effective stakeholder engagement without proper incentives for bottom-up and inclusive policy making. A clear set of rules, platforms and vehicles for doing so is critical to move from reactive to proactive and systematic stakeholder engagement in the water sector. But institutionalisation per se is not the panacea and raises risks of engagement "fatigue" and/or "capture" from over-represented categories to the detriment of unheard voices. It should provide for the flexibility needed to adjust to place-based needs and changing circumstances while fostering a change in the "mindset", daily practices, professional skills and culture of decision-making. Provisions for stakeholder engagement should be aligned coherently and holistically across the water chain and policy domains related to water.

Preliminary Checklist

- ✓ Are charters and rules of the game clearly defined to instil a minimum level of stakeholder engagement in water policy/project process?
- ✓ When defining these charters, are the following elements taken into account?
  - the types of decisions making process the duty should apply
  - at which stage of the decision-making process the engagement duty should apply
  - who should be targeted
  - what information should be provided to stakeholders and how
- ✓ Are engagement practices embedded in institutional/organisation culture?
- ✓ Are the needed competencies and culture of engagement built within institutions and organisations for managing and facilitating inclusive decision-making processes (e.g. staff training)
- ✓ Are legislations in place requiring timely and effective stakeholder engagement in water policy/project processes?
- ✓ Are there guidelines to support water utilities in developing customer engagement?
- ✓ When establishing the legislation:
  - Are stakeholders engaged and contributing to the definition of requirements?
  - Does it include the minimum criteria for engagement and acknowledge that such formalised engagement is one element among others in the decision-making process?
  - Does it take into account local frameworks already in place?
  - Are requirements flexible and adjustable?

Indicators

Requirements for stakeholder engagement are in place within the organisation	
Establishment of standing stakeholder advisory group that reflects the broadest range of interests possible and with equalised number of seats across categories of stakeholders	

Definition of explicit, fair and balanced ground rules for engagement within water policy process goals	
Charters and/rules of the game are clearly established	
A business case has been developed to support stakeholder engagement	
Reporting on the compliance with existing requirements is in place	

Selected tools and practices

Japan - Japan Water Agency requirements on stakeholder engagement (box 14)

Netherlands - Delta Programme (box 7)

United States - Chesapeake Bay Programme (box 7)

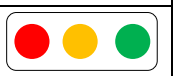
ADAPTIVENESS

7. **Principle 6: Customise the type and level of engagement to the needs and keep the process flexible to changing circumstances.** Stakeholder engagement tools and mechanisms work differently across places, times, objectives, and stages of the policy/project cycle. They should be tailored to each (geographic, socio-economic, cultural) context, type of stakeholder concerned, policy goal targeted and place-based needs to accommodate varying levels of interest and resources from stakeholders and consider other options as needs arise. Water governance systems are complex and in flux, where change is dynamic and often unpredictable. Engagement processes therefore need to enable multiple stakeholders to respond and adapt to the uncertainty. They should remain flexible to manage risks and resilient to adapt to changing environments. Lessons can be learned from failure in engagement approaches in terms of management of complexity and how to trigger fundamental change.

Preliminary Checklist

- ✓ Are short-term-decisions linked to long-term objectives?
- ✓ Are outcomes of engagement processes (i.e. policies, strategies, solutions) flexible enough to keep sufficient options opened in the future?
- ✓ Are stakeholders engaged in mapping the key uncertainties relevant for the issue at hand?
- ✓ Are formal or/and informal mechanisms for engagement carefully chosen, considering the types of stakeholders and the local context?
- ✓ Have the efficiency, value-added and limits of different approaches been explored across different scenarios or similar contexts?
- ✓ Are knowledge building and sharing supported to build the evidence base on what works, in which contexts and why and inform the development of new approaches?

Indicators

Outcomes of engagement processes cover short and long-term issues	
Outcomes of the engagement process are robust yet flexible	
Mapping of uncertainties jointly with stakeholders involved	
Clear understanding of local specificities of the context prior to setting-up the engagement process (e.g. urban/rural areas, etc.)	
Additional venues for discussions, additional educational events or additional information-sharing mechanisms are envisaged to bridge identified capacity gaps	
Ex-ante assessment of stakeholder's needs	
Development and analysis of different engagement scenarios (pros/cons, potential risks)	
Regular reassessment and establishment of new methods to address gaps where the engagement process is not meeting expectations	
Development of innovative/creative methods with new approaches and new stakeholders, including from outside the sector	

Selected tools and practices

Electricité de France's convention on water efficiency and allocation (box 16)

Brazil National Water Agency's national management pact (box 37)

SELECTED BIBLIOGRAPHY

Abelson, J., Gauvin, F.P., (2006), *Assessing the Impacts of Public Participation: Concepts, Evidence and Policy Implications*, Research Report P/06, Canadian Policy Research Networks;

Arnstein, S. R., (1969), *A Ladder of Citizen Participation*, JAIP, Vol. 35, No. 4, July 1969, pp. 216-224

Beierle, T.C., Cayford, J. (2002), *Democracy in Practice: Public Participation in Environmental Decisions*, Washington D.C: Resources for the Future, 2002

Carr, G., Bloschl, G., Loucks, D.P. (2012), *Evaluating participation in water resource management: A Review*, Water Resources Research Vol. 48, W11401, 2012

CEO Water Mandate; Pacific Institute; WWF (2014), *Shared Water Challenges and Interests: The Case for Private Sector Engagement in Water Policy and Management*, Discussion Paper, June 2014.

Ceres (2010), *The 21st Century Corporation: The Ceres Roadmap for Sustainability*, http://www.ceres.org/resources/reports/ceres-roadmap-to-sustainability-2010

Convention on the Protection and Use of Transboundary Watercourses and International Lakes, (2014), *Principles for Effective Joint Bodies on Transboundary Water Cooperation*, Working Group on Integrated Water Resources Management 9th Meeting, 25-26 June 2014, Geneva

Dahl, R.A. (1994), *A Democratic Dilemma: System Effectiveness versus Citizen Participation*, Political Science Quarterly 109 (1): 23-34.

Da Silva, C., A. Sutherland and C. Green (2010), *Institutional Mapping*, Learning Alliance, briefing note 15, IRC

Della Croce, R. (2012), *Trends in Large Pension Fund Investment in Infrastructure*, OECD Working Papers on Finance, Insurance and Private Pensions, No.29, OECD Publishing.

De Stefano, L. (2010), *Facing the water framework directive challenges: A baseline of stakeholder participation in the European Union*, Journal of Environmental Management 91, 1332e1340

Delli Carpini, M.X., Cook, F.L., Jacobs, L., (2004), *Public Deliberation, Discursive Participation and Citizen Engagement: A Review of the Empirical Literature*, Annual Review of Political Science 2004

Directive 2003/4/EC of the European Parliament and the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC

Directive 2003/35/EC of the European Parliament and the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice.

Dore, J., Lebel, L. (2010), *Deliberation and Scale in Mekong Region Water Governance*, Environmental Management (2010) 46

Enserink, B., Witteveen, L., Lie, R. (2009), *Performance indicators for public participation*, IAIA09 Conference Proceedings', Impact Assessment and Human Well Being, 29th Annual Conference of the International Association for Impact Assessment, 22 May 2009, Accra International Conference Center, Accra, Ghana

Fenemor, A., Neilan, D., Allen, W., Russel, S., (2011), *Improving water governance in New Zealand – Stakeholder view of catchment management processes and plans*, Policy Quarterly, Volume 7, Issue 4, November 2011

Fidrmuc, J., Noury, A.G., (2003), *Interest Groups, Stakeholders, and the Distribution of Benefits and Costs of Reform*, prepared for the GDN Global Research Project: *Understanding Reform*, August 2003

Garibaldo, F., Telljohann, V. (eds.) (2010), *The Ambivalent Character of Participation: New Tendencies in Worker Participation in Europe*, Peter Land GmBH

Global Water Partnership (2003), *Sharing knowledge for equitable, efficient and sustainable water resources management*, Version 2 IWRM Toolbox, GWP, Sweden

Glucker, A.N. et al (2013), *Public participation in environmental impact assessment: Why, who and how?* Environmental Impact Assessment Review 43, 104-111Mollinga, P.P., (2010), *Public Engagement in Water Governance in the MENA Region*: *A review*, Deliverable 1, Arab Water Council.

Habermas, J., (1989), *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*, The MIT Press, Cambridge, Massachusett

Humm, J., Jones, K., Chanan, G., (2005), *Testing Indicators of Community Involvement*, Final Report, Community Development Foundation Research Unit

International Association for Impact Assessment, (2006), *Public Participation – International Best Practice Principles*, Special Publication Series N°4, August 2006

International Water Association (2004), *Bonn Charter for safe drinking water*, IWA

Involve (2005), *The True Costs of Public Participation: Involve*, Full Research Report, Together We Can

Involve (2005b), *People and Participation – How to put citizens at the heart of decision-making*, Beacon Press, London

Janssen, J.K.H., Mol, A.P.J., van Tatenhove, J.P.M., Otter, H.S., (2014), *The role of knowledge in greening flood protection. Lessons from the Dutch case study future Afsluitdijk*, Ocean & Coastal Management 95 (2014), 219-232

Majoor, S.J.H., Salet, W.G.M., (2008), *The enlargement of local power in trans-scalar strategies of planning: recent tendencies in two European cases*, GeoJournal (2008) 72:91–103

Moss, T., Newig, J., (2010), *Multi-Level Water Governance and Problems of Scale: Setting the Stage for a Broader Debate*, Environmental Management (2010) 46

Mowday, R. R., Steers, R. M., Porter, L. W., (1979), The Measurement of Organisational Commitment, Journal of Vocational Behavior 14, 224-247

Nabatchi, T. (2012), *A Manager's Guide to Evaluating Citizen Participation*, Fostering Transparency and Democracy Series 2012, IBM Centre for The Business of Government

OECD (2003), *The eGovernment Imperative*, OECD Publishing, Paris

OECD (2005), *Modernising Government: The way forward*, OECD Publishing, Paris

OECD (2008), *OECD Regulatory Management Systems' Indicators Survey 2008*, *www.oecd.org/regreform/indicators*

OECD (2010), *Towards Recovery and Partnerships with Citizens: A Call for Innovative and Open Government*, Ministerial meeting of the OECD, Public Governance Committee (15 November 2010)

OECD (2010b), *Making Reform Happen – Lessons from OECD Countries*, OECD Publishing, Paris

OECD (2011), *Water Governance in OECD Countries: A Multi-level Approach*, OECD Publishing, Paris

OECD (2011, b), *Together for Better Public Services*, OECD Publishing, Paris

OECD (2011, c), *Regulatory Consultation: A MENA-OECD Practitioners' Guide for Engaging Stakeholders in the Rule-Making Process*, OECD Publishing, Paris

OECD (2012), *OECD Environmental Outlook to 2050*, OECD Publishing, Paris

OECD (2012b), *Recommendation of the Council on Regulatory Policy and Governance*, http://www.oecd.org/gov/regulatory-policy/2012recommendation.htm, accessed in July 2014.

OECD (2013), *Government at a Glance 2013*, OECD Publishing, Paris.

OECD (2013b), *Making Water Reform Happen in Mexico*, OECD Publishing, Paris

OECD (2013c), *The role of banks, equity markets and institutional investors in long-term financing for growth and development*, Report for G20 Leaders, OECD Publishing, Paris

OECD (2014), *Water Governance in the Netherlands: Fit for the Future?*, OECD Publishing, Paris

OECD (2014b), Regulatory Enforcement and Inspections, *OECD Best Practice Principles for Regulatory Policy*, OECD Publishing.

OECD (2014c), *OECD Toolkit for Integrity*, OECD Publishing, Paris.

OECD (2014d), *The Governance of Regulators*, OECD Publishing, Paris

OECD, (2015a), *Water Resources Allocation: Shared Water, Shared Risks* , OECD Publishing, Paris

OECD (2015b), *OECD Water Governance Indicators*, forthcoming

Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action.* Cambridge, UK: Cambridge University Press.

Ostrom, E. (2010). *Beyond markets and states: Polycentric governance of complex economic systems.* American Economic Review, *100*, 641-672.

Petts, J. (2010), *Public Participation and Environmental Impact Assessment: Purposes, Implications and Lessons for Public Policy Making*, Environment Impact Assessment Review 2010, 30:19-27

Rowe, G., Frewer, L. J., (2005), *A Typology of Public Engagement Mechanisms*, Science Technology Human Values, 30: 251

Rowe G and Frewer LJ. (2005b), *Evaluating public participation exercises: A research agenda*, Science, Technology, and Human Values 2004, 29(4): 512-556.

Seijger, C., van Tatenhove, J., Dewulf, G., Otter, H.S., (2013), *Responding to coastal problems: Interactive knowledge development in a US nature restoration project*, Ocean & Coastal Management 89 (2014), 29-38.

Susskind, L. (2013), *Water and democracy: New roles for civil society in water governance*, International Journal of Water Resources Development, 29:4, 666-667

Tortajada, C., (2007), *Water Governance in the MENA region : Critical Issues and the Ways Forward – the Case of Stakeholder Participation and Public Awareness*, presented at the Second Partners' Forum on « Water Governance in the MENA Region : Critical Issues and the Way Forward », 23-26 June 2007, Cairo

Ubaldi, B. (2013), *Open Government Data - Towards Empirical Analysis of Open Government Data Initiatives*, OECD Working Papers on Public Governance , No. 22, OECD Publishing

Udall Foundation, US Institute for Environmental Conflict Resolution (2011), *Principles for Stakeholder Involvement in Coastal and Marine Planning* – Distribution Draft

United Nations Open Working Group on Sustainable Development Goals, (2014), *Outcome Document*, 19 July 2014, available at http://sustainabledevelopment.un.org (last consulted in August 2014).

Victorian Department of Sustainability and Environment (2005), *Effective engagement: Building relationships with community and other stakeholders – The Engagement Toolkit*, State of Victoria, Australia

Wageningen UR's Centre for Development Innovation (2012), *Principles – What are the Key Elements for Successful Multi-Stakeholder Processes*, http://www.wageningenportals.nl/msp/topic/principles-what-are-key-elements-succesful-msps

Wehn, U. and Evers, J. (2014) *Citizen observatories of water: Social innovation via eParticipation?* Accepted for presentation at the ICT4 Sustainability Conference (ICT4S), Stockholm, 24-27 August, nominated for best paper award.

Wehn, U., Rusca, M. and Evers, J. (2014) *Participation in flood risk management and the potential of citizen observatories: a governance analysis*, submitted to the International Conference on Flood Management, 16-18 September, Sao Paulo, Brazil.

Working Group 2.9 – Public Participation, (2003), *Common Implementation Strategy for the Water Framework Directive (2000/60/EC)*, Guidance Document No 8, Public Participation in Relation to the Water Framework Directive, European Communities

World Health Organisation (2008), *3rd Edition of the WHO Drinking Water Quality Guidelines*, WHO, Geneva

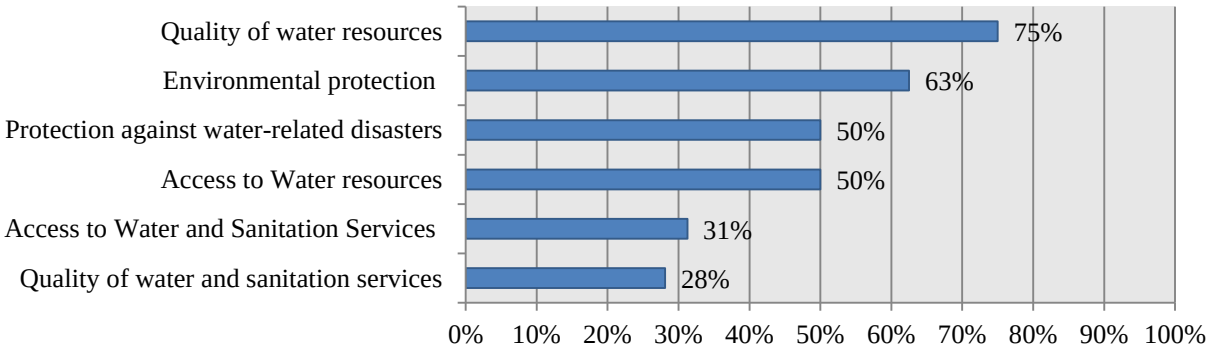
ANNEX A. STAKEHOLDERS' PROFILES

National governments

List of national governments surveyed

Afghanistan - Ministry of Energy and Water
Australia - Murray-Darling Basin Authority
Bangladesh - Water Development Board
Brazil - National Water Agency
Chile - General Directorate for Water
China - Ministry of Water Resources, Development Research Centre
Colombia - Ministry for Environment, Housing and Territorial Development
Czech Republic - Ministry of Agriculture
Denmark - Nature Agency
El Salvador - Under-secretary for territorial development and decentralisation
Finland - Finnish Environment Institute
France - Ministry of Sustainable Development and Energy
Germany - Federal Ministry for the Environment, Nature conservation, Building and Nuclear Safety
Hungary - Ministry of Interior
Japan - Ministry of Land, Infrastructure, Transport and Tourism, Water Resources Department
Luxemburg - Ministry for Sustainable Development and Infrastructure
Mexico - National Water Commission
Netherlands - Ministry of Infrastructure and Environment
New Zealand - Ministry for the Environment
Norway - Norwegian Environment Agency
Palestinian territories - Environment Quality Authority
Panama – National Environmental Authority
Paraguay - National Service for Environmental sanitation
Poland - Ministry of the Environment
Russian Federation - Federal Agency of Water Resources, Department for International Cooperation
Scotland - Scottish Government
Slovenia - Ministry of Agriculture and the Environment
South Africa - Water Research Commission
Spain - Ministry of Agriculture, Food and the Environment, General Directorate for Water
Thailand - Department of Water Resources
Turkey - Turkish Water Institute
United States - Environmental Protection Agency

Areas of interest

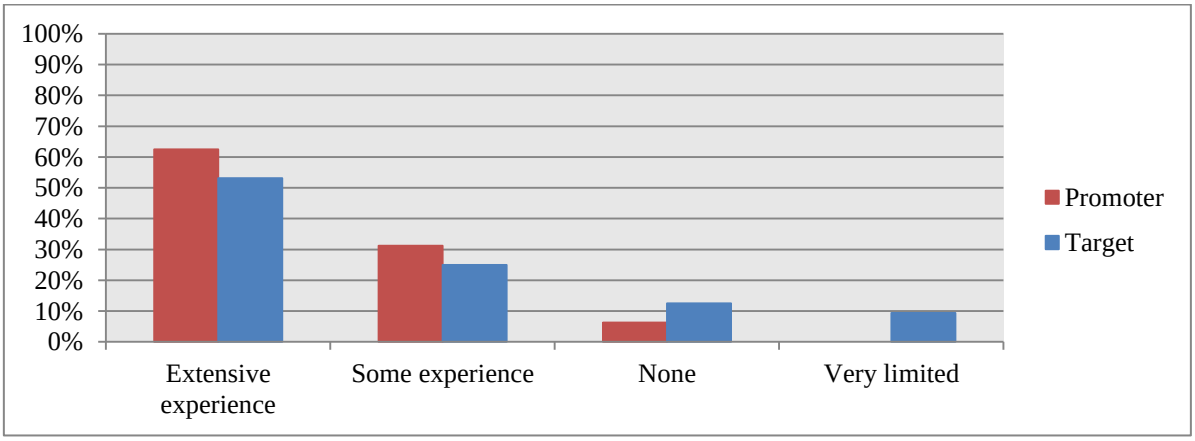


Note: Areas of interest of national governments ranked from 1 to 3 on a scale from (1) to (6)

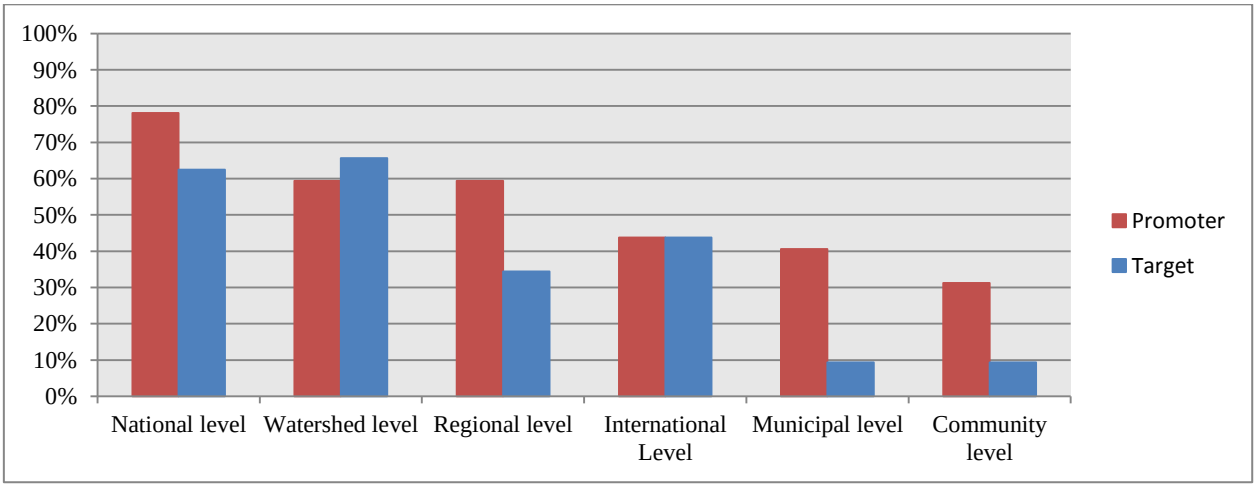
Key words most often associated to stakeholder engagement

Note: The word cloud was created based on the key terms that were ranked first on a scale from 1 to 5.

Experience in stakeholder engagement

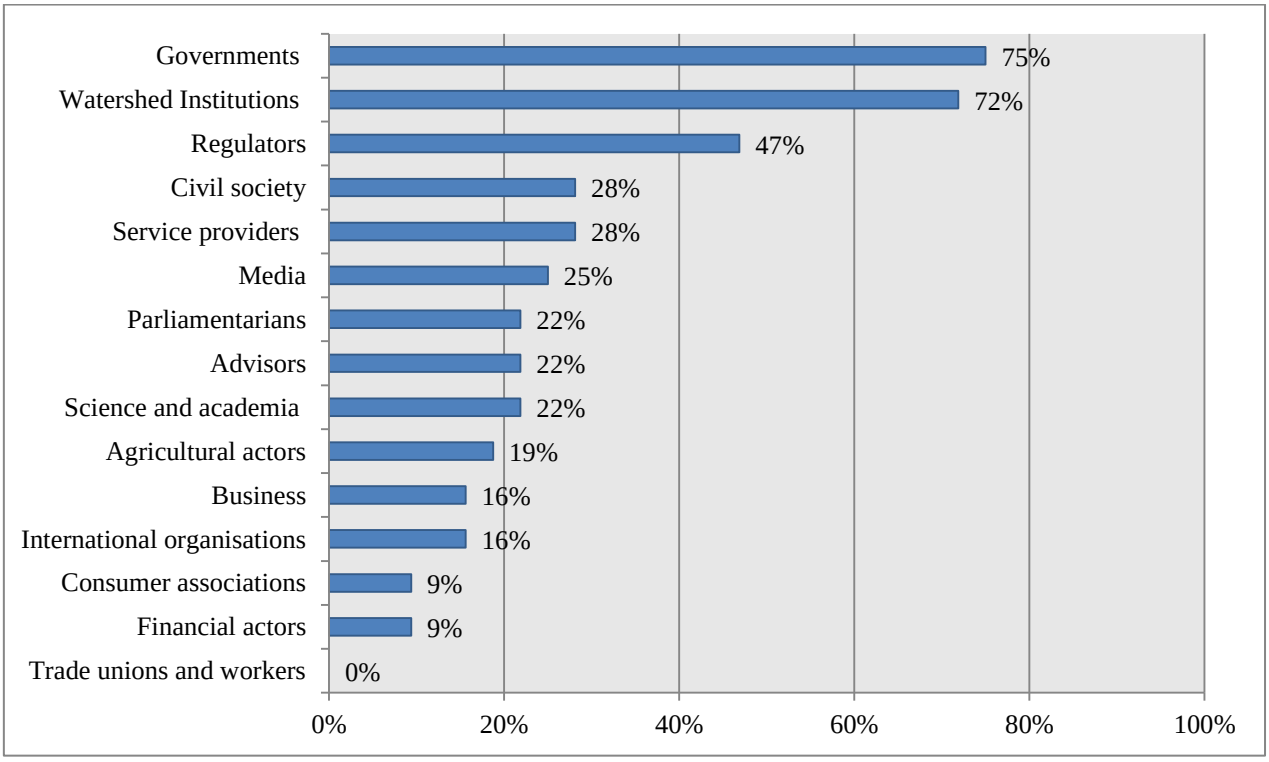


Scale of intervention



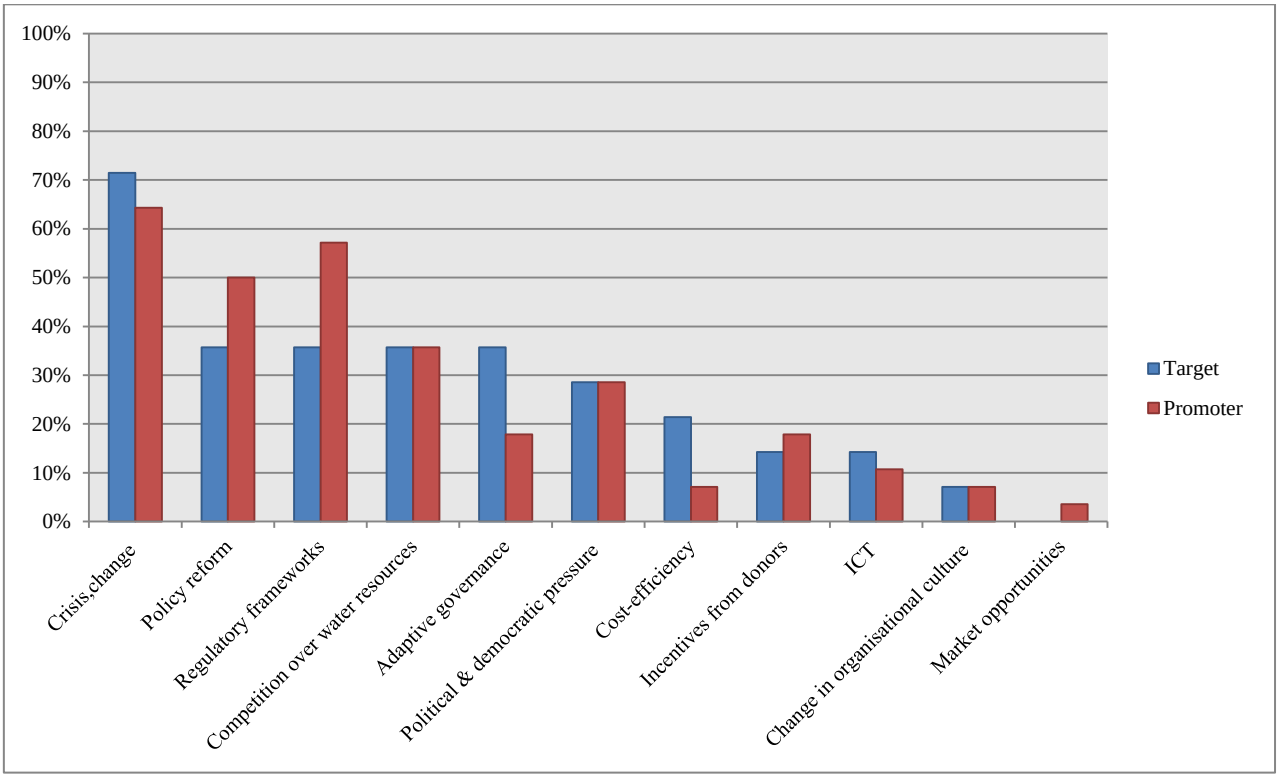
Note: Scale of intervention at which national governments primarily intervene

Interactions with other stakeholders



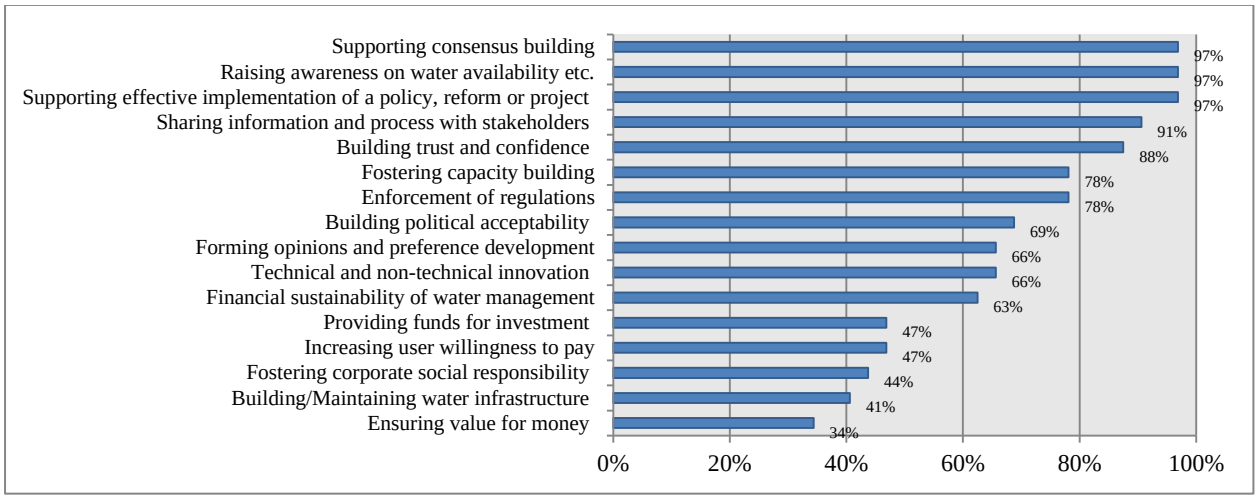
Note: Categories of stakeholders with which national governments interact "always or very frequently"

Main drivers



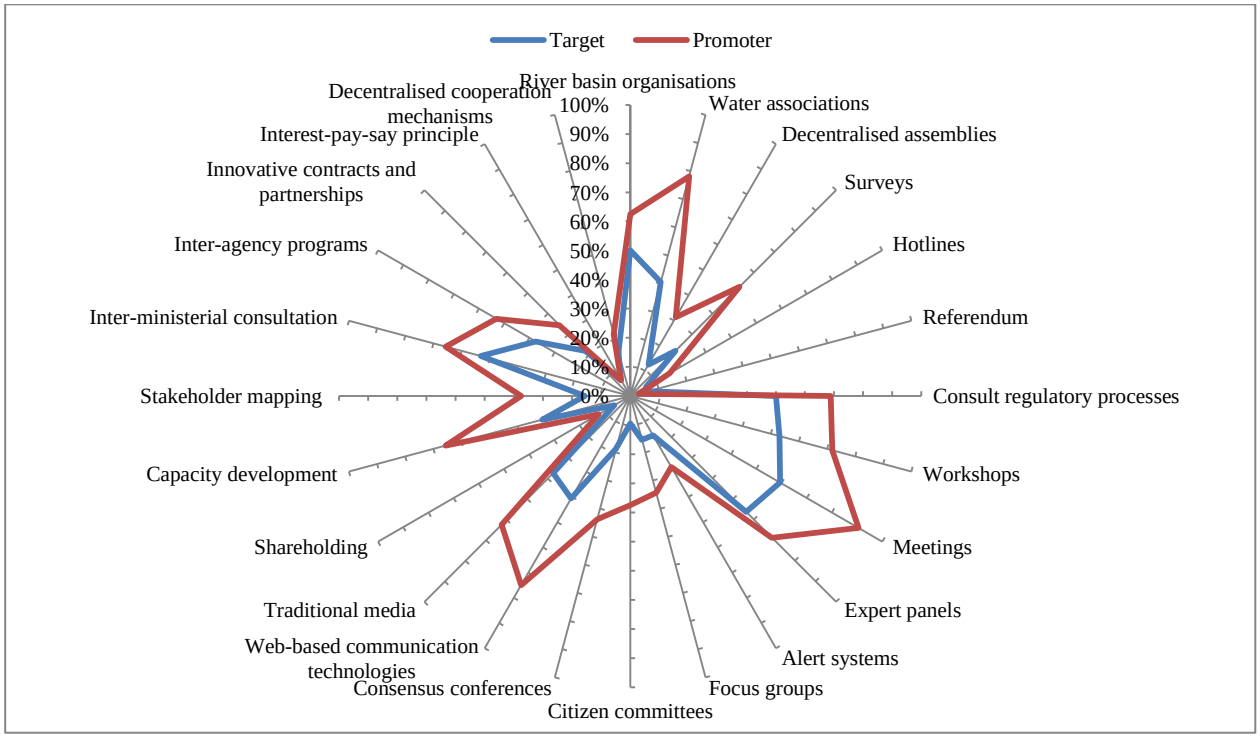
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10

Perception about stakeholder engagement contribution to better water governance

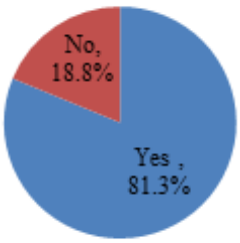


Note: Areas of contribution to water governance for which national governments responded “yes”

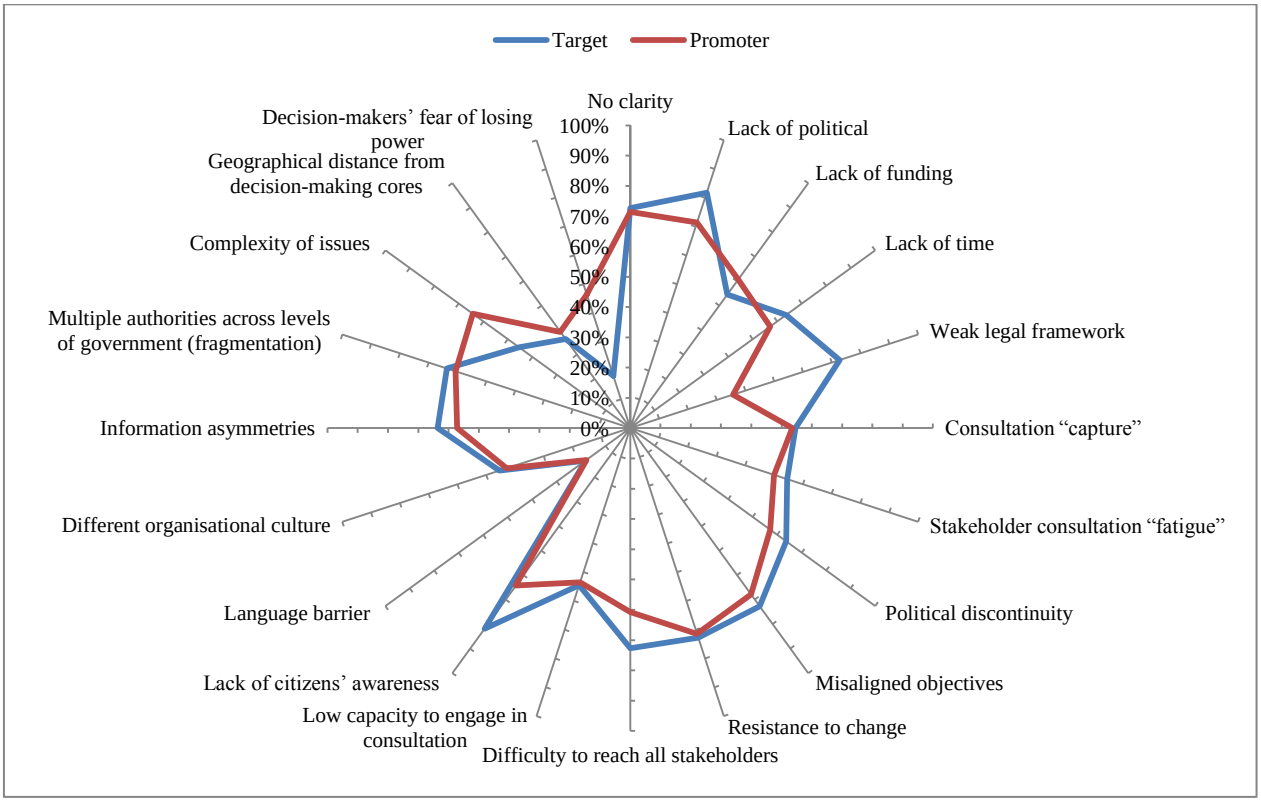
Use of stakeholder engagement mechanisms



Are existing stakeholder engagement mechanisms sufficient?

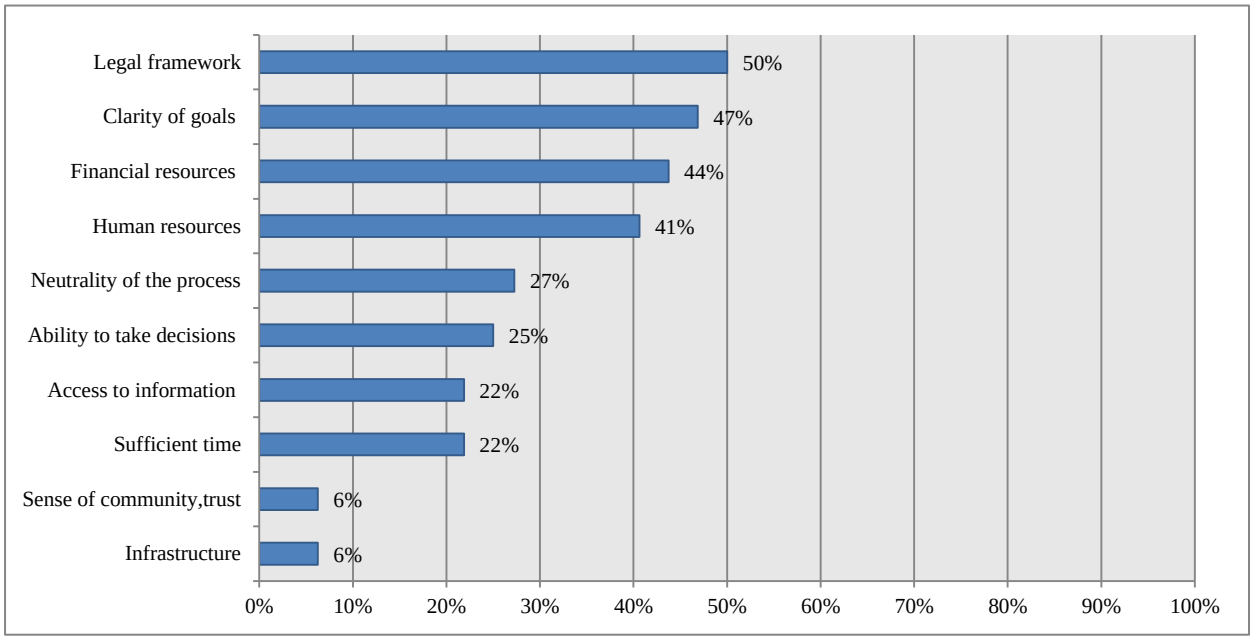


Main obstacles faced to engage stakeholders



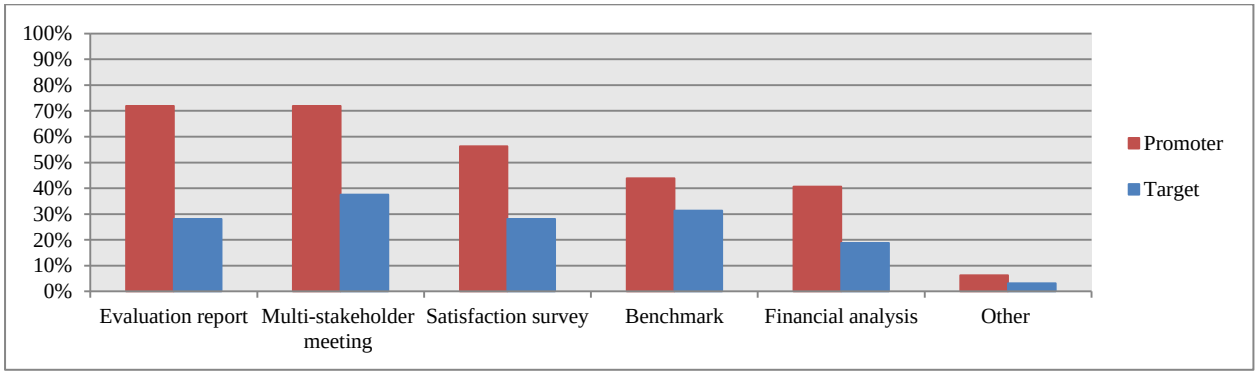
Note: Obstacles considered as "critical" and "important" by national governments

Perception of critical conditions of success to effectively contribute to water-related decision-making

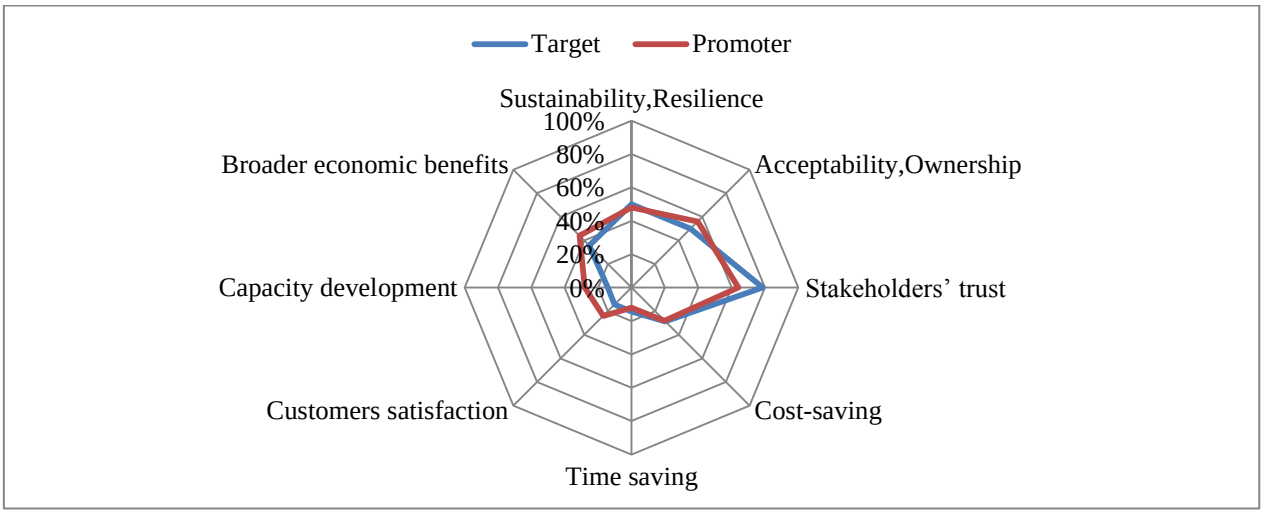


Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Mechanisms used to assess the effectiveness of stakeholder engagement

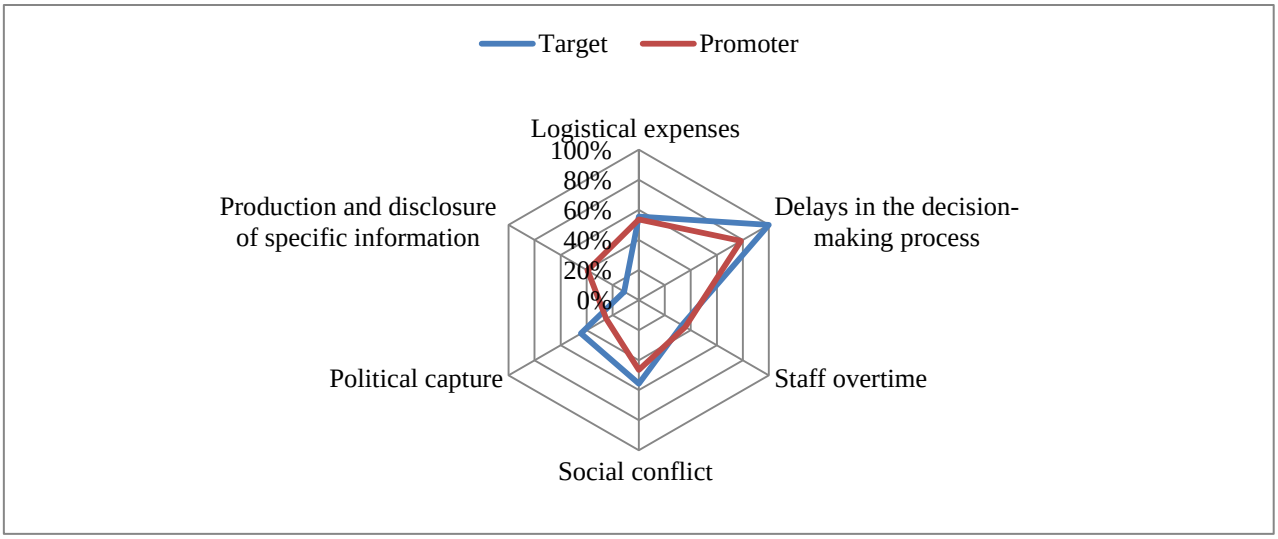


Perception of the main benefits derived by stakeholder engagement



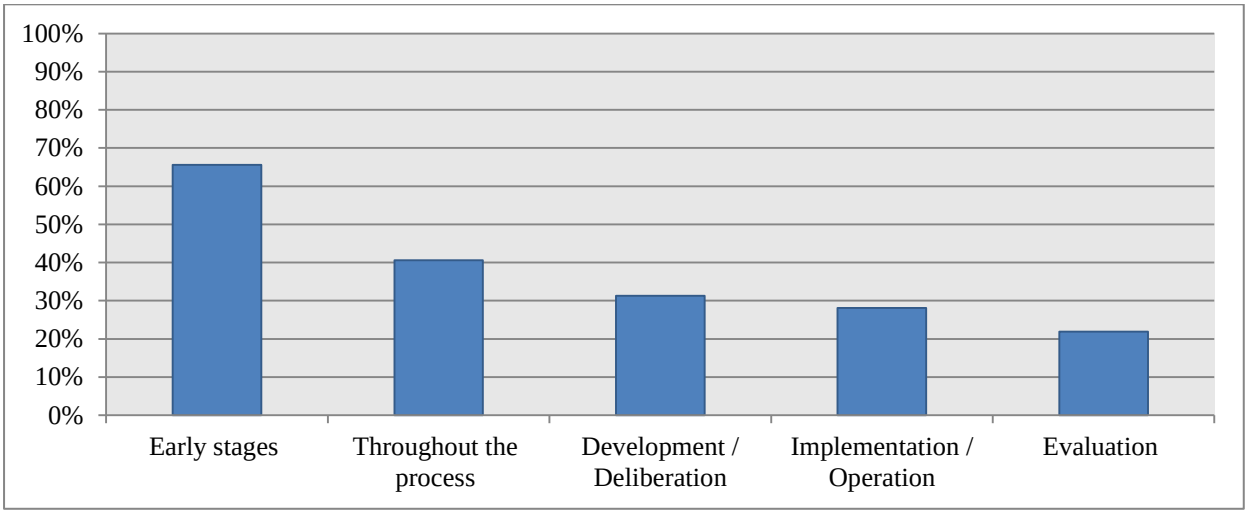
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (8).

Perception of the main costs incurred by stakeholder engagement



Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (6)

Stage of decision-making at which the stakeholder is most influential



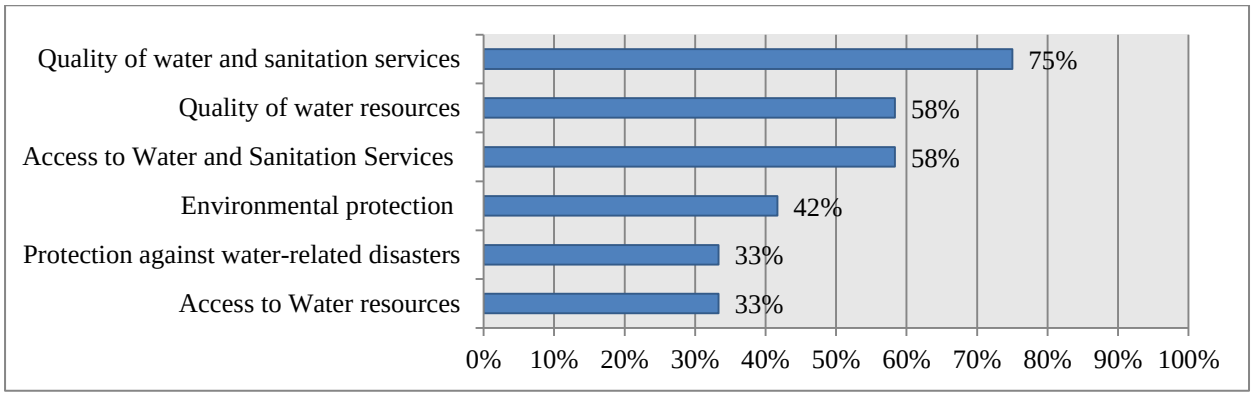
Note: Stages of decision-making at which national governments consider having a "critical influence"

Subnational governments

List of sub-national governments surveyed

Belgium - Flemish Environment Agency
Brazil - Municipal Council of Sesimbra
Canada - City of Vancouver
Canada - New Brunswick Department of Environment and Local Government
Canada - Province of Ontario
Costa Rica -Institute for aqueducts and sewerage
Korea - Seoul Metropolitan Government
New Zealand - Canterbury Regional Council
Paraguay - Coordination unit for the drinking water and sanitation programme of El Chaco
Spain - Consortium for environmental services management of the Badajoz province
United States - Hampton Roads Sanitation District
United States - Kent County Department of Public Works

Areas of interest

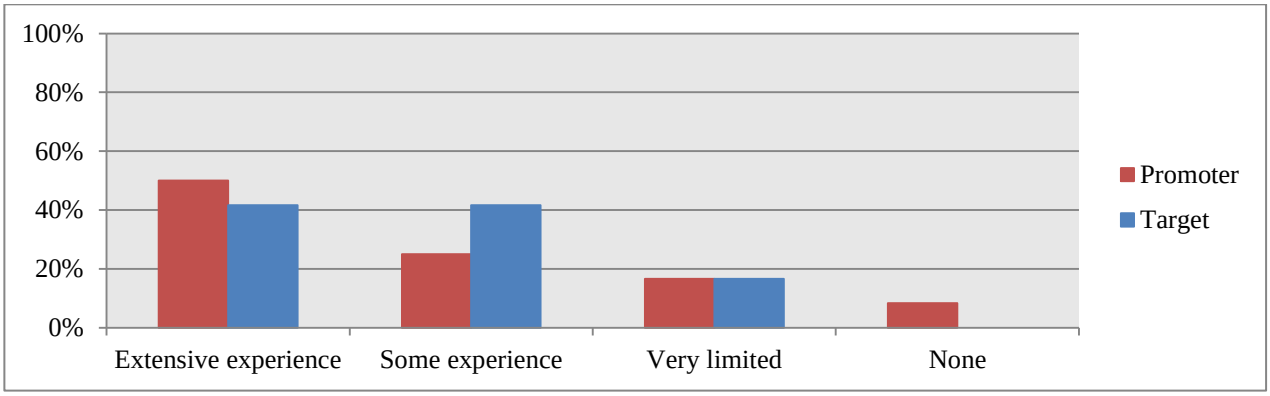


Note: Areas of interest of sub-national governments ranked from 1 to 3 on a scale from (1) to (6)

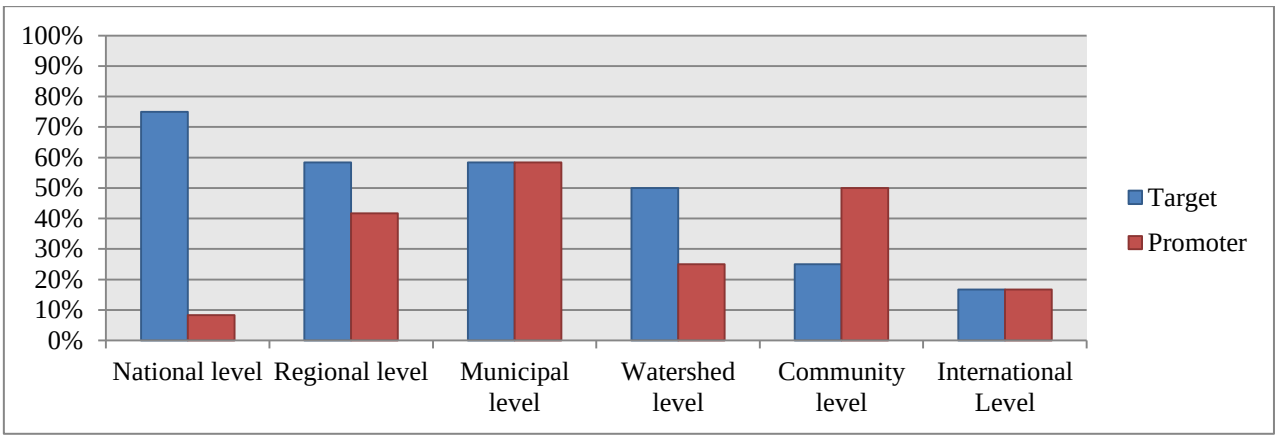
Key words most often associated to stakeholder engagement

Note: The word cloud was created based on the key terms that were ranked first on a scale from 1 to 5.

Experience in stakeholder engagement

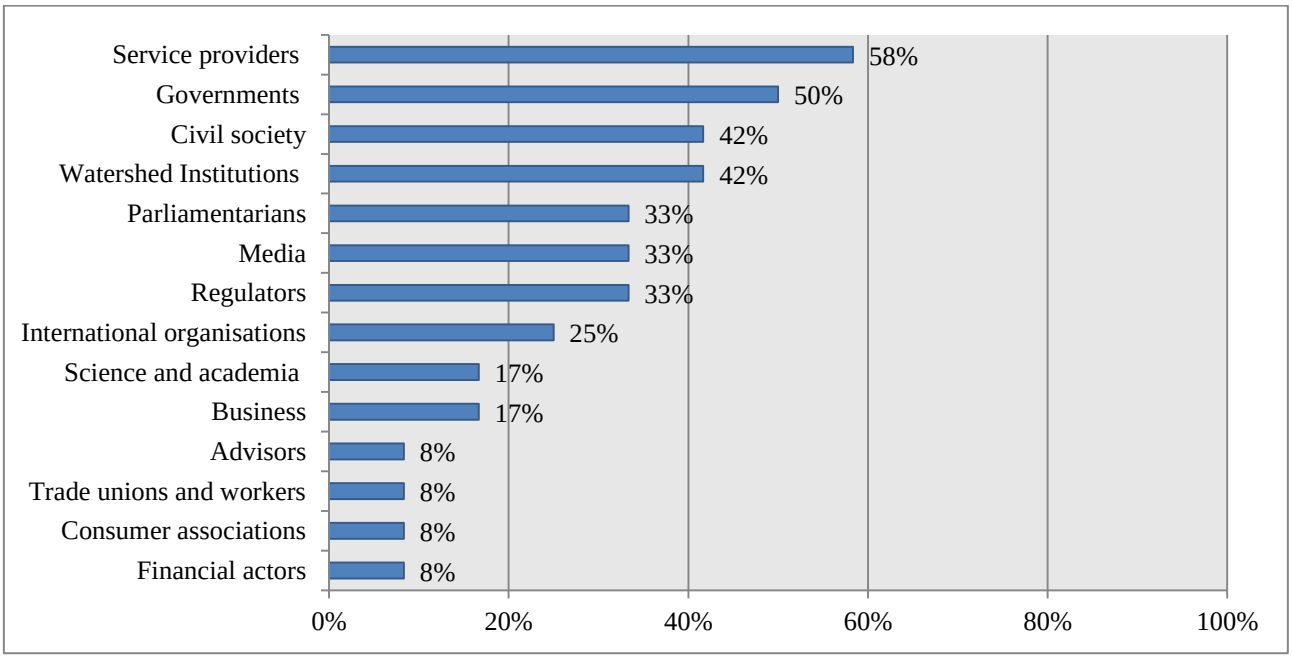


Scale of intervention



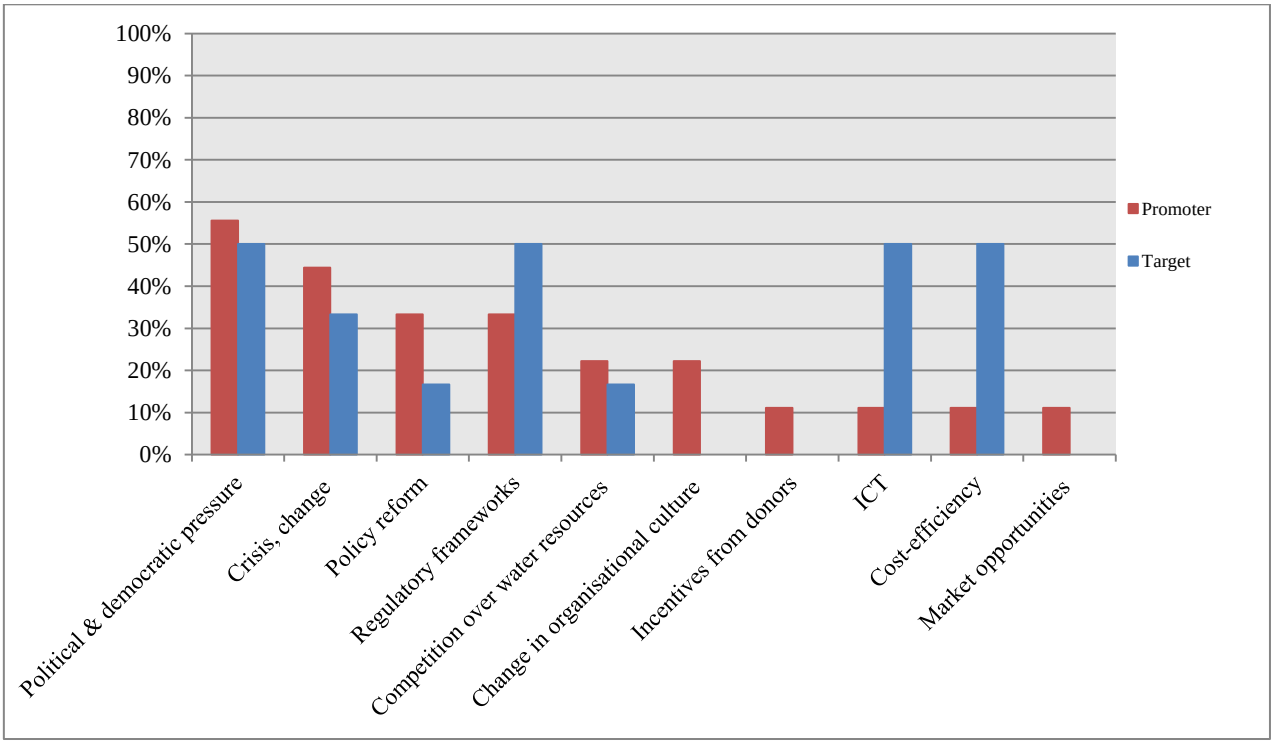
Note: Scale of intervention at which sub-national governments primarily intervene

Interactions with other stakeholders



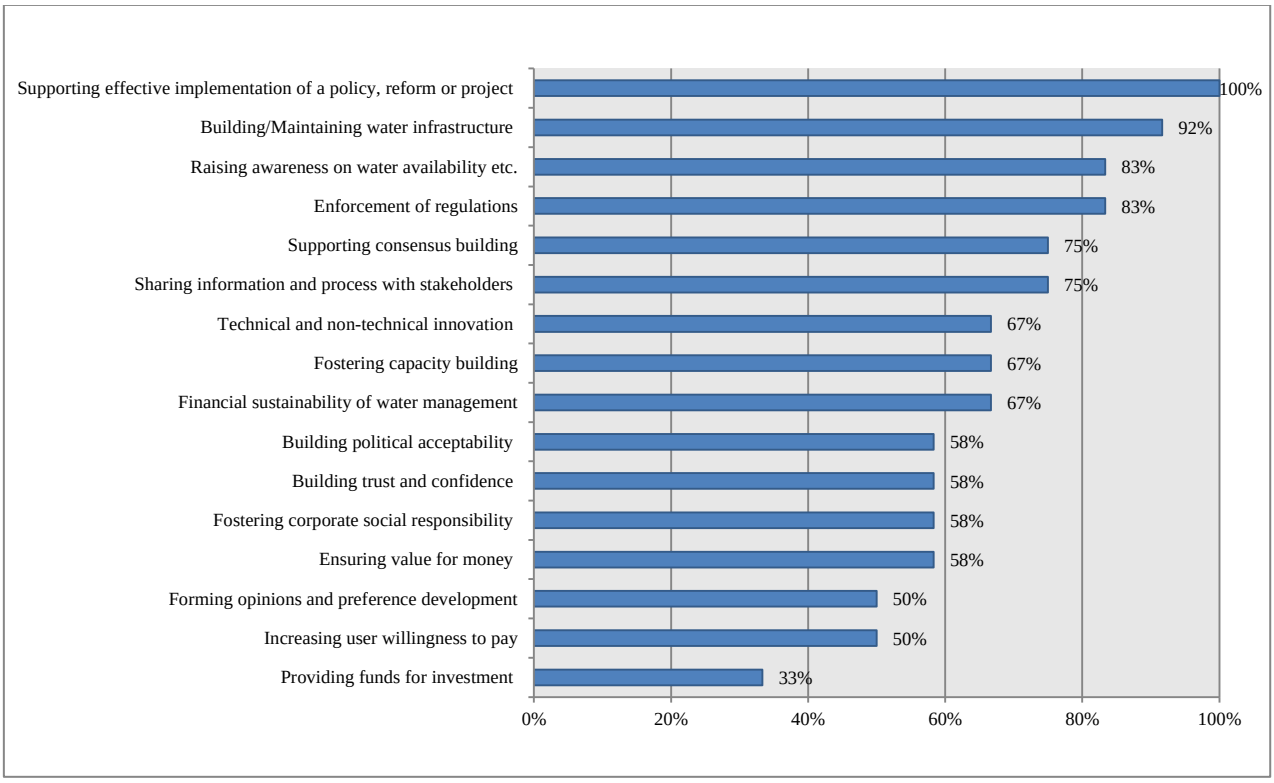
Note: Categories of stakeholders with which sub-national governments interact "always or very frequently"

Main drivers



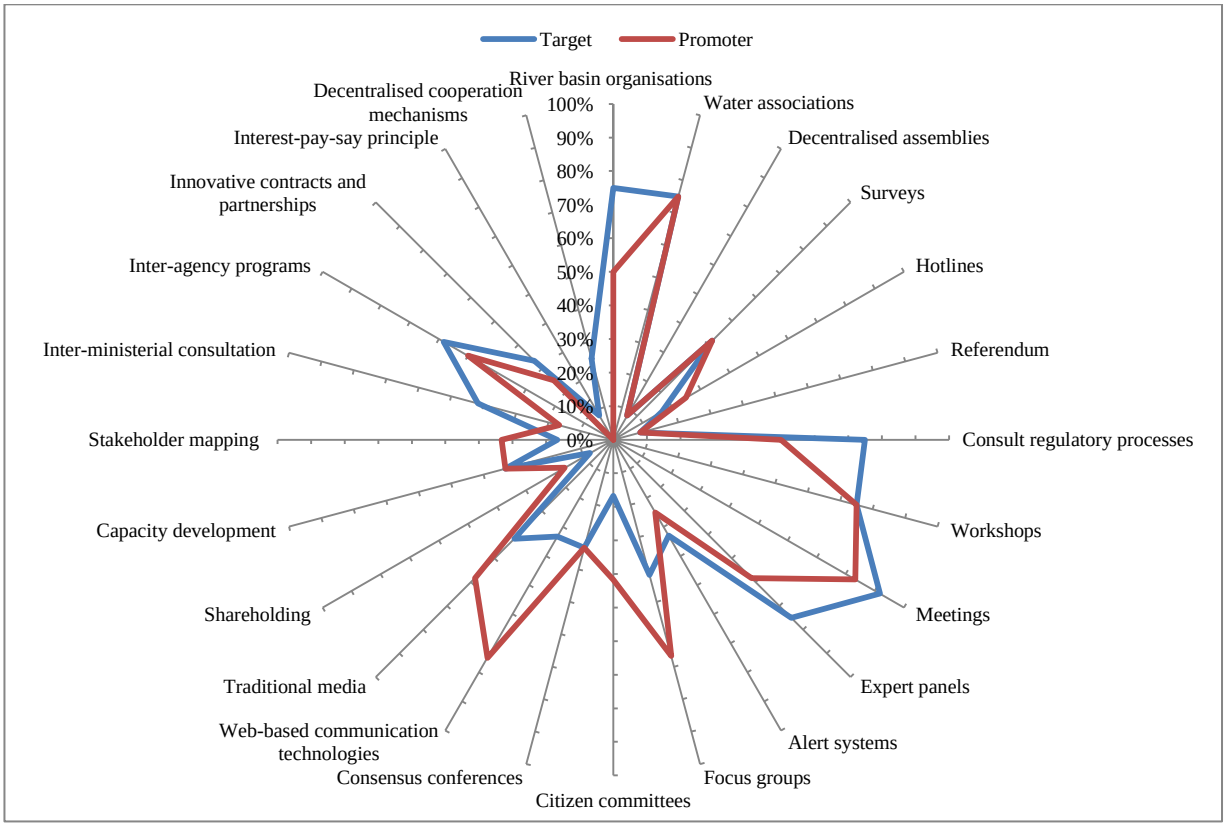
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Perception about stakeholder engagement contribution to better water governance

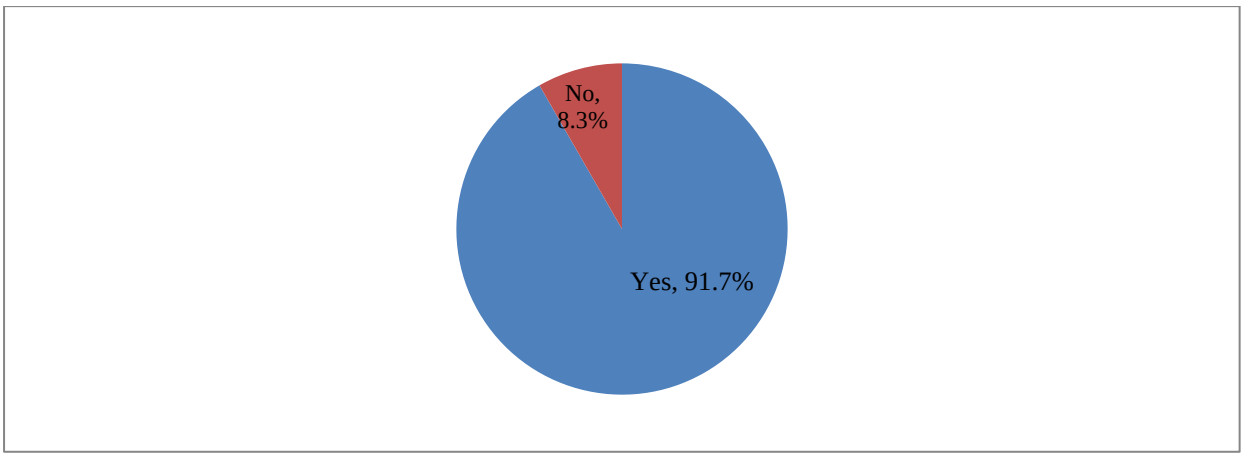


Note: Areas of contribution to water governance for which sub-national governments responded "yes"

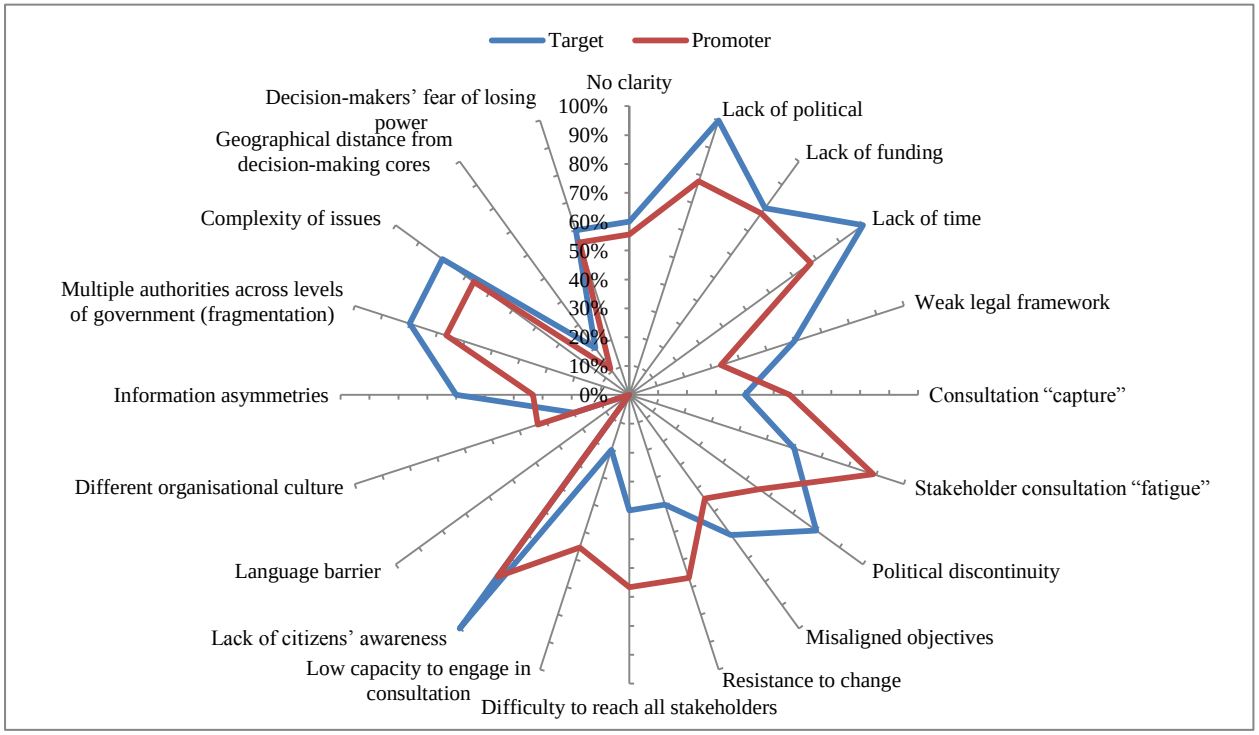
Use of stakeholder engagement mechanisms



Are existing stakeholder engagement mechanisms sufficient?

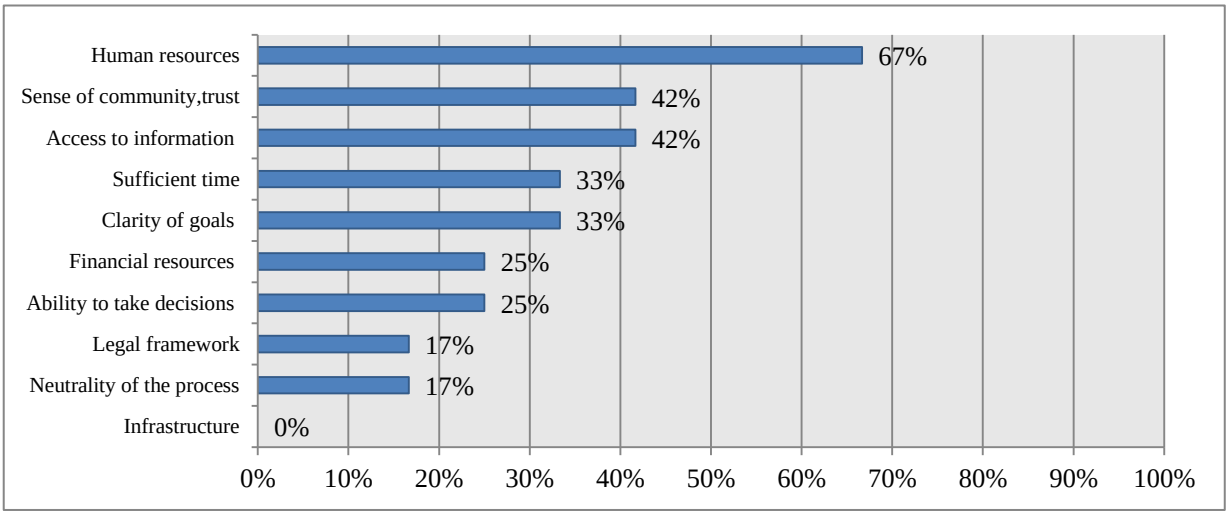


Main obstacles faced to engage stakeholders



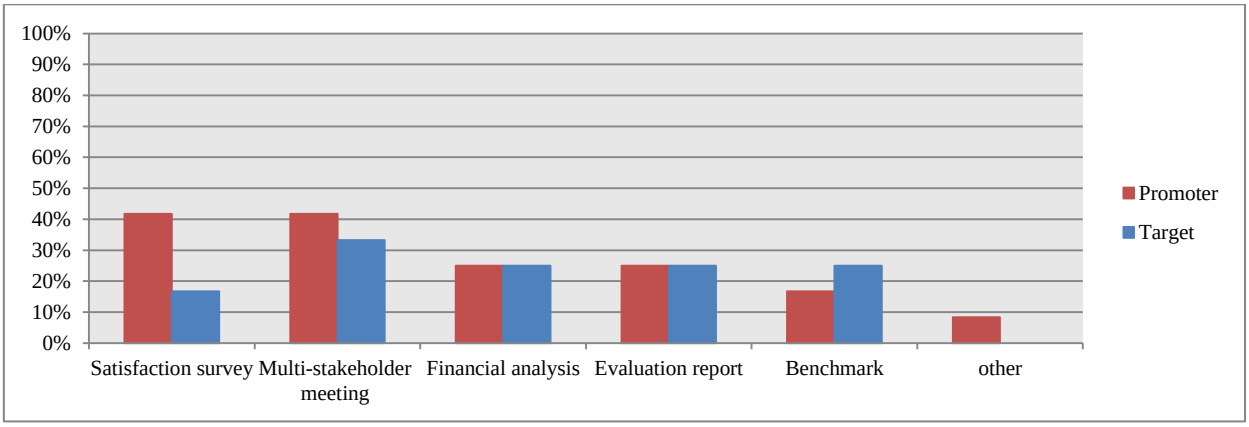
Note: Obstacles considered as "critical" and "important" by sub-national governments

Perception of critical conditions of success to effectively contribute to water-related decision-making

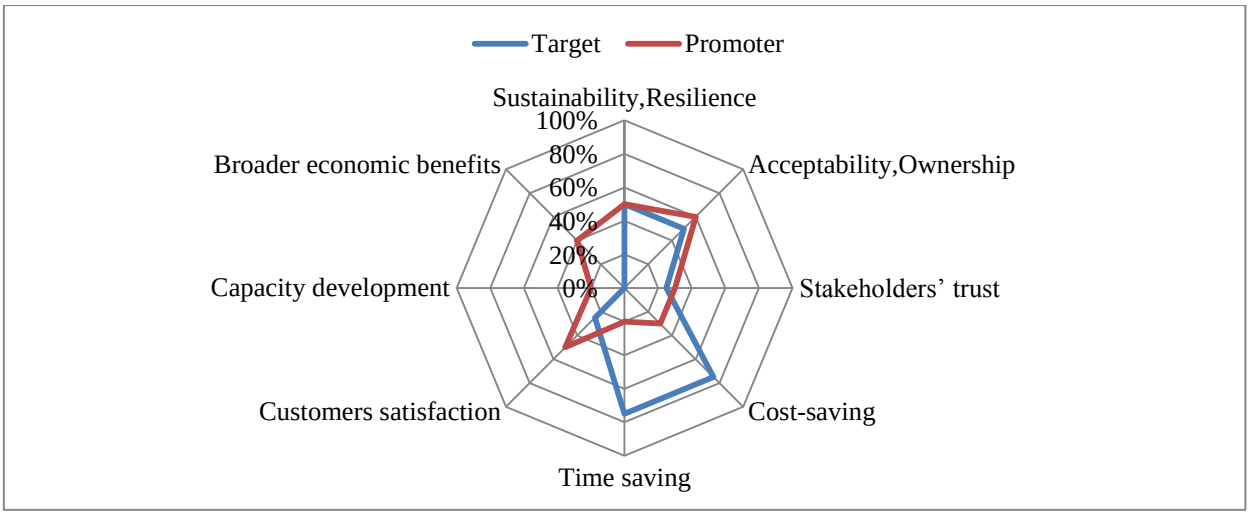


Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Mechanisms used to assess the effectiveness of stakeholder engagement

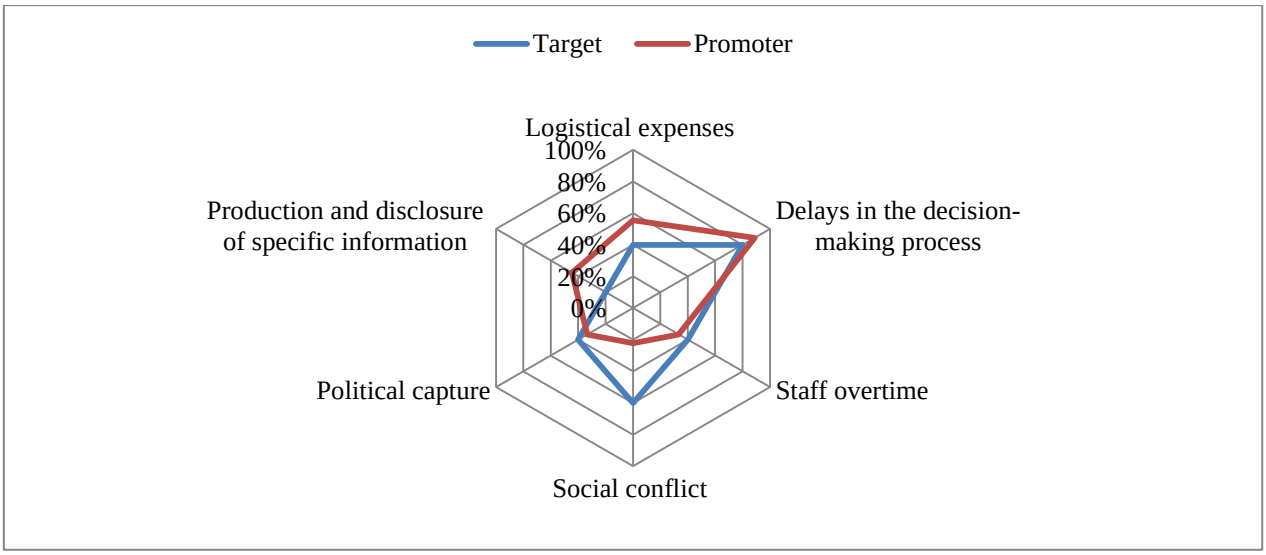


Perception of the main benefits derived by stakeholder engagement



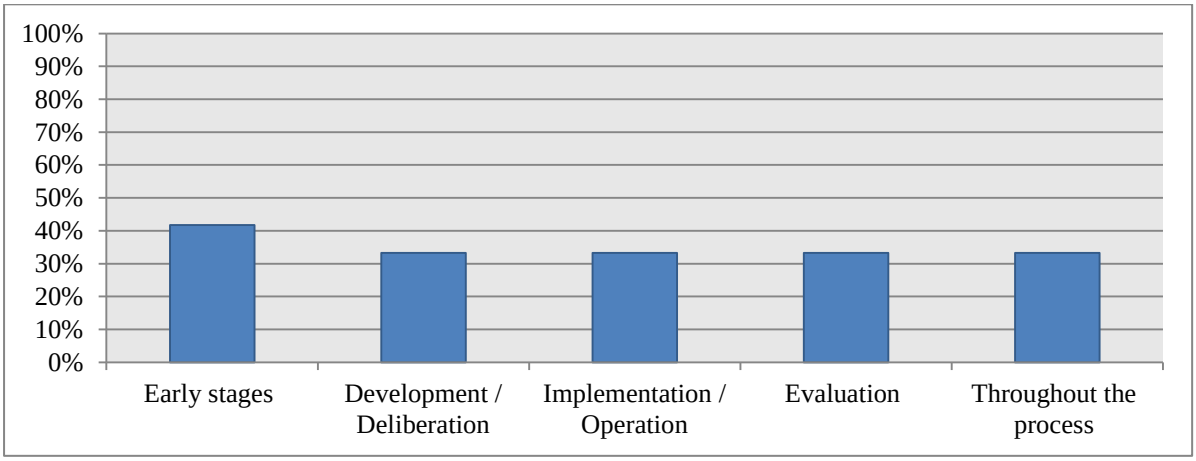
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (8)

Perception of the main costs incurred by stakeholder engagement



Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (6)

Stage of decision-making at which the stakeholder is most influential



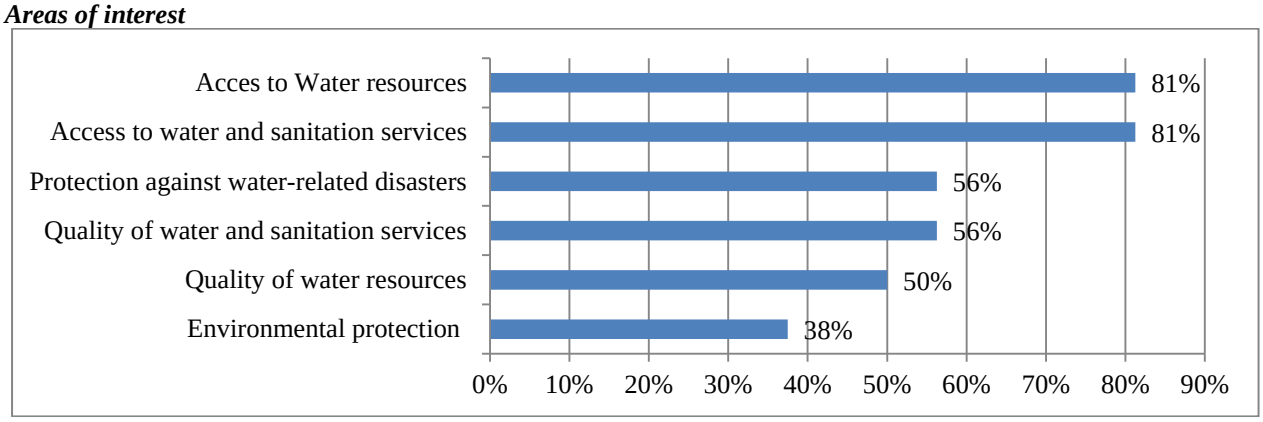
Note: Stages of decision-making at which sub-national governments consider having a "critical influence"

International organisations

List of international organisations surveyed

African Minister's Council on Water
Economic Commission for Latin America and the Caribbean
Food and Agriculture Organisation
Global Environmental Facility - International Waters Focal Area
Global Institute for Water, Environment and Health
Global Water Partnership
Global Water Partnership - Ukraine
Global Water Partnership - Slovenia
International Commission for the Protection of the Danube River
League of Arab States
Mediterranean Institute for Water (IME)
Scientific Information Centre of Interstate Commission for Water Coordination in Central Asia
UNDP Global Water Solidarity
UNESCO International Hydrological Program
Union for the Mediterranean
UN-Water Decade Programme on Advocacy and Communication

Areas of interest

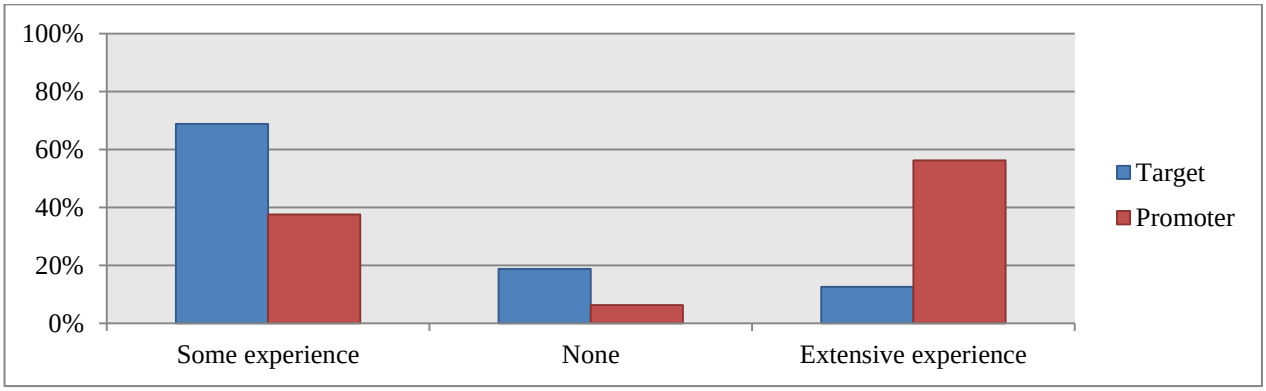


Note: Areas of interest of International organisations ranked from 1 to 3 on a scale from (1) to (6)

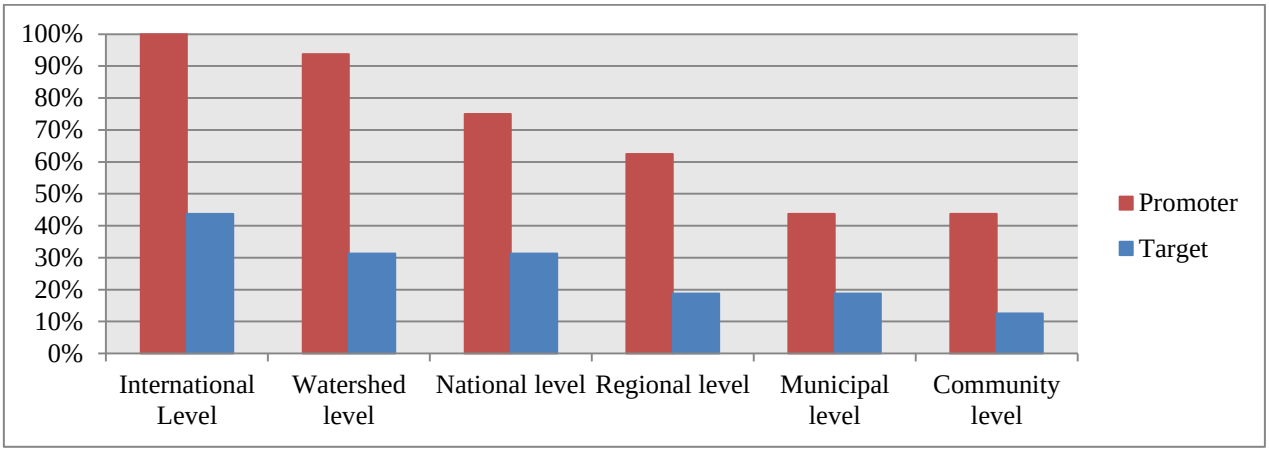
Key words most often associated with stakeholder engagement

Note: The word cloud was created based on the key terms that were ranked first on a scale from 1 to 5

Experience in stakeholder engagement

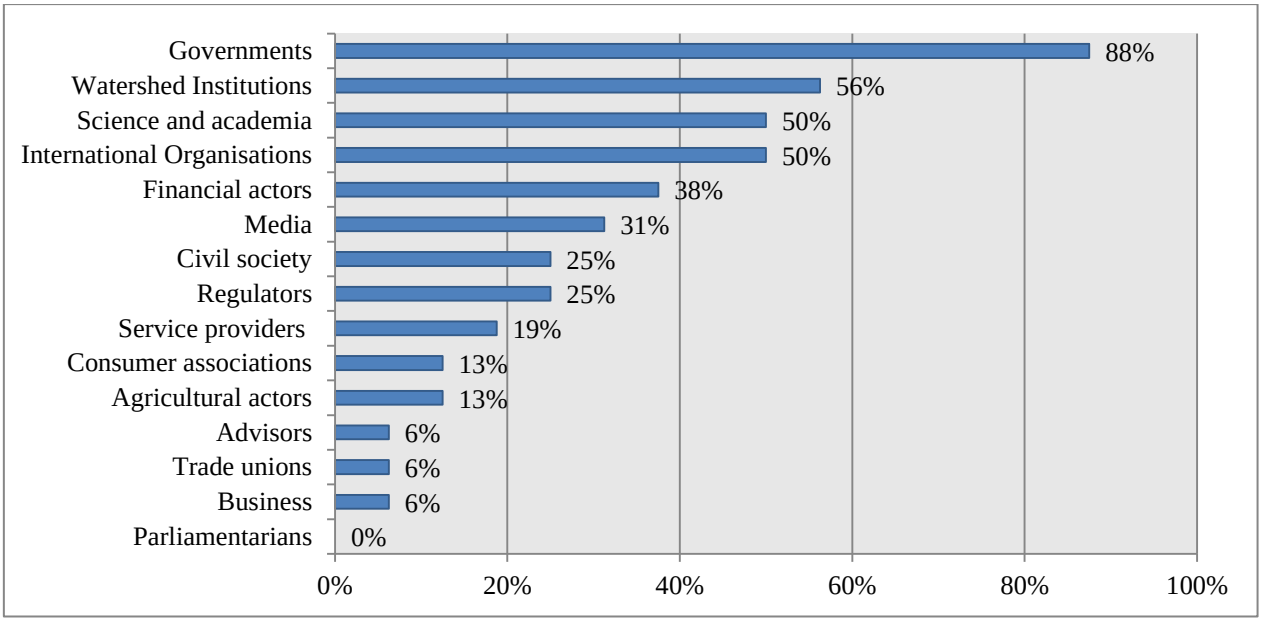


Scale of intervention



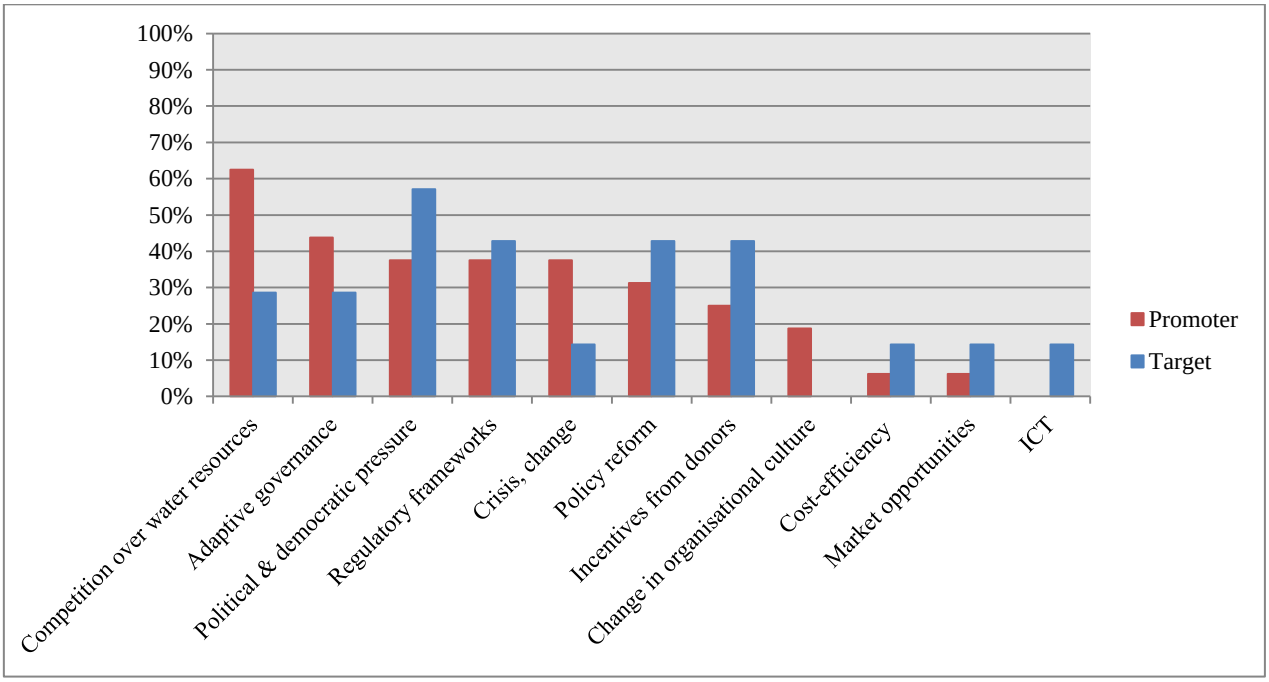
Note: Scale of intervention at which international organisations primarily intervene

Interactions with other stakeholders



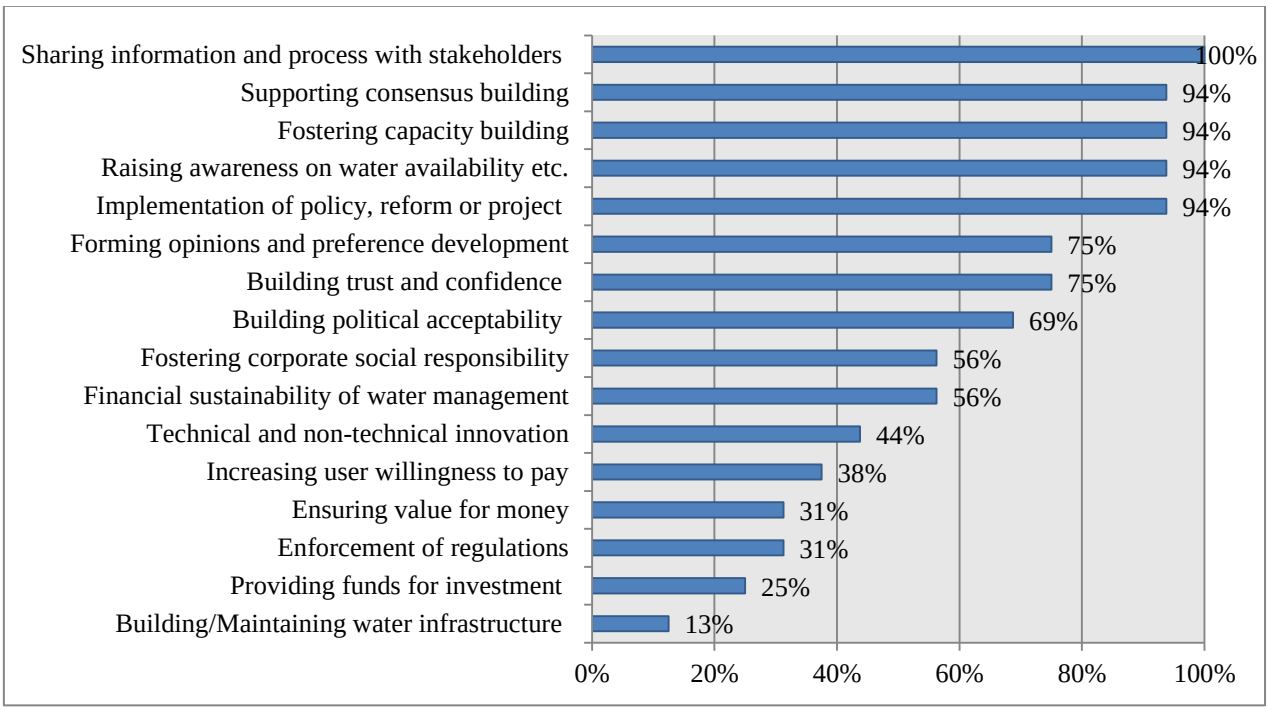
Note: Categories of stakeholders with which international organisations interact “always or very frequently”

Main drivers



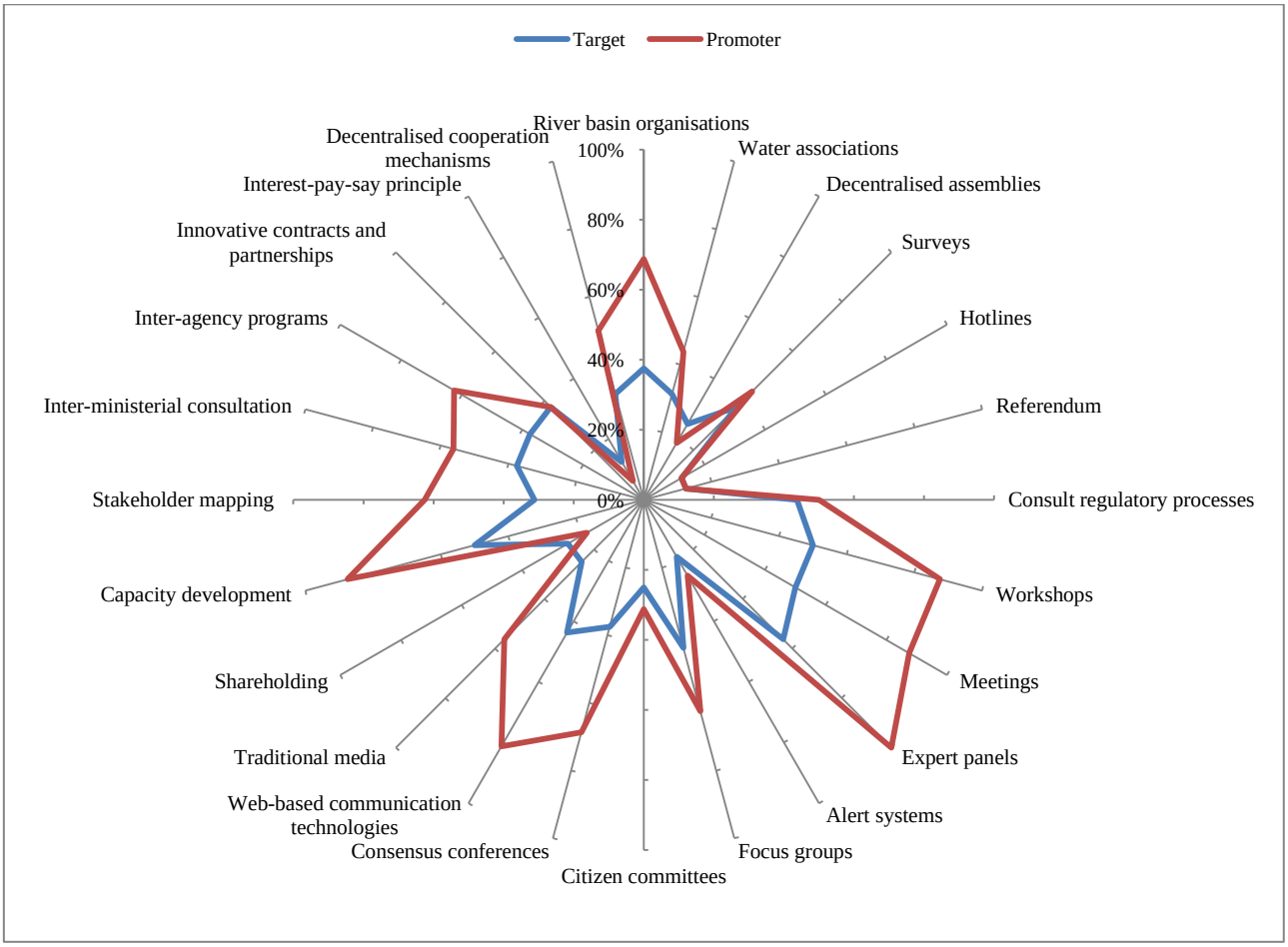
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Perception about stakeholder engagement contribution to better water governance

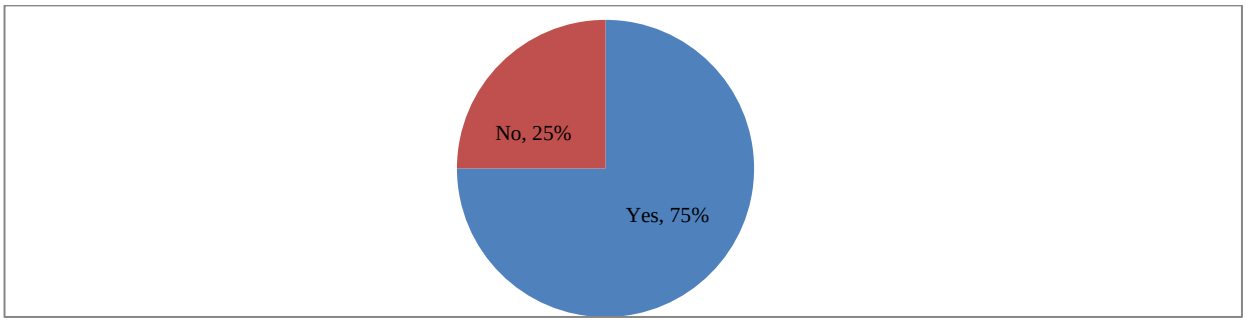


Note: Areas of contribution to water governance for which international organisations responded "yes"

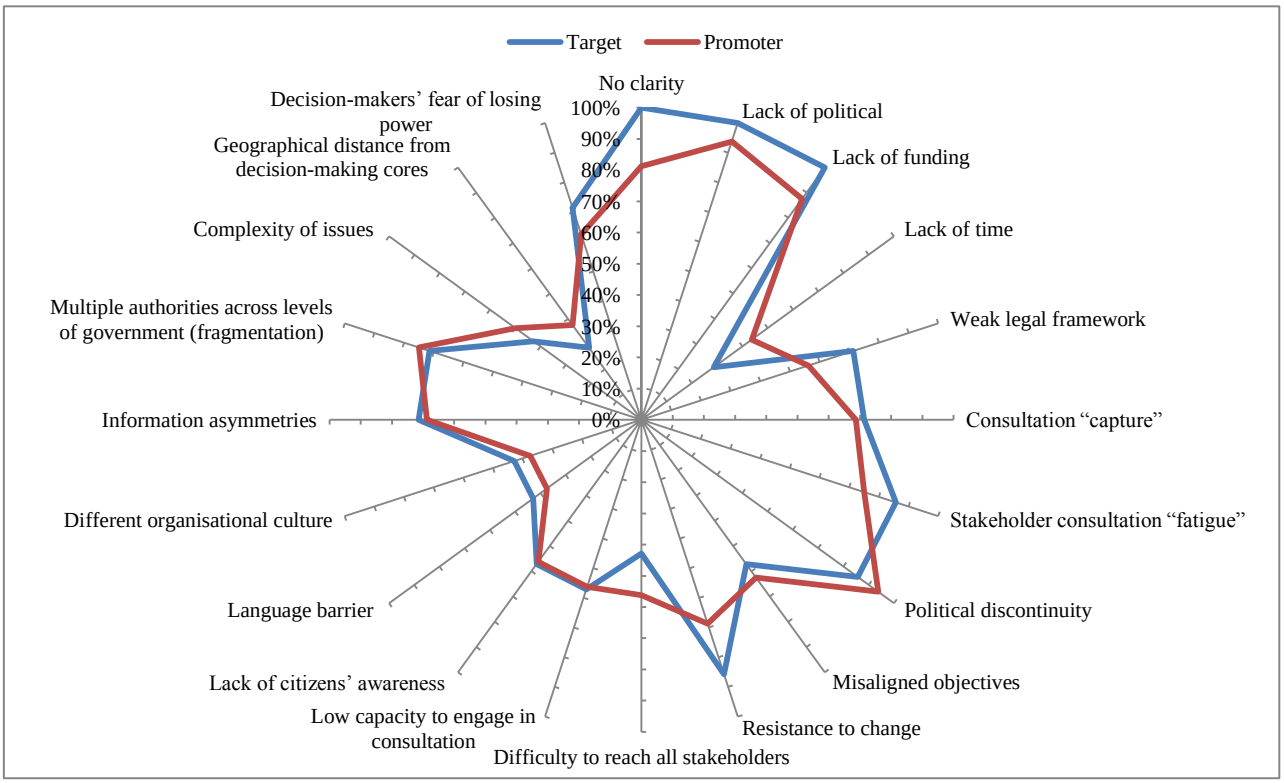
Use of stakeholder engagement mechanisms



Are existing stakeholder engagement mechanisms sufficient?

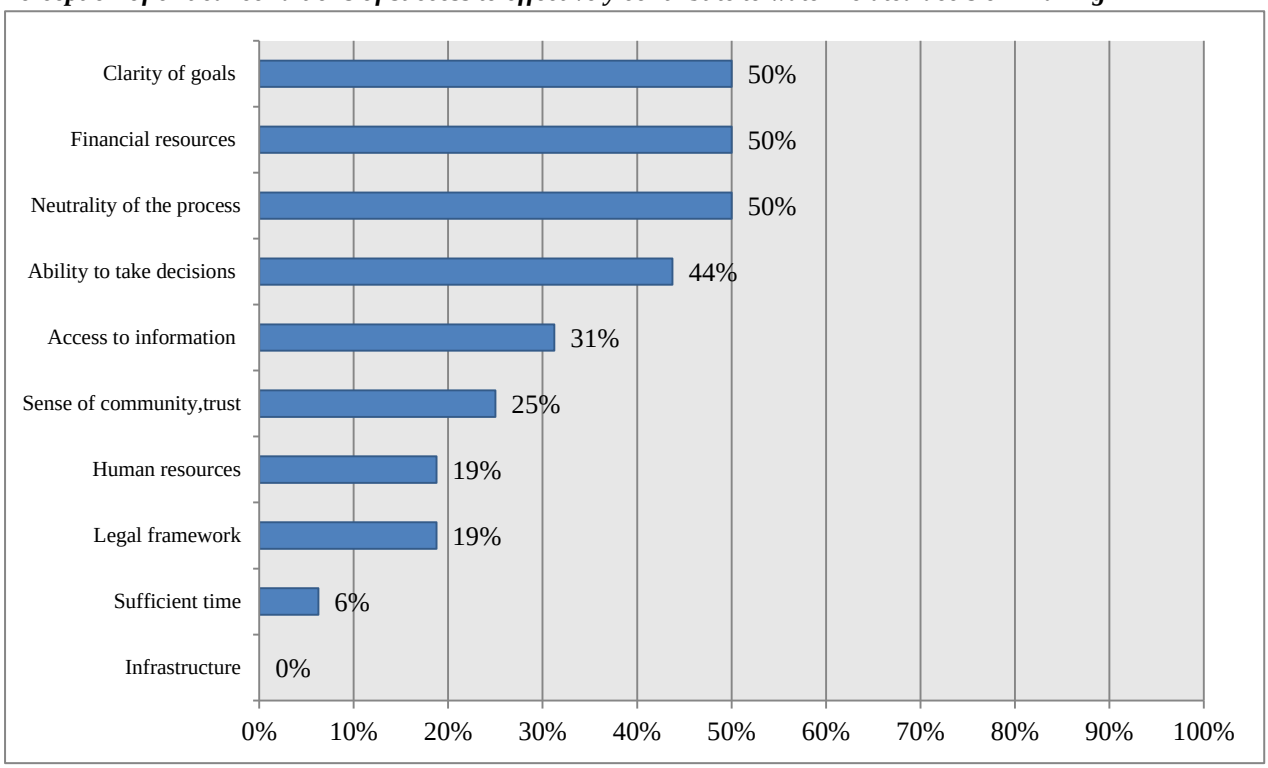


Main obstacles faced to engage stakeholders



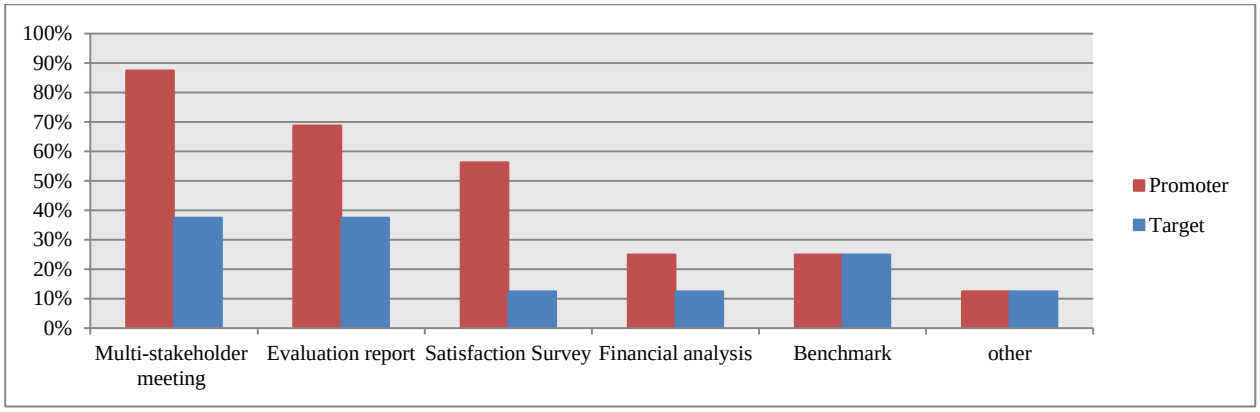
Note: Obstacles considered as "critical" and "important" by international organisations

Perception of critical conditions of success to effectively contribute to water-related decision-making

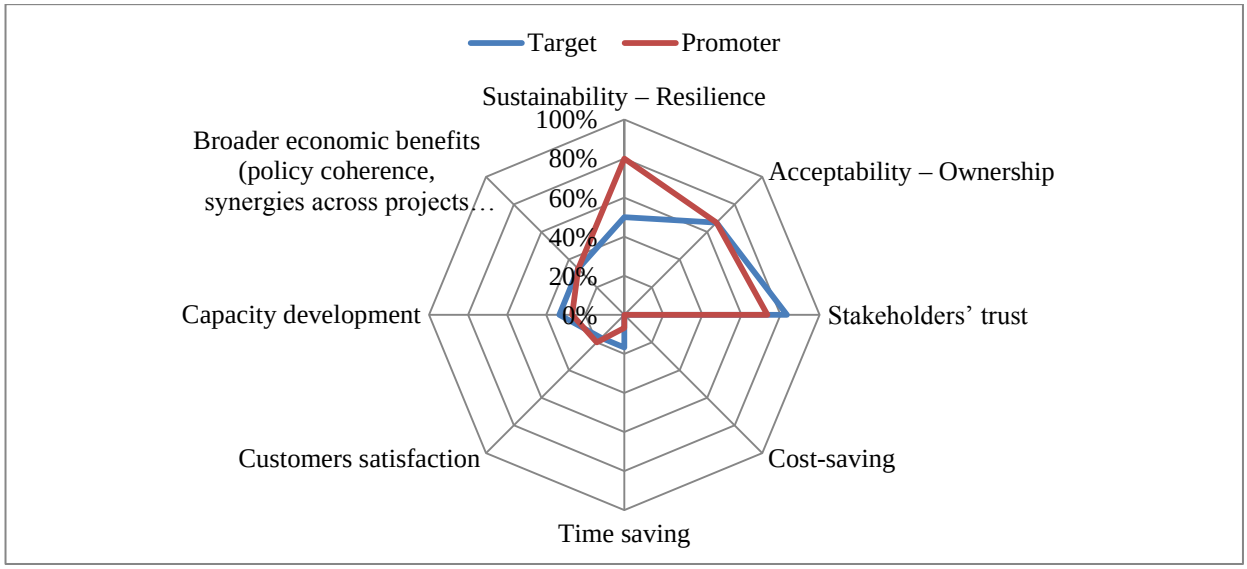


Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Mechanisms used to assess the effectiveness of stakeholder engagement

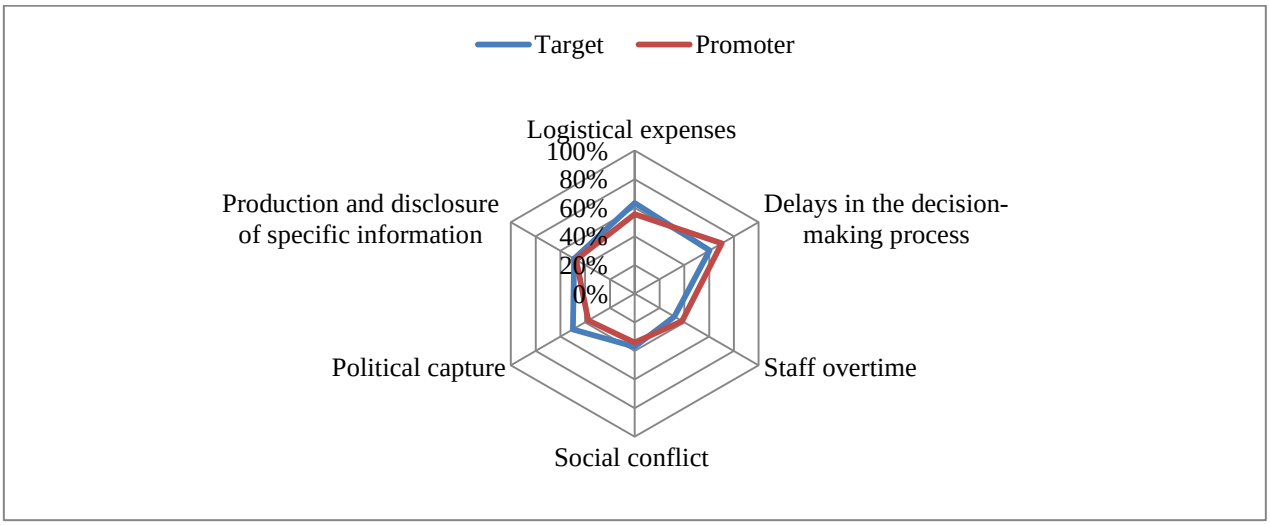


Perception of the main benefits derived by stakeholder engagement



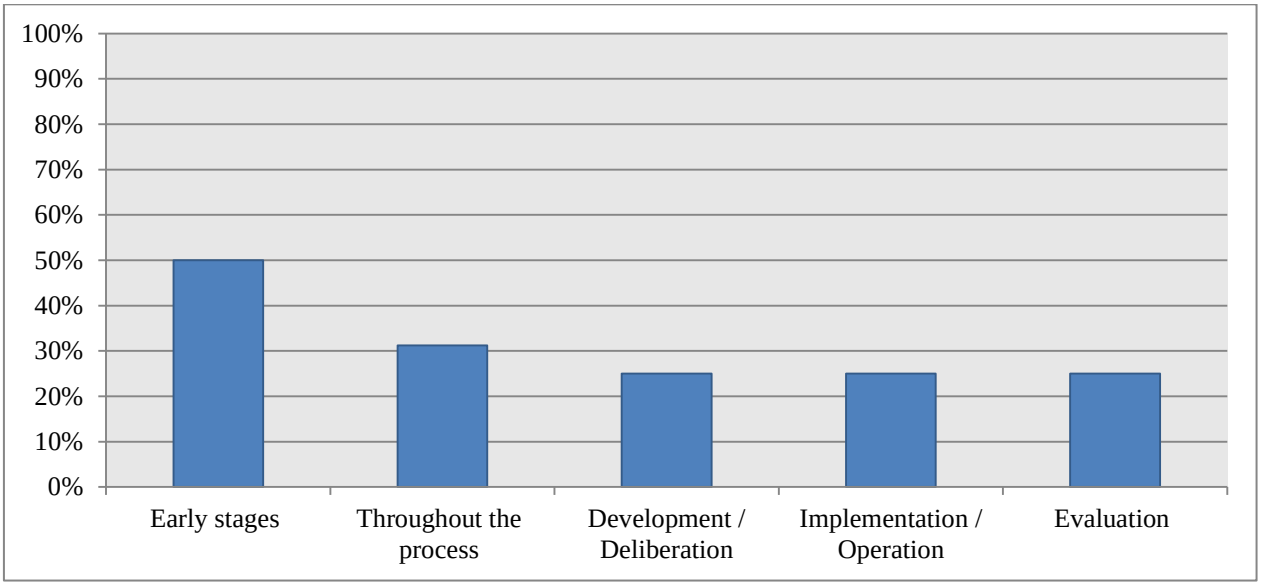
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (8)

Perception of the main costs incurred by stakeholder engagement



Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (6)

Stage of decision-making at which the stakeholder is most influential



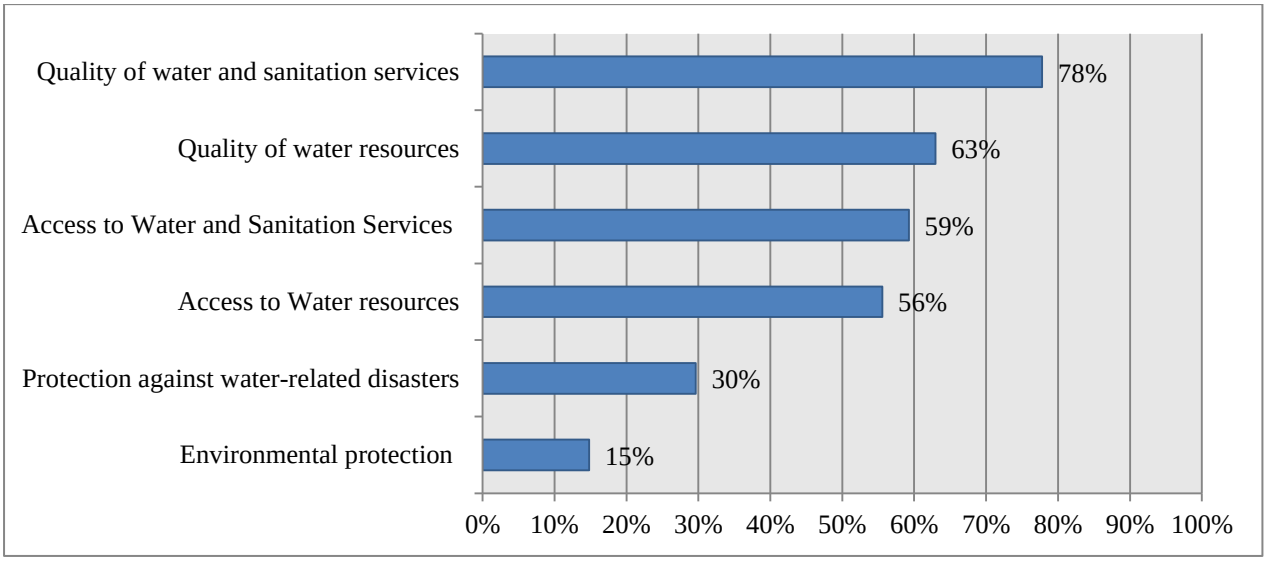
Note: Stages of decision-making at which international organisations consider having a "critical influence"

Service providers and their networks

List of service providers surveyed

Algeria - SEAAL (Société des Eaux et de l'assainissement d'Alger)
Aqua Publica Europea
AquaFed
Australia - Water Corporation of Western Australia
Belgium - SA AQUAWAL
EUREAU
France - Eau de Paris
France - SYDEC
France - Syndicat des eaux d'Ile de France
France - Syndicat des Eaux et de l'Assainissement - Alsace Moselle
Italy - Cap Holding Spa
Italy - Metropolitana Milanese Spa
Italy - SMAT S.p.A.
Italy - UNIACQUE SpA
Korea - K-Water
Mexico - National Association for Water and Sanitation
Portugal - AC E.M.
Portugal - Aguas de Coimbra
Portugal - Aguas de Portugal SA
Portugal - APDA (Portuguese Water Supply and Wastewater Association)
Russia - Russian Water and Wastewater Association
Slovak Republic - Verejné prístavy AS
Spain - ACUAMED
Spain - AEAS (Spanish Association of Water and Sanitation)
SUEZ Environnement
United Kingdom - Water UK

Areas of interest

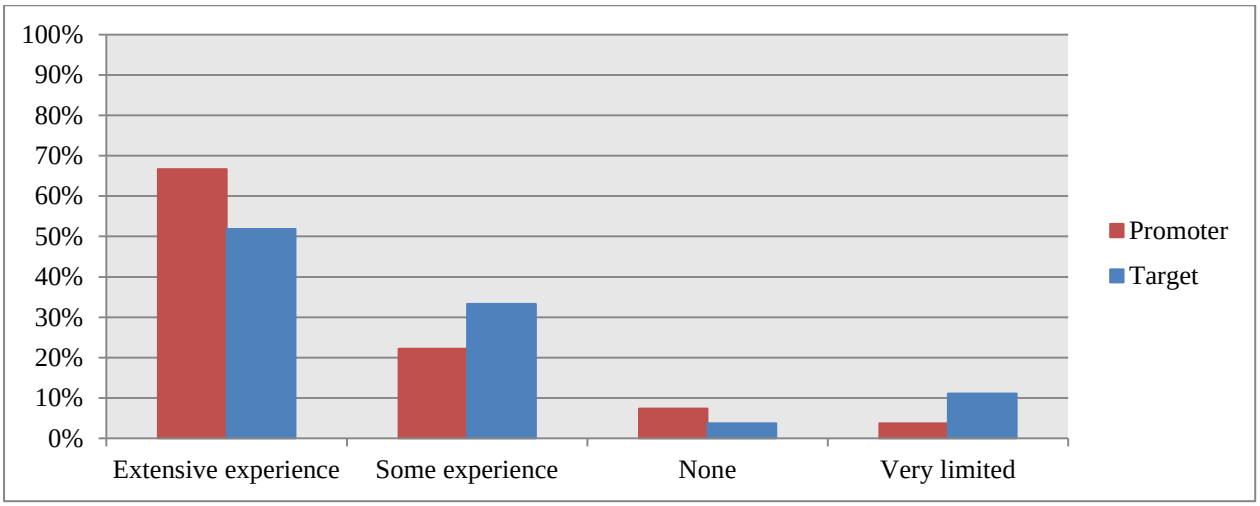


Note: Areas of interest of service providers ranked from 1 to 3 on a scale from (1) to (6)

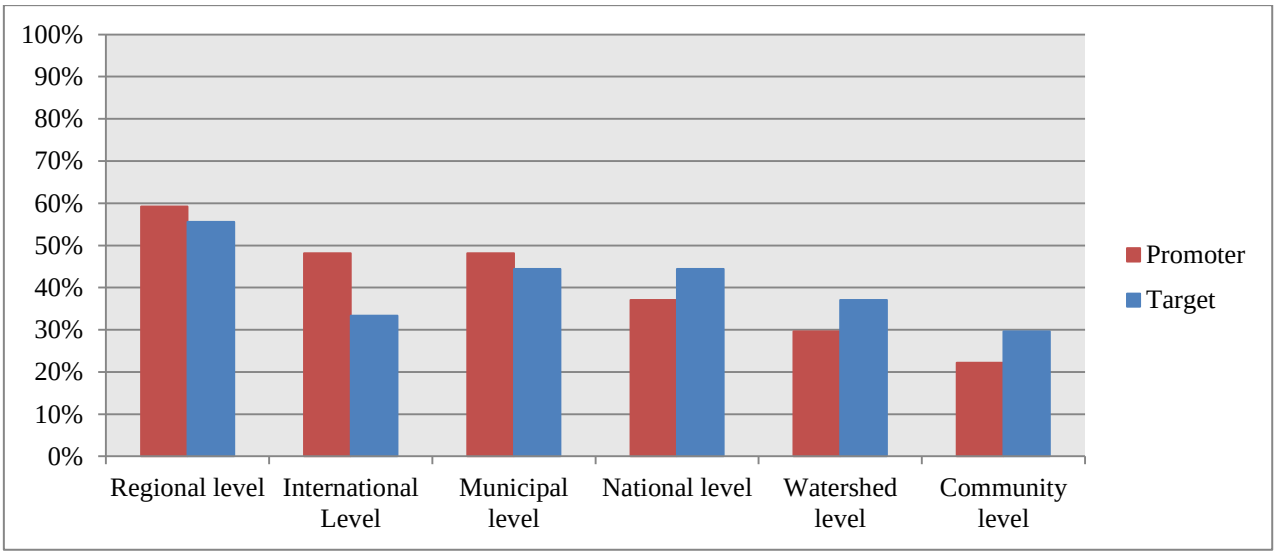
Key words most often associated with stakeholder engagement

Note: The word cloud was created based on the key terms that were ranked first on a scale from 1 to 5.

Experience in stakeholder engagement

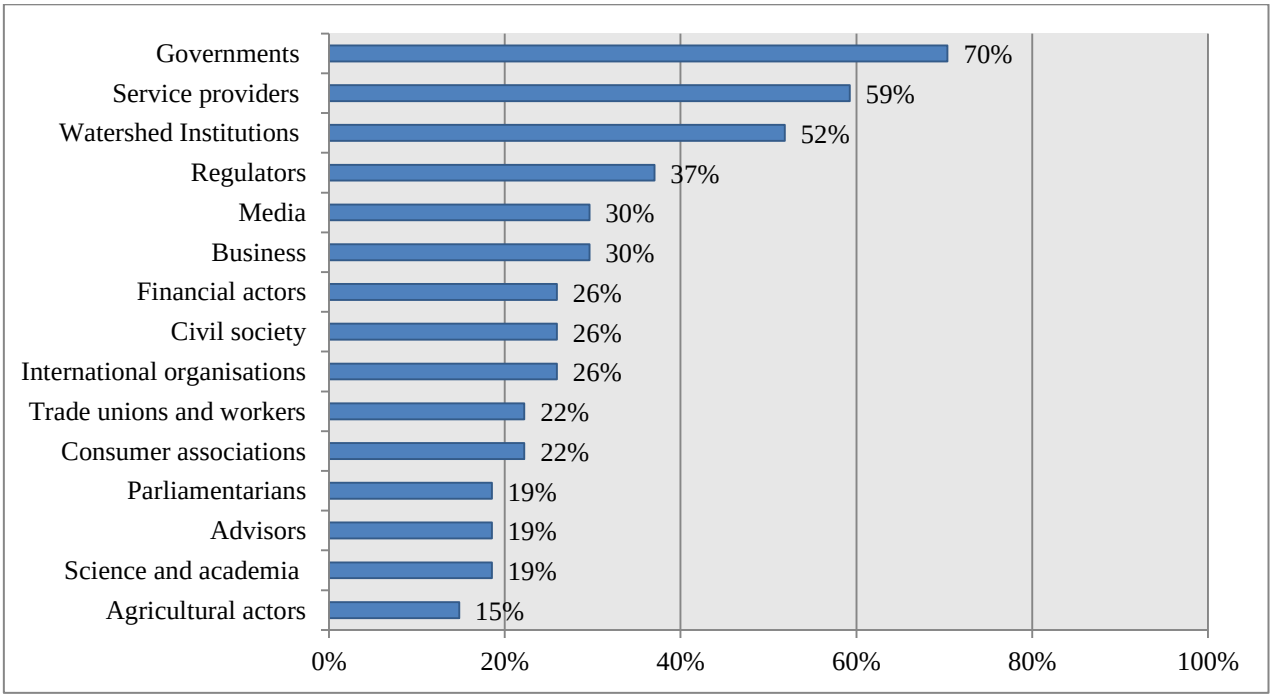


Scale of intervention



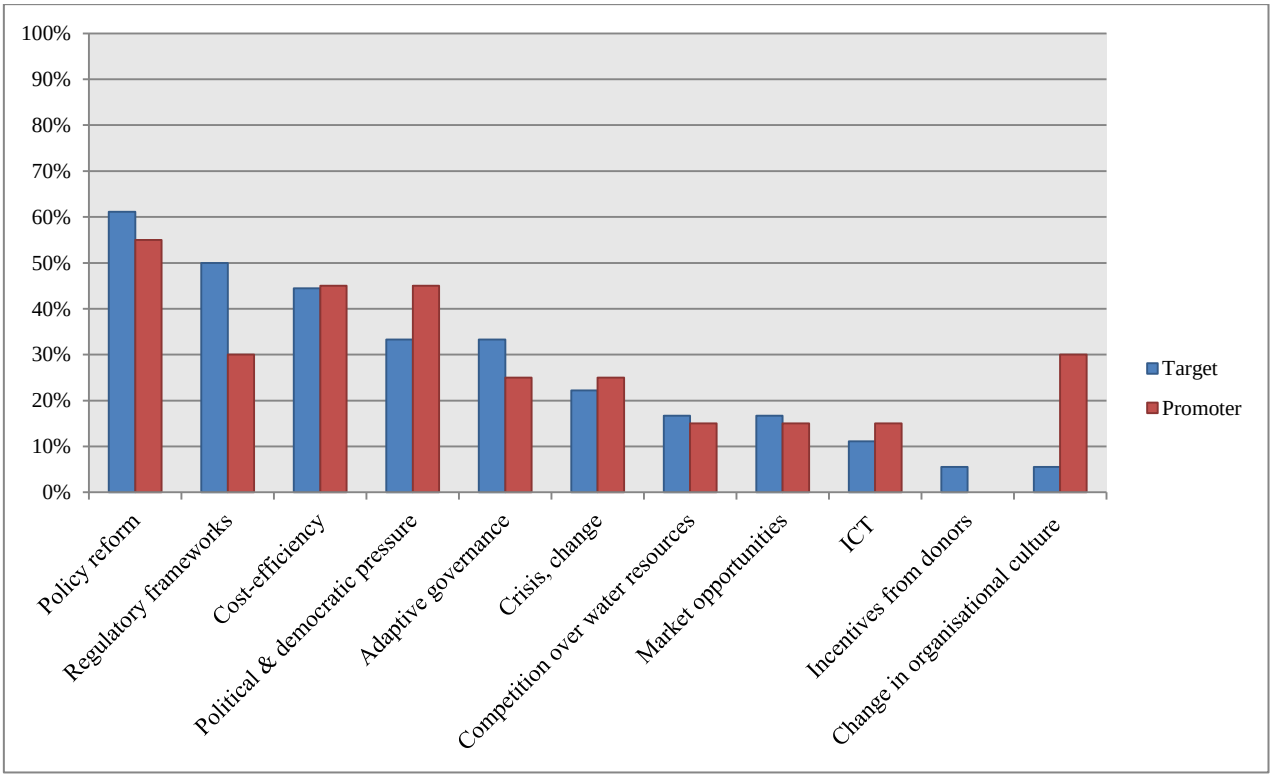
Note: Scale of intervention at which service providers primarily intervene

Interactions with other stakeholders



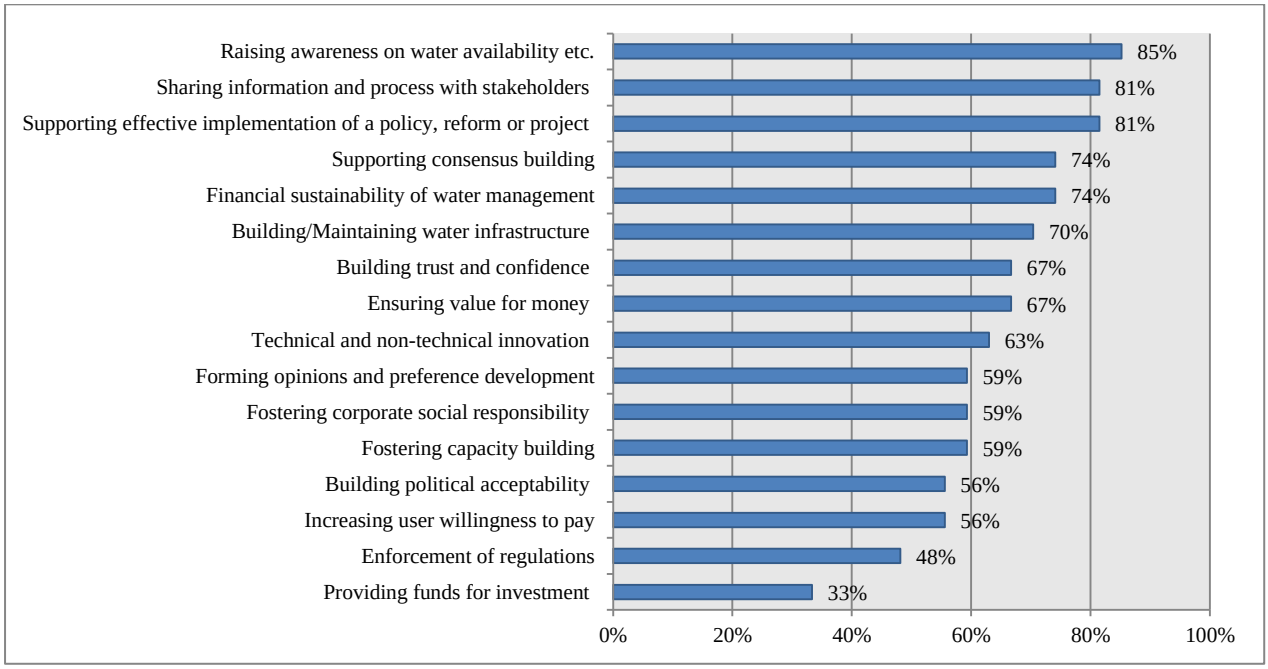
Note: Categories of stakeholders with which service providers interact "always or very frequently"

Main drivers



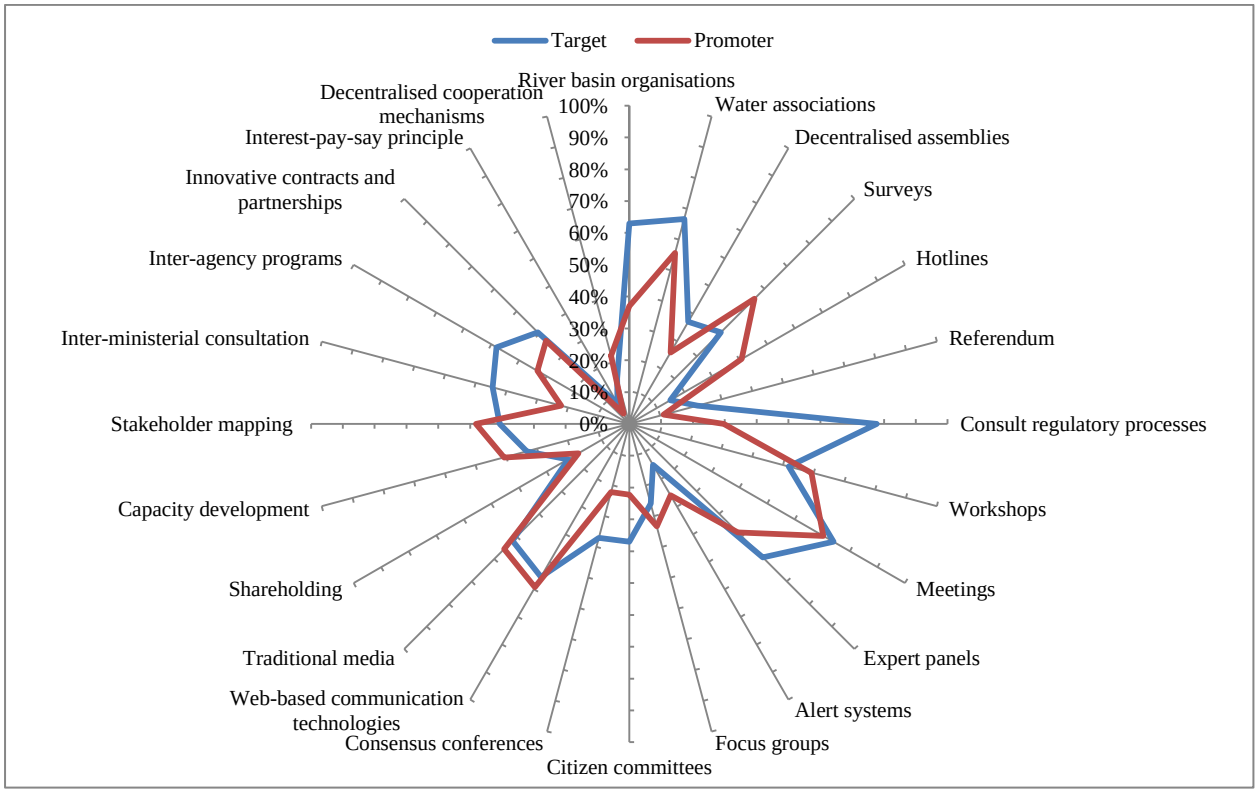
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Perception about stakeholder engagement contribution to better water governance

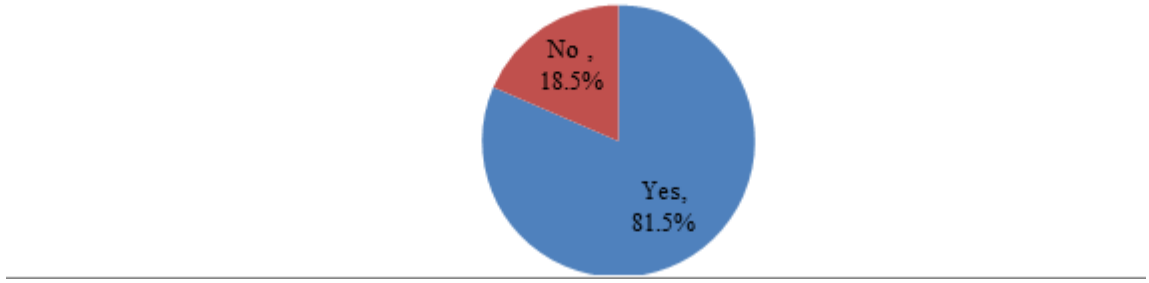


Note: Areas of contribution to water governance for which service providers responded "yes"

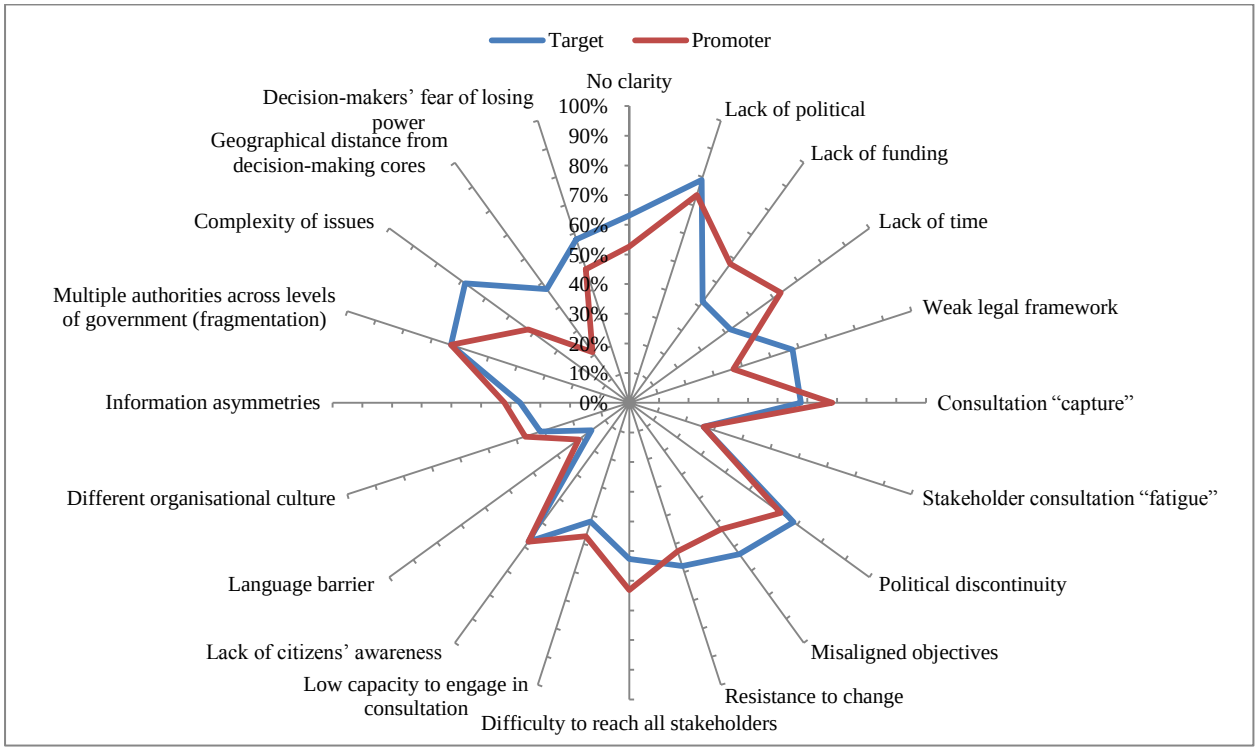
Use of stakeholder engagement mechanisms



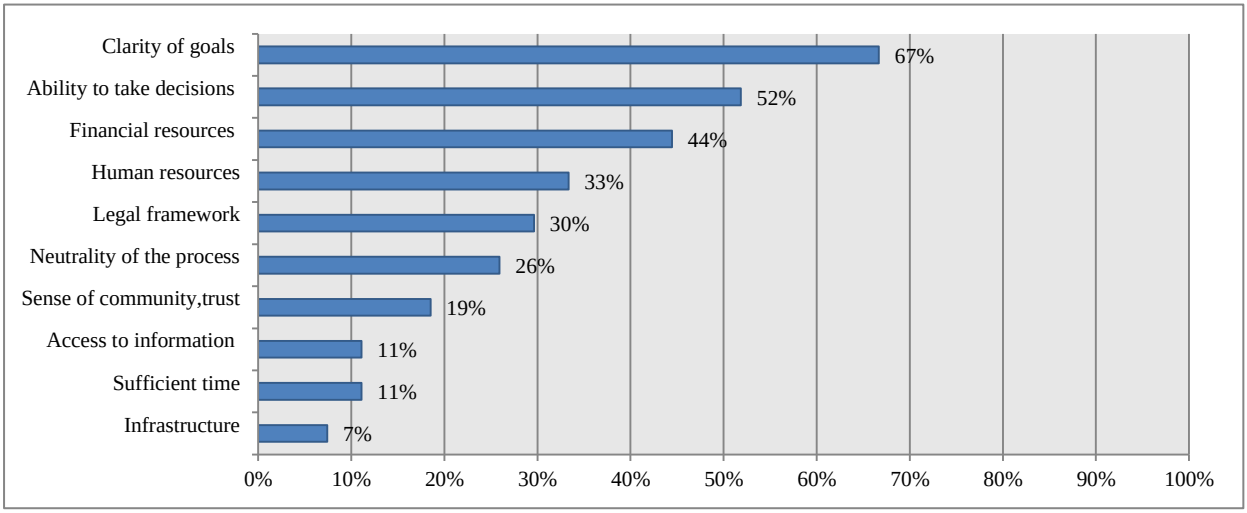
Are existing stakeholder engagement mechanisms sufficient?



Main obstacles faced to engage stakeholders

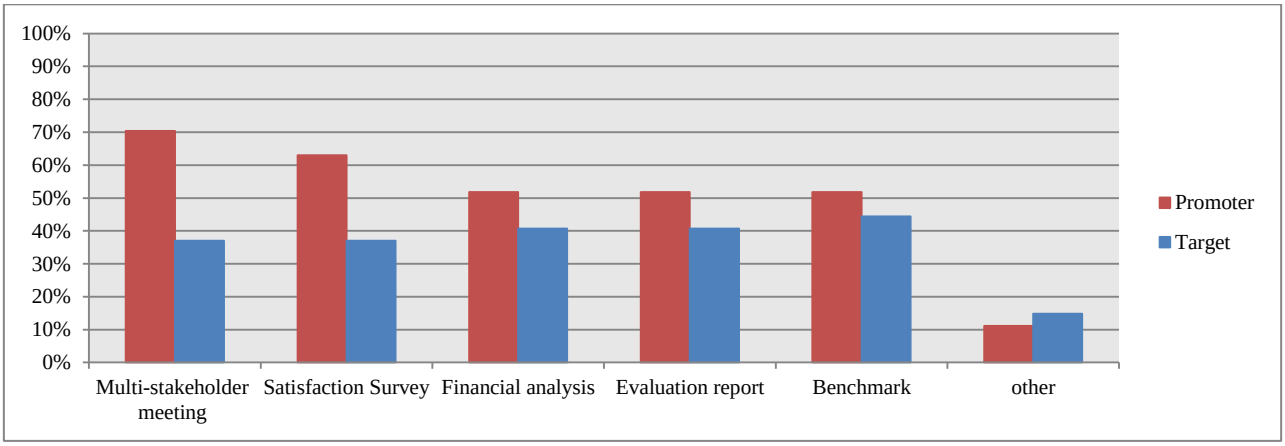


Perception of critical conditions of success to effectively contribute to water-related decision-making

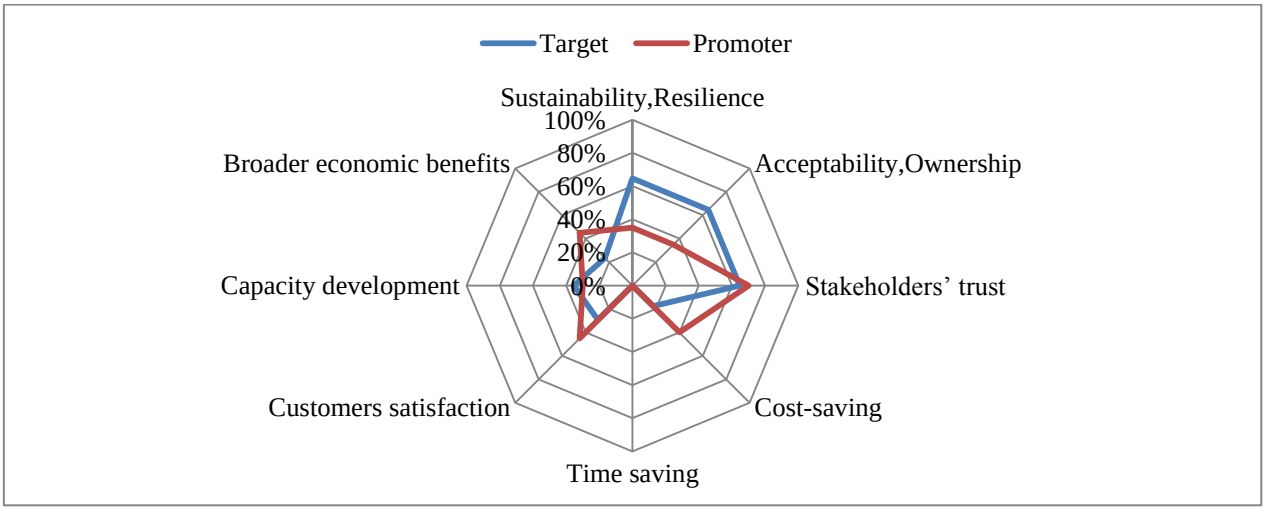


Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Mechanisms used to assess the effectiveness of stakeholder engagement

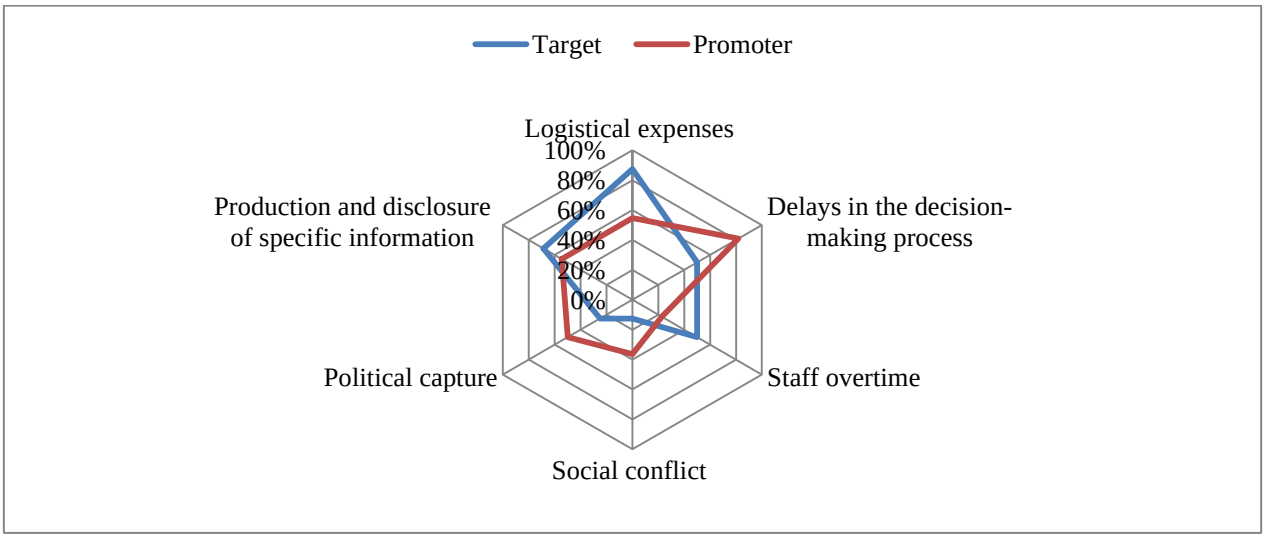


Perception of the main benefits derived by stakeholder engagement



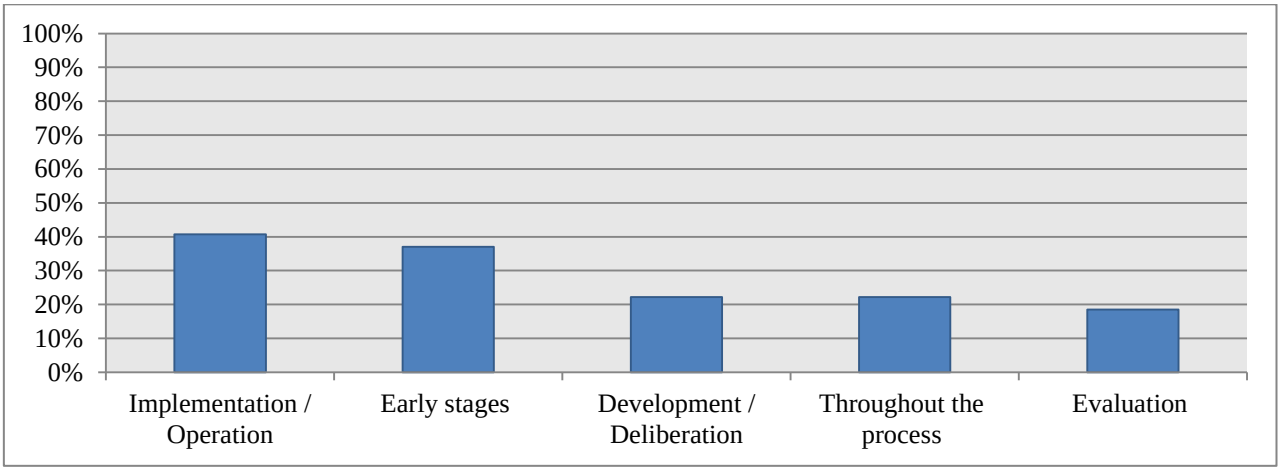
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (8)

Perception of the main costs incurred by stakeholder engagement



Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (6)

Stage of decision-making at which the stakeholder is most influential



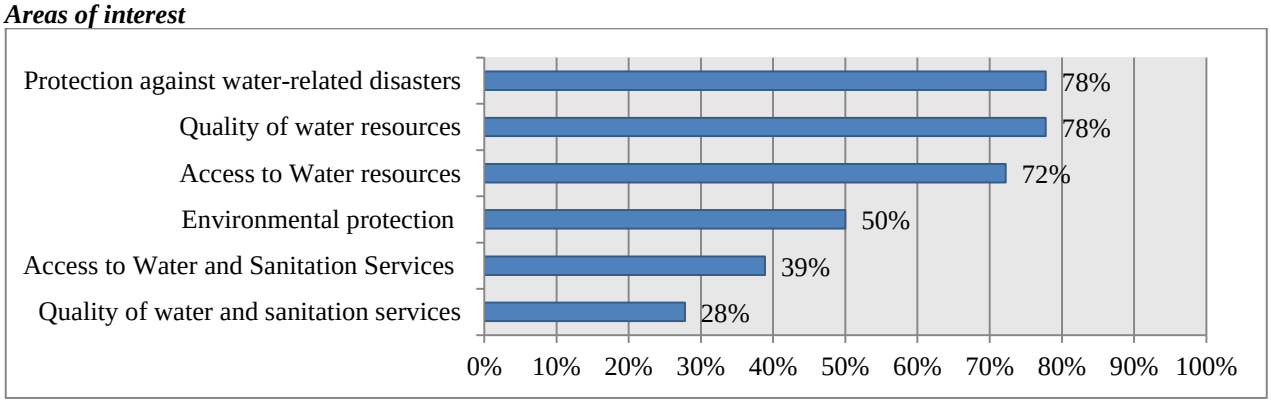
Note: Stages of decision-making at which service providers consider having a "critical influence"

Watershed institutions and their networks

List of watershed institutions surveyed

Canada - Regroupement des organismes de bassins versants du Québec
Canada - South Nation River Conservation Authority
European Union Water Management Association
France - Agence de l'eau Rhône-Méditerranée-Corse
France - Association Française des Établissements Publics Territoriaux de Bassin
Germany - Wupperverband
Indonesia - Perum Jasa Tirta II Jatiluhur
International Network of Basin Organizations
Italy - Tuscany Water Authority
Japan - Japan Water Agency
Netherlands - Association of Dutch Water Authorities
Netherlands - Dutch Water Authority of Brabantse Delta
Netherlands - Dutch Water Authority of Rijnland
Network of Asian River Basin Organizations
Spain - Jucar River Basin Authority
Spain - River Basin Authority of Segura
Sri Lanka - Mahaweli Authority
Thailand - Mun River Basin Committee

Areas of interest

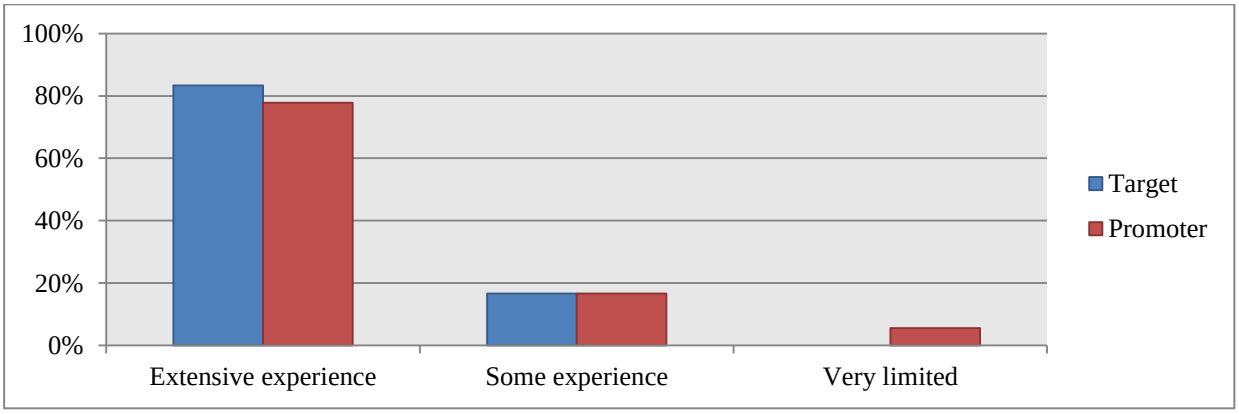


Note: Areas of interest of watershed institutions ranked from 1 to 3 on a scale from (1) to (6)

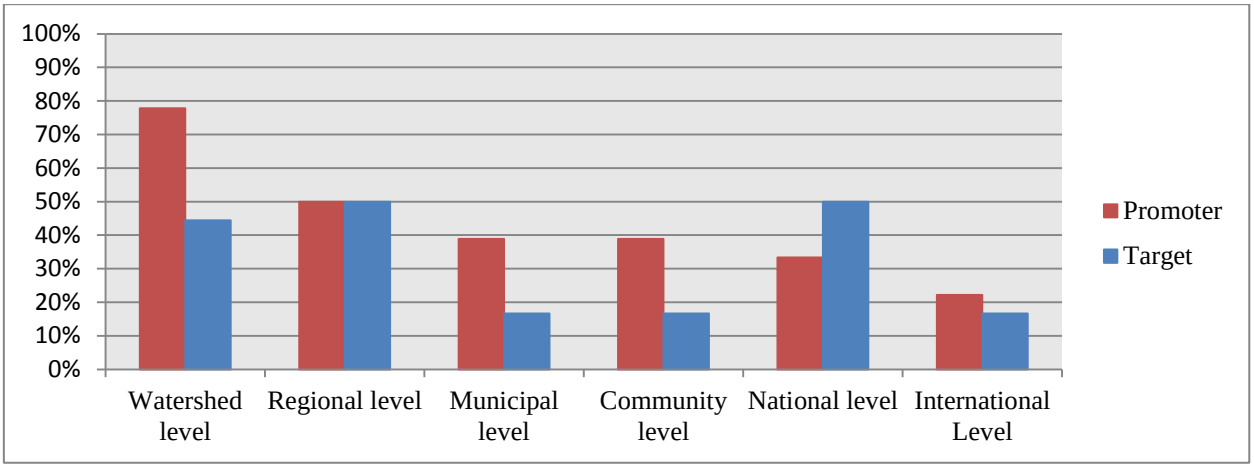
Key words most often associated with stakeholder engagement

Note: The word cloud was created based on the key terms that were ranked first on a scale from 1 to 5.

Experience in stakeholder engagement

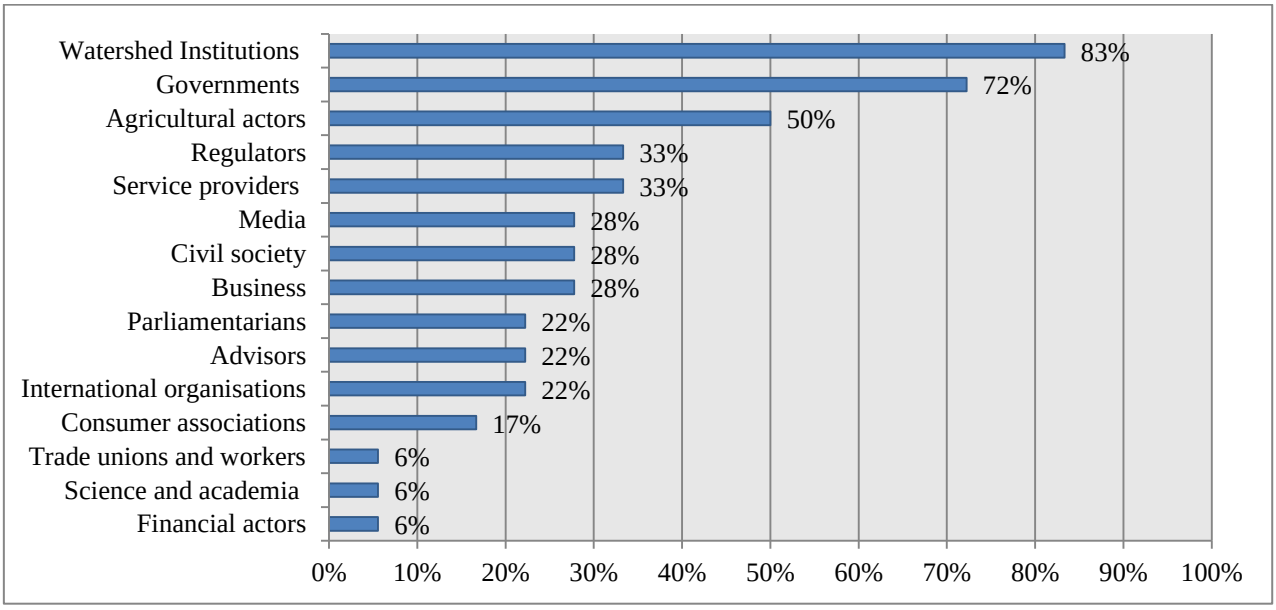


Scale of intervention



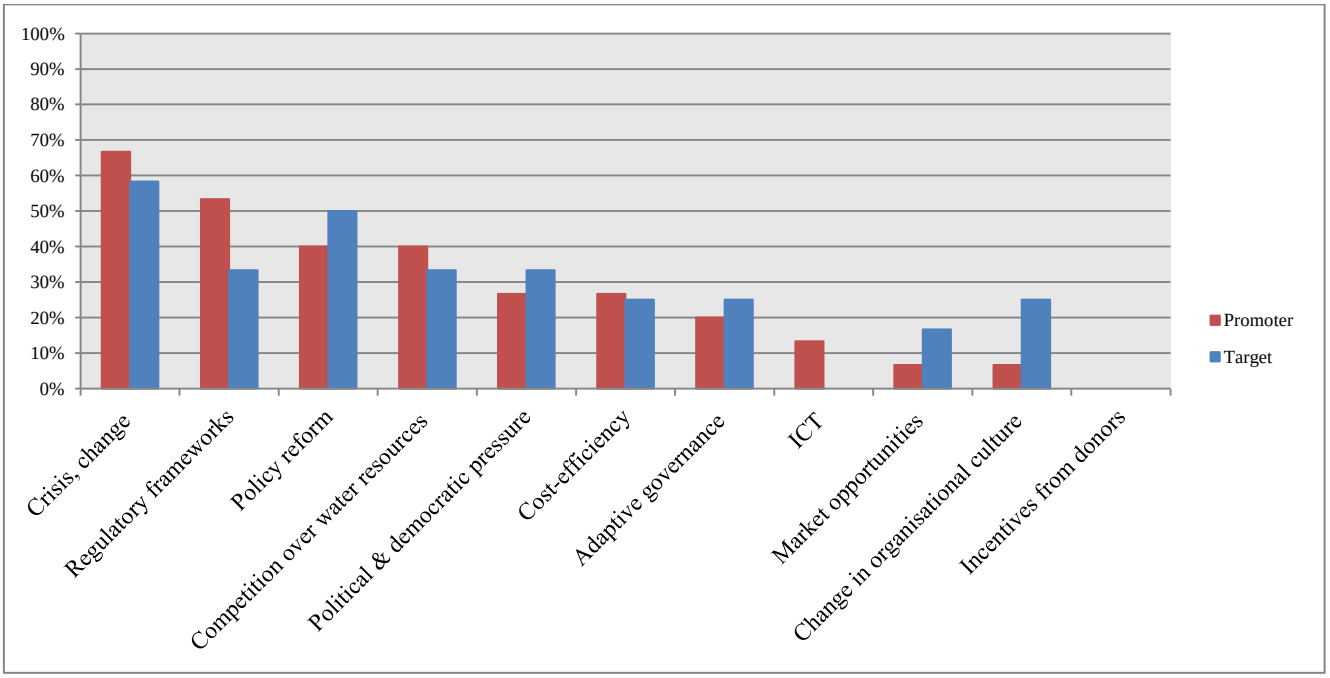
Note: Scale of intervention at which watershed institutions primarily intervene

Interactions with other stakeholders



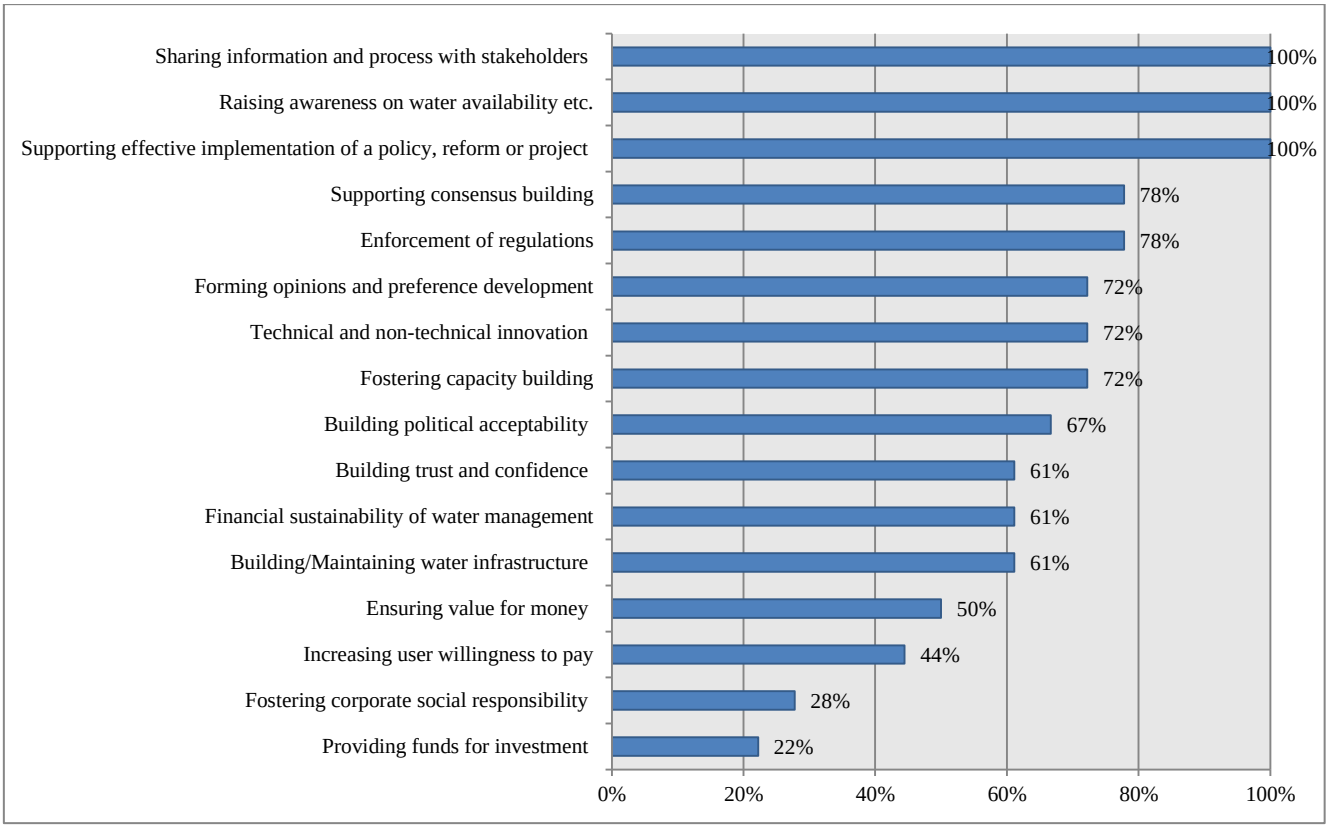
Note: Categories of stakeholders with which watershed institutions interact "always or very frequently"

Main drivers



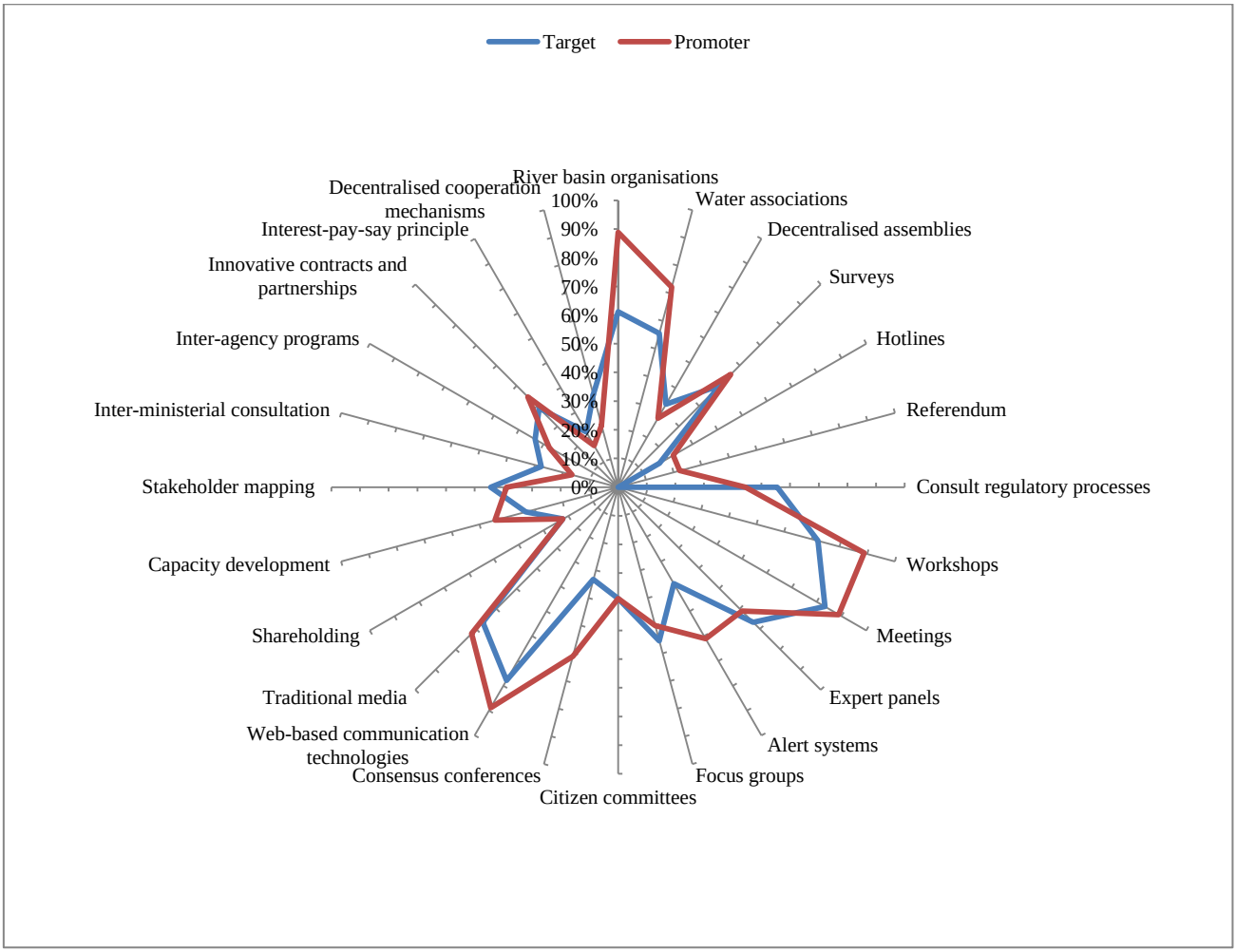
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Perception about stakeholder engagement contribution to better water governance

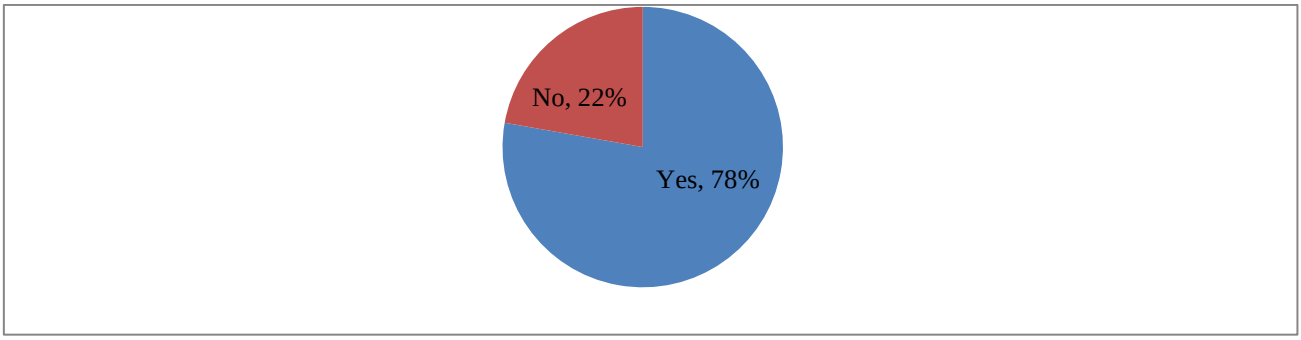


Note: Areas of contribution to water governance for which watershed institutions responded "yes"

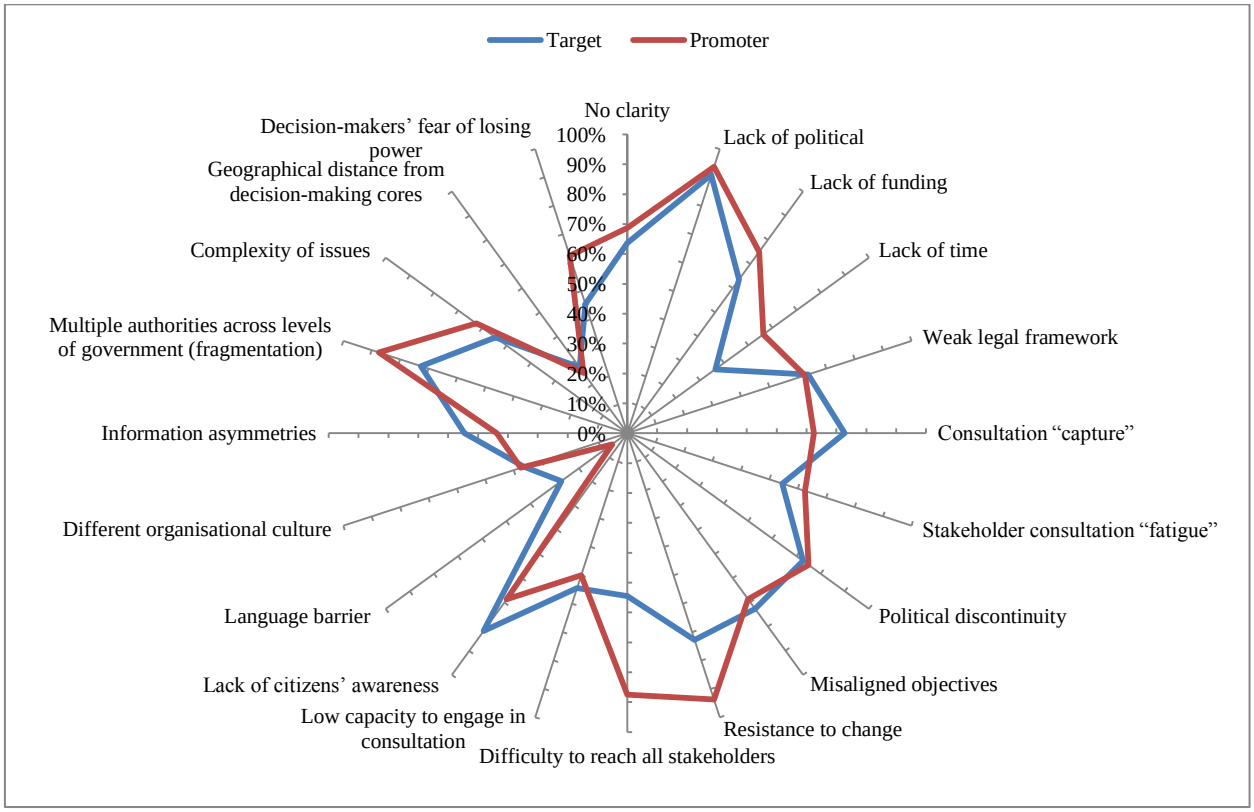
Use of stakeholder engagement mechanisms



Are existing stakeholder engagement mechanisms sufficient?

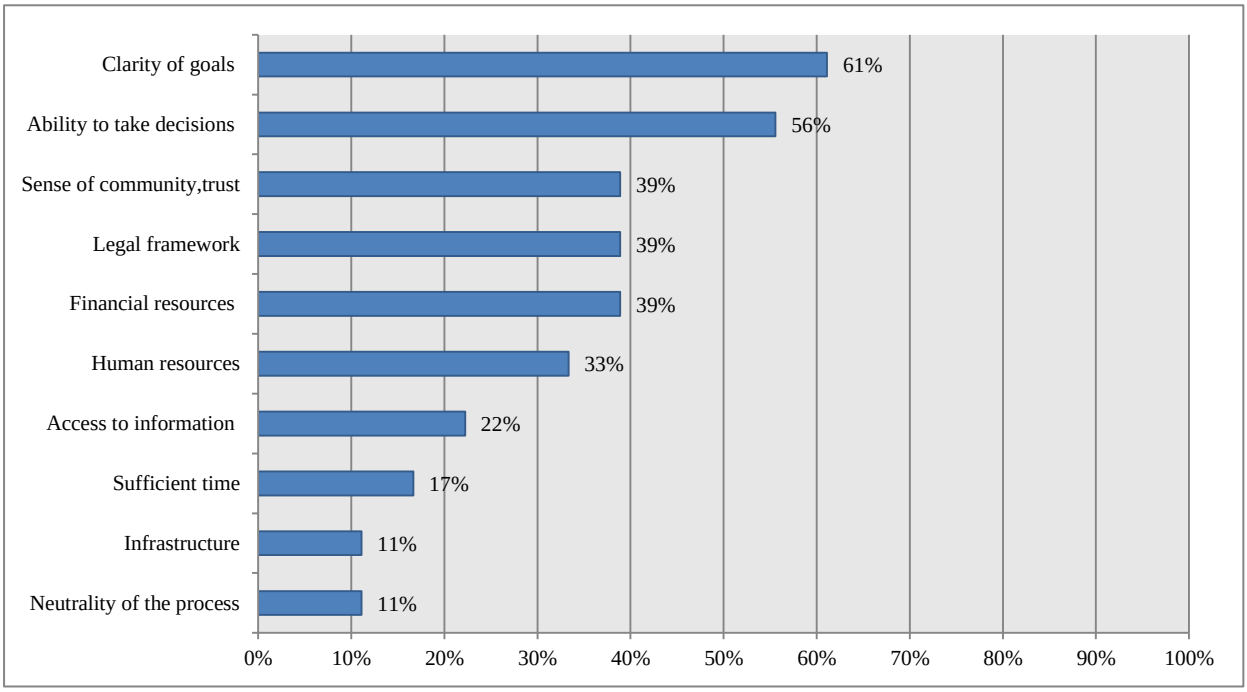


Main obstacles faced to engage stakeholders



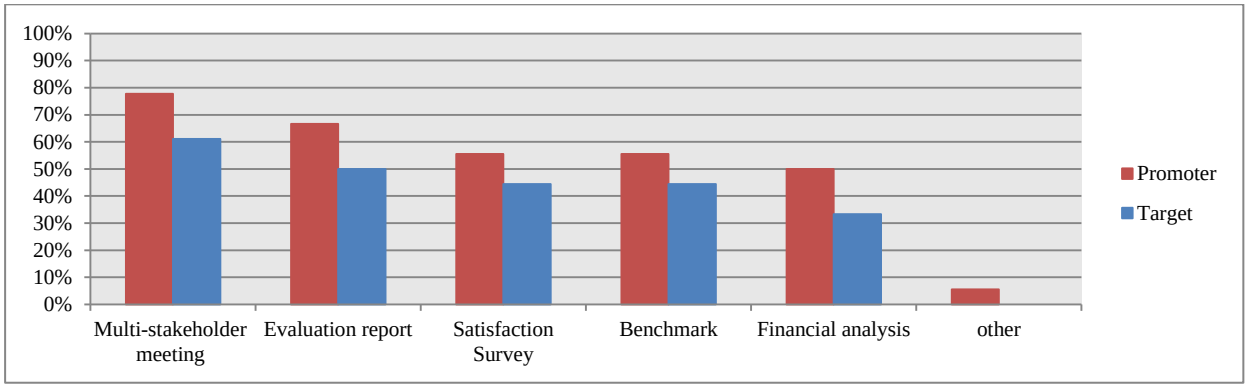
Note: Obstacles considered as "critical" and "important" by watershed institutions

Perception of critical conditions of success to effectively contribute to water-related decision-making

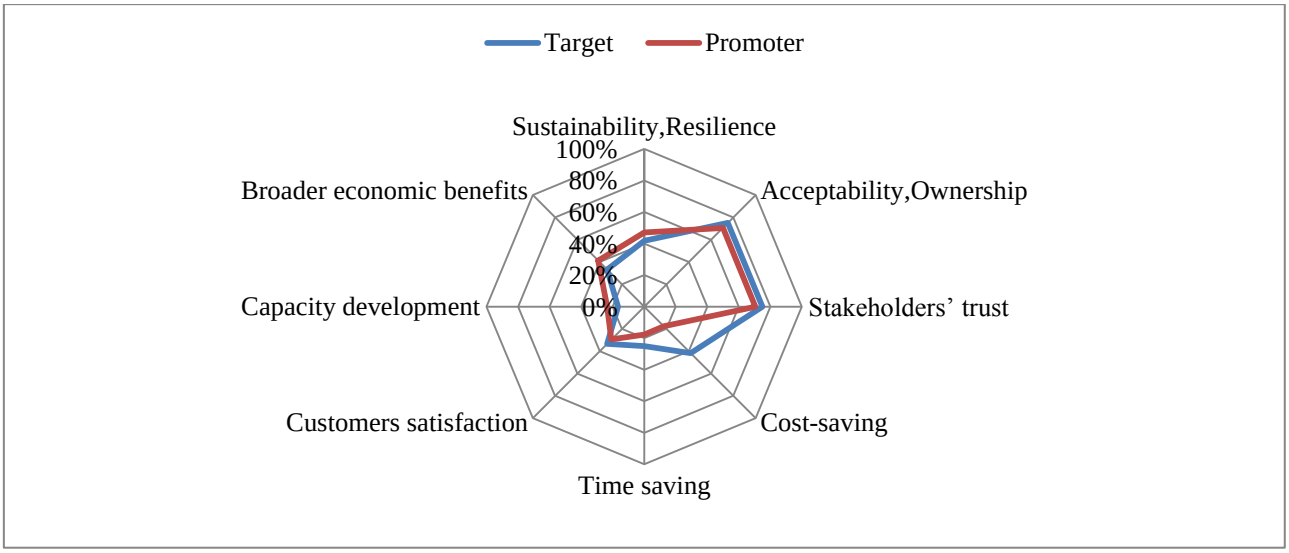


Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Mechanisms used to assess the effectiveness of stakeholder engagement

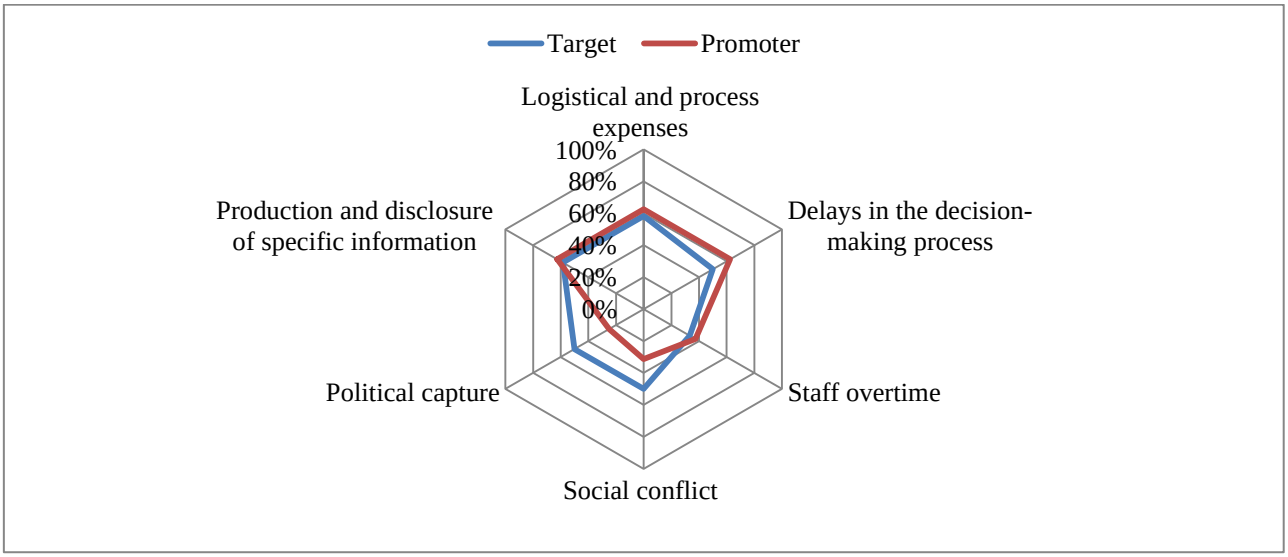


Perception of the main benefits derived by stakeholder engagement



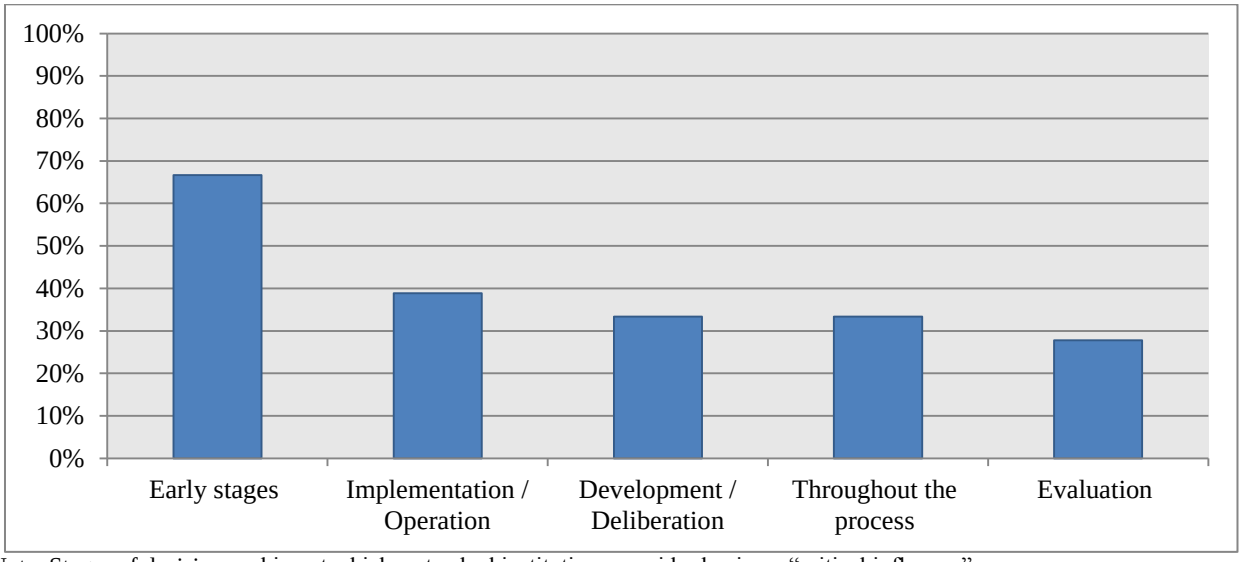
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (8)

Perception of the main costs incurred by stakeholder engagement



Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (6)

Stage of decision-making at which the stakeholder is most influential



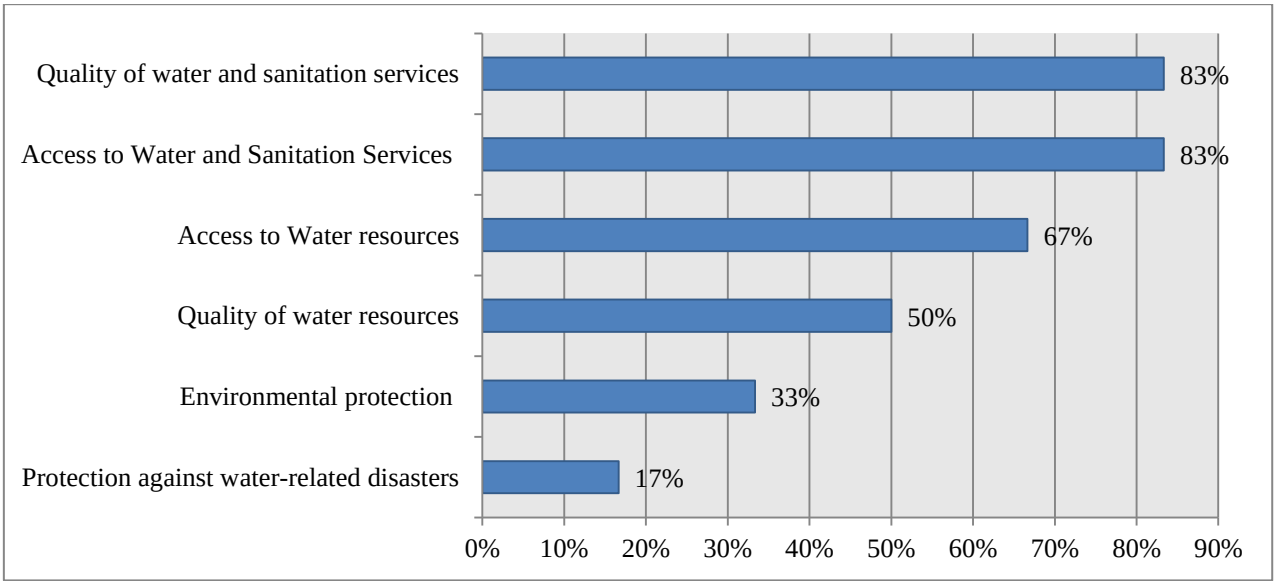
Note: Stages of decision-making at which watershed institutions consider having a "critical influence"

Regulators

List of regulators surveyed

Australia - Independent Competition & Regulatory Commission
Brazil - Municipal regulatory agency for water services of Esgoto
Italy - Authority for electricity, gas and water systems
Malta - Malta Resources Authority
Portugal Water and Waste Services Regulation Authority
United Kingdom - Environment Agency

Areas of interest

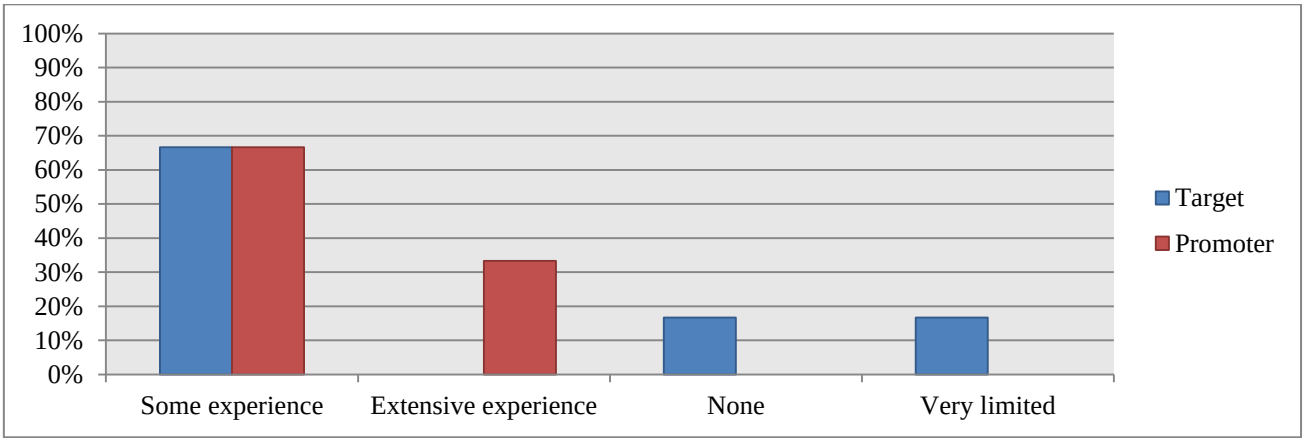


Note: Areas of interest of regulators ranked from 1 to 3 on a scale from (1) to (6)

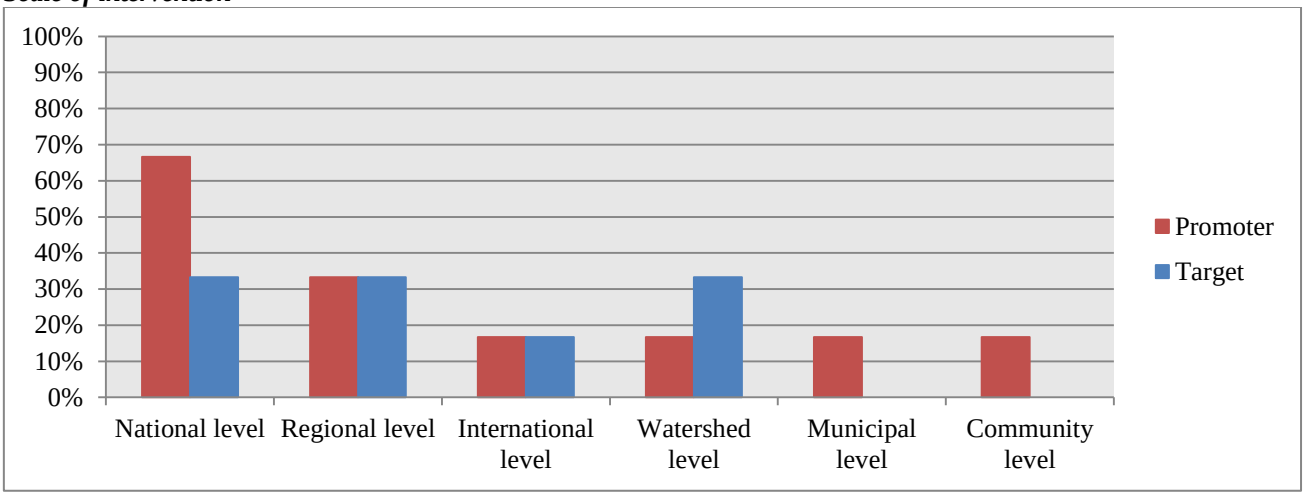
Key words most often associated with stakeholder engagement

Note: The word cloud was created based on the key terms that were ranked first on a scale from 1 to 5.

Experience in stakeholder engagement

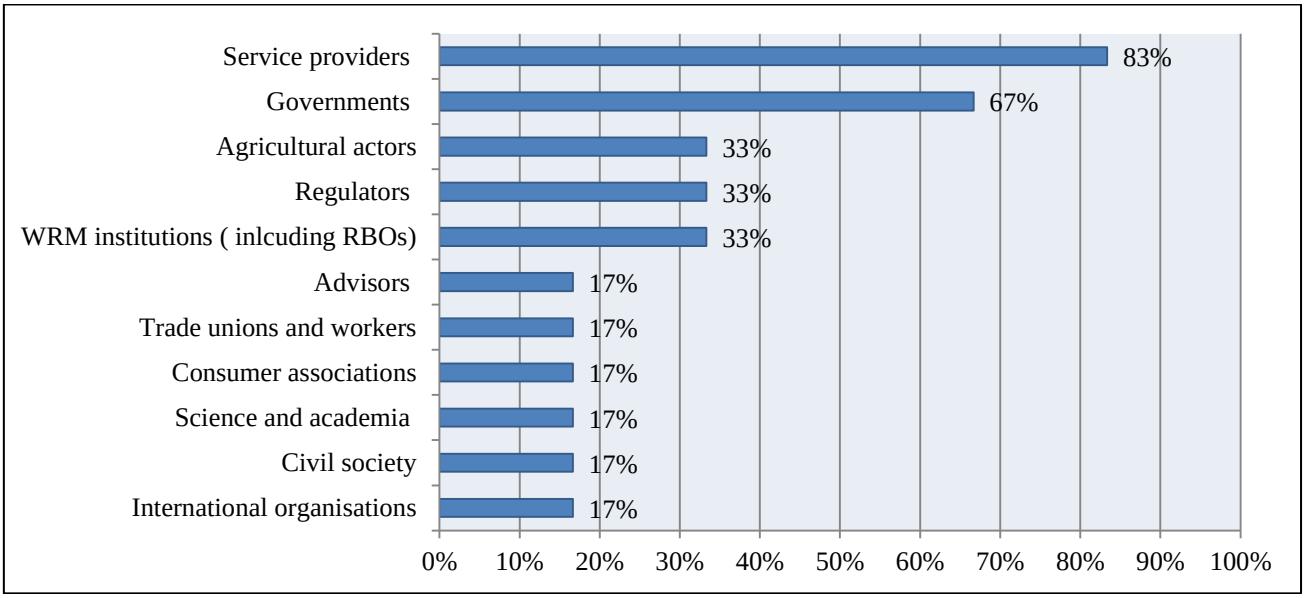


Scale of intervention



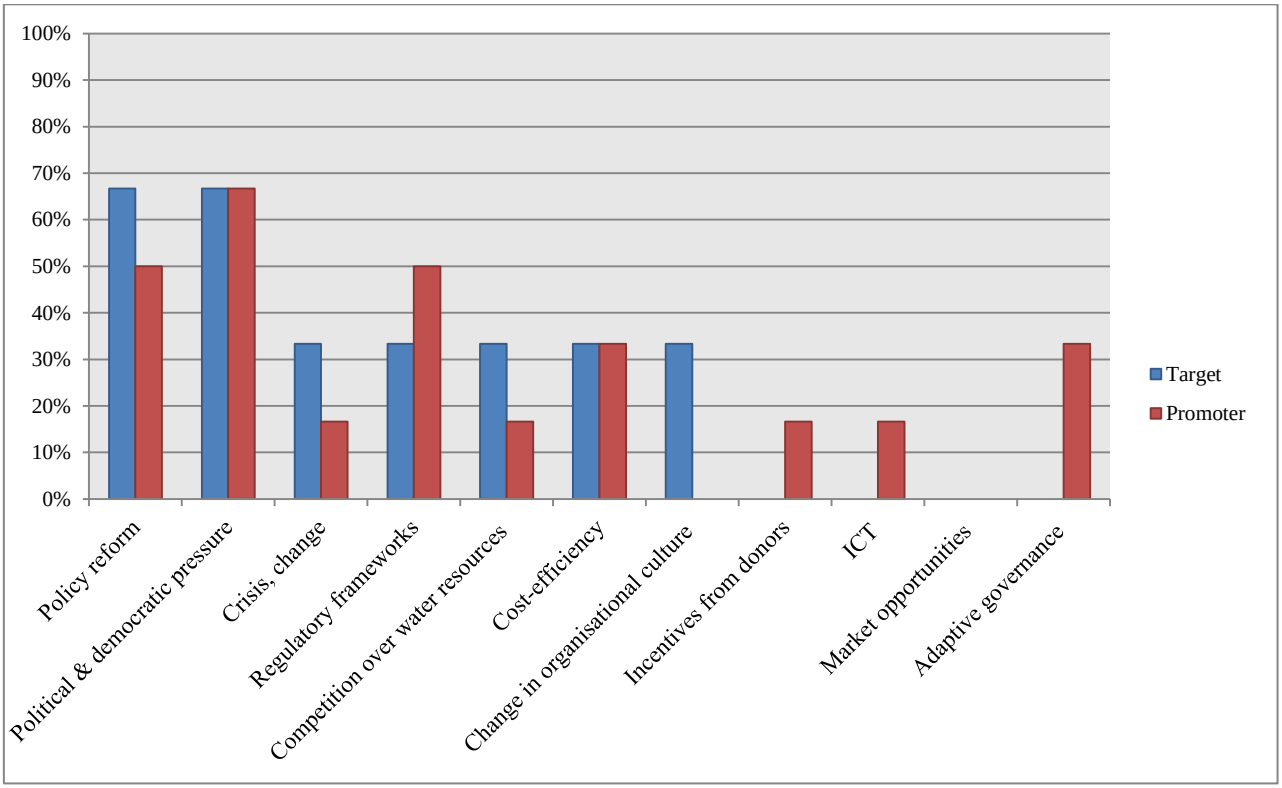
Note: Scale of intervention at which regulators primarily intervene

Interactions with other stakeholders



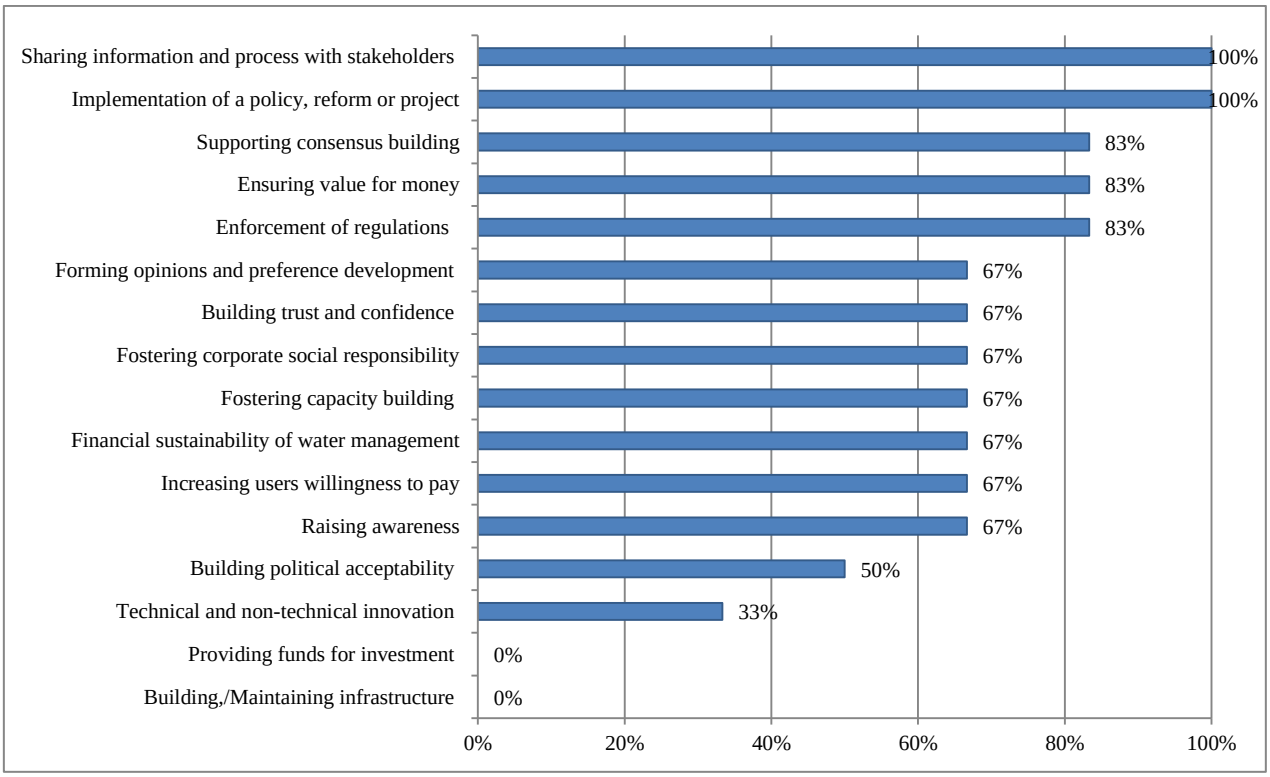
Note: Categories of stakeholders with which regulators interact “always or very frequently”

Main Drivers



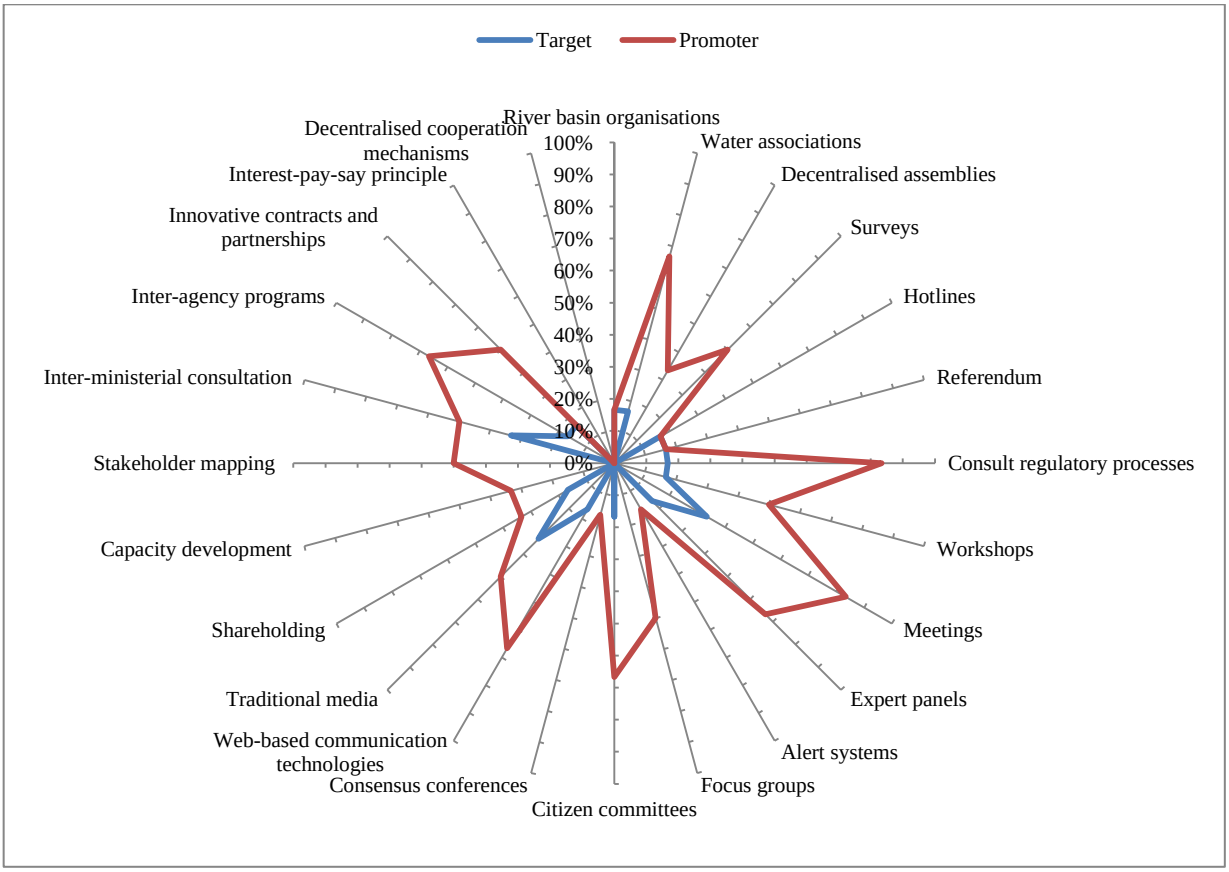
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Perception about stakeholder engagement contribution to better water governance

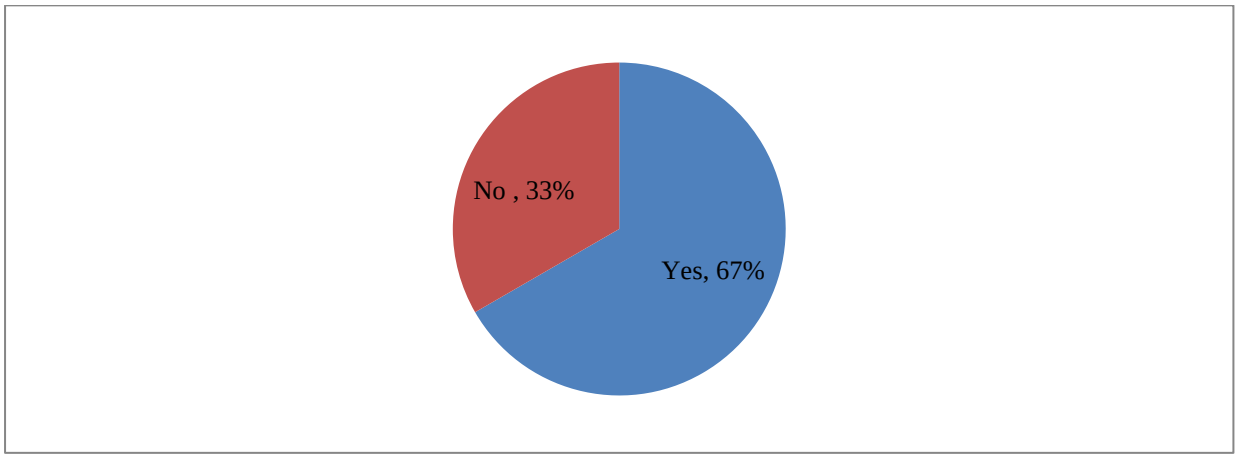


Note: Areas of contribution to water governance for which regulators responded "yes"

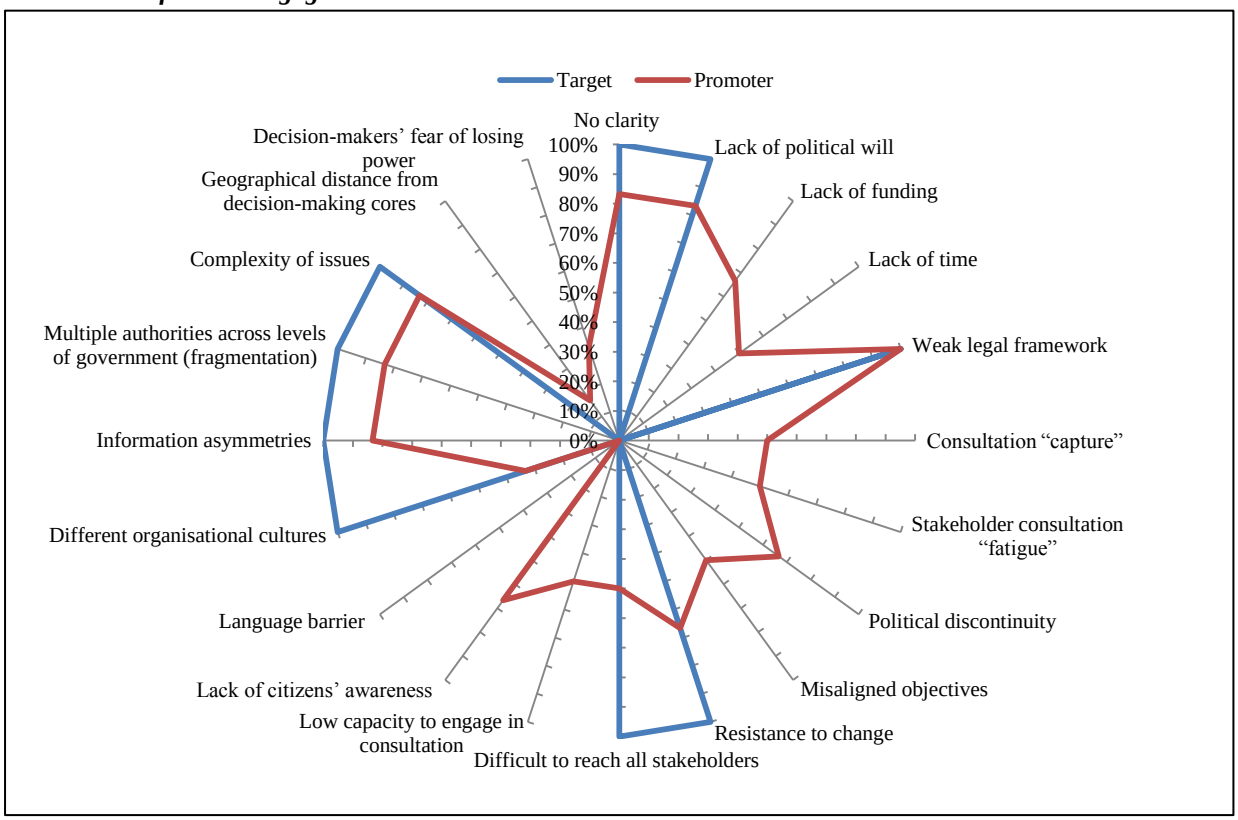
Use of stakeholder engagement mechanisms



Are existing stakeholder engagement mechanisms sufficient?

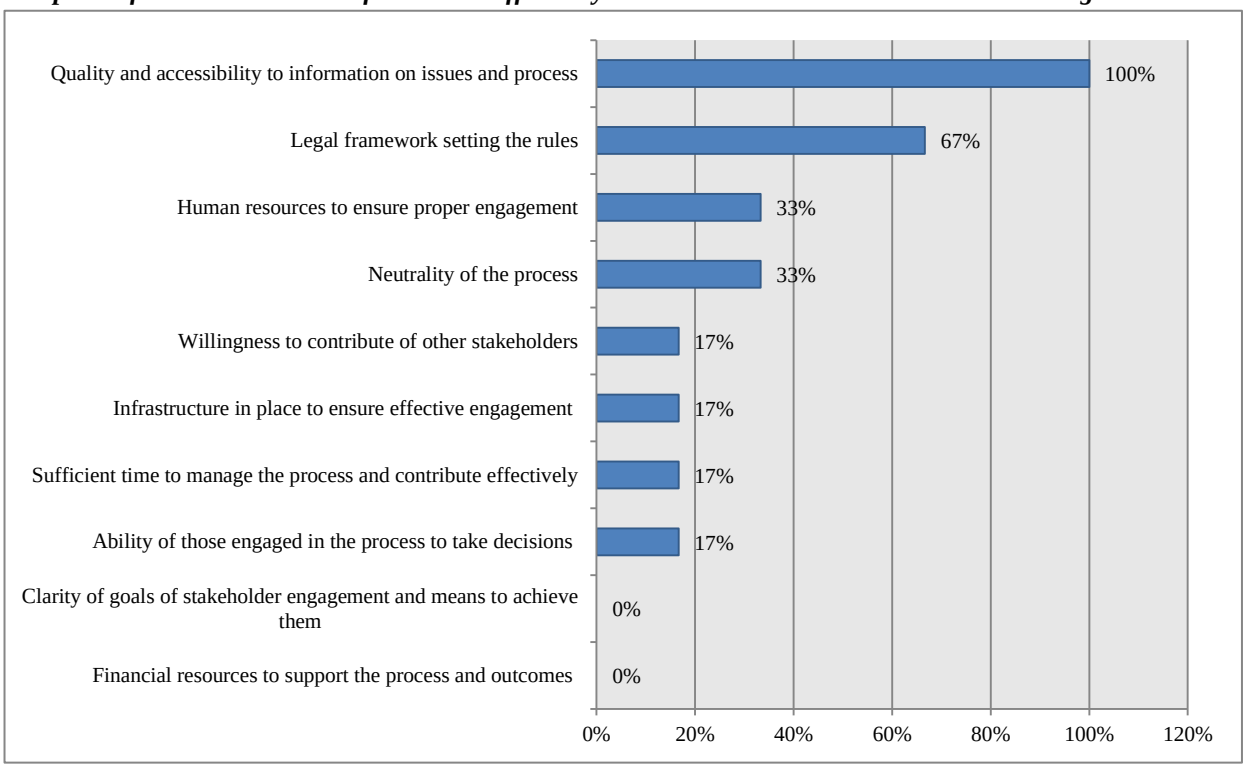


Main obstacles faced to engage stakeholders



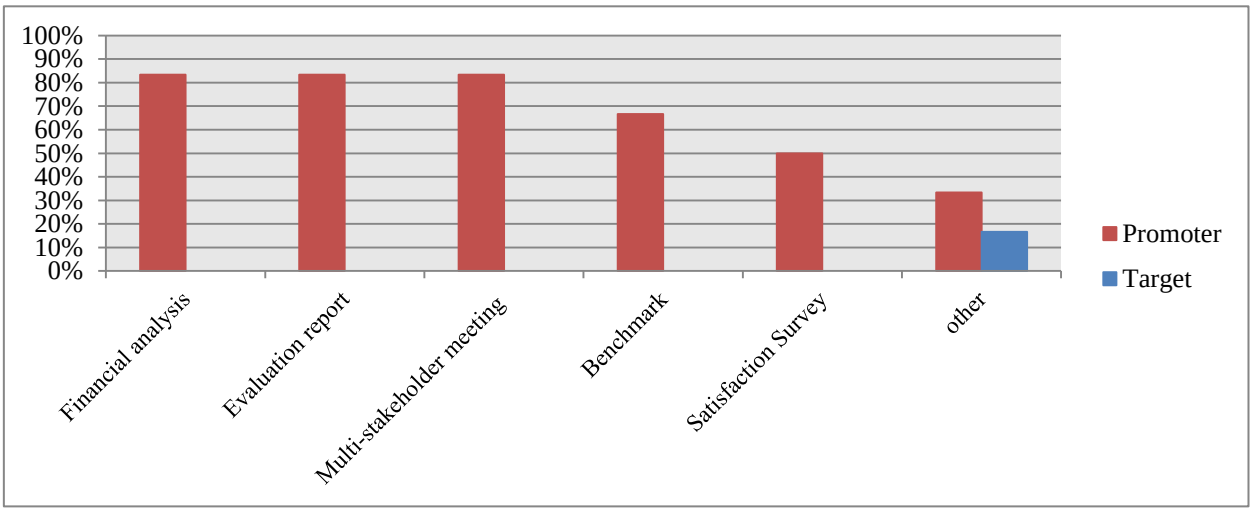
Note: Obstacles considered as "critical" and "important" by regulators

Perception of critical conditions of success to effectively contribute to water-related decision-making

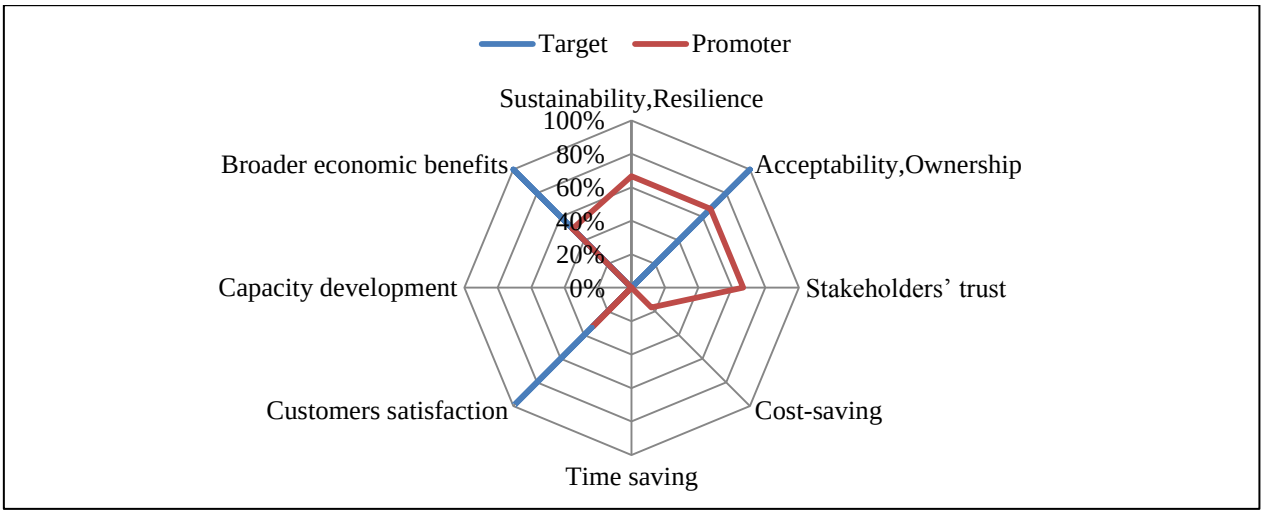


Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Mechanisms used to assess the effectiveness of stakeholder engagement

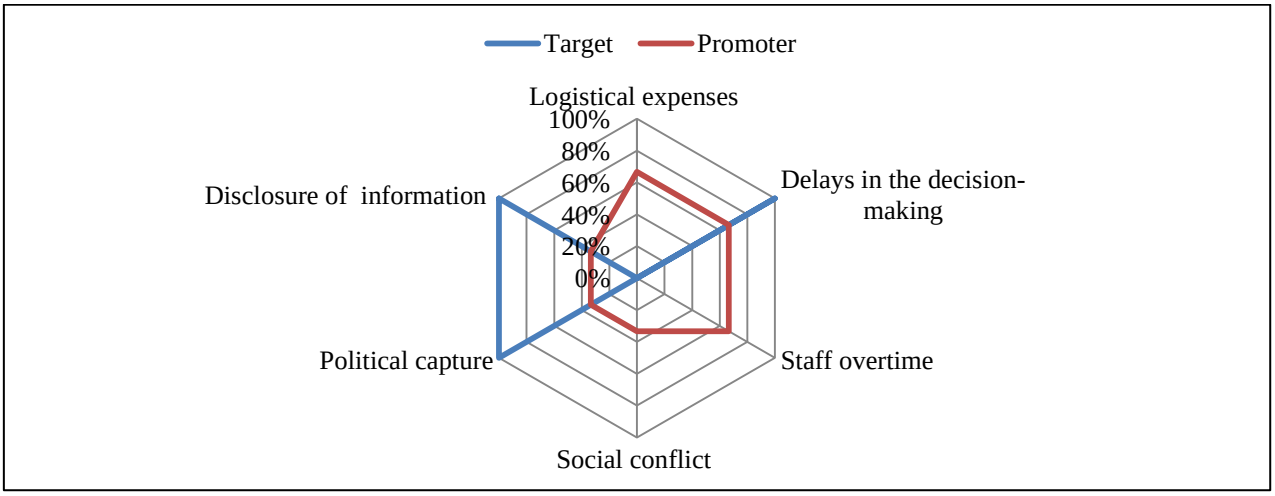


Perception of the main benefits derived by stakeholder engagement



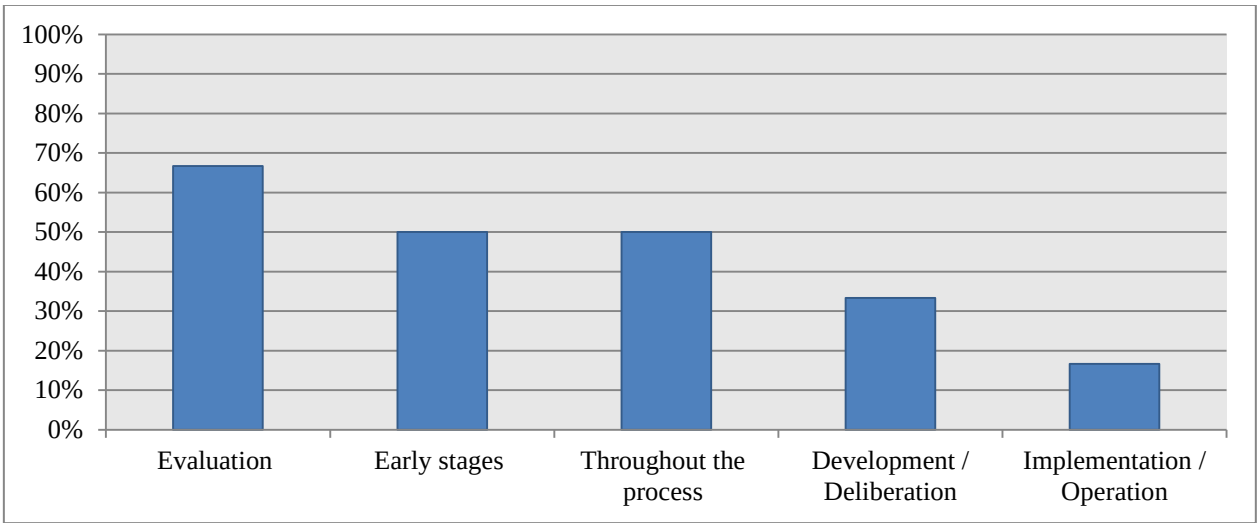
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (8)

Perception of the main costs incurred by stakeholder engagement



Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (6)

Stage of decision-making at which the stakeholder is most influential



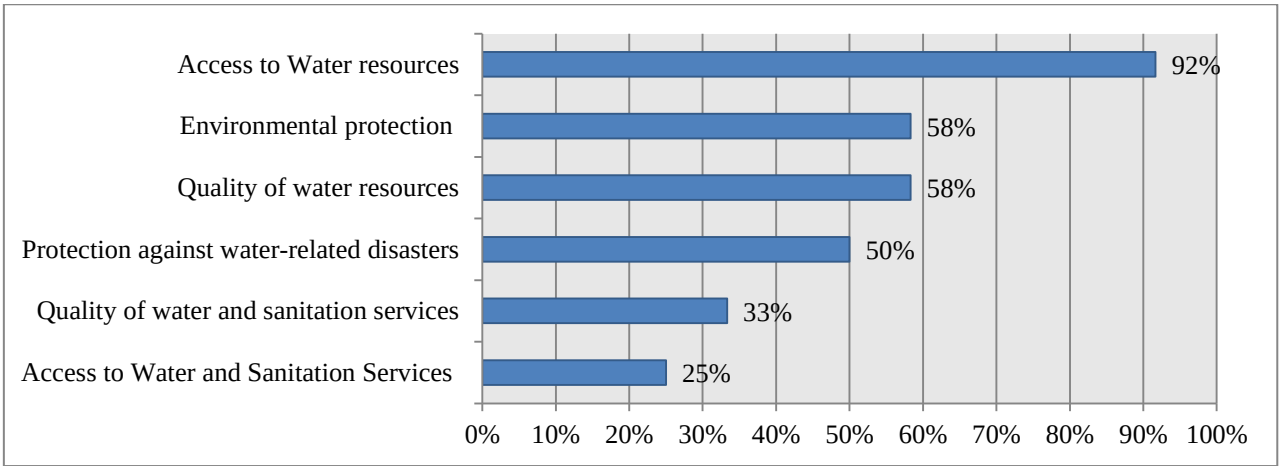
Note: Stages of decision-making at which regulators consider having a "critical influence"

Business

List of business surveyed

Anglo American
Brazilian Business Council for Sustainable Development
CH Industries
Coca-Cola Hellenic Bottling Company S.A.
Électricité de France
GDF SUEZ
Sasol
The Coca-Cola Company
Titan Cement - Greece
Tractebel Energia – Brazil
Water Committee of the National company for mining, oil and energy - Peru
World Business Council for Sustainable Development

Areas of interest

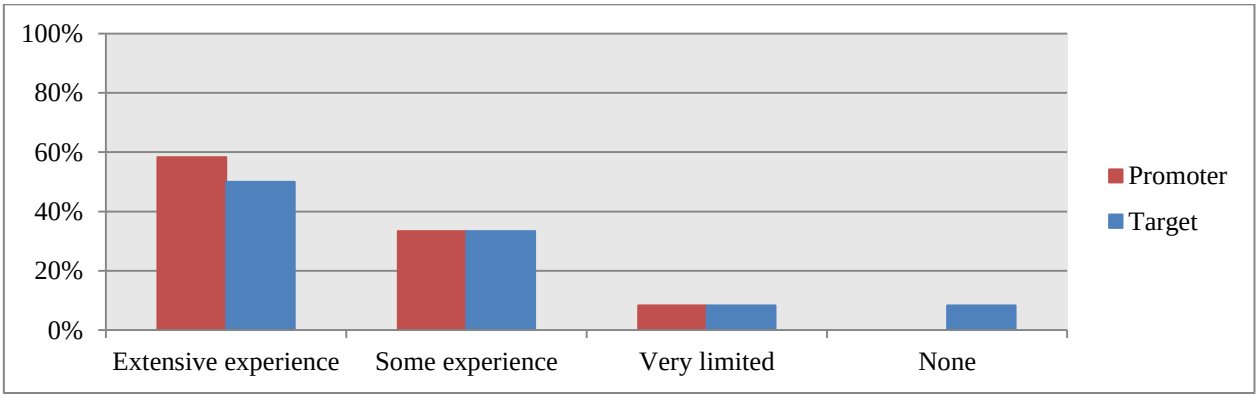


Note: Areas of interest of business ranked from 1 to 3 on a scale from (1) to (6)

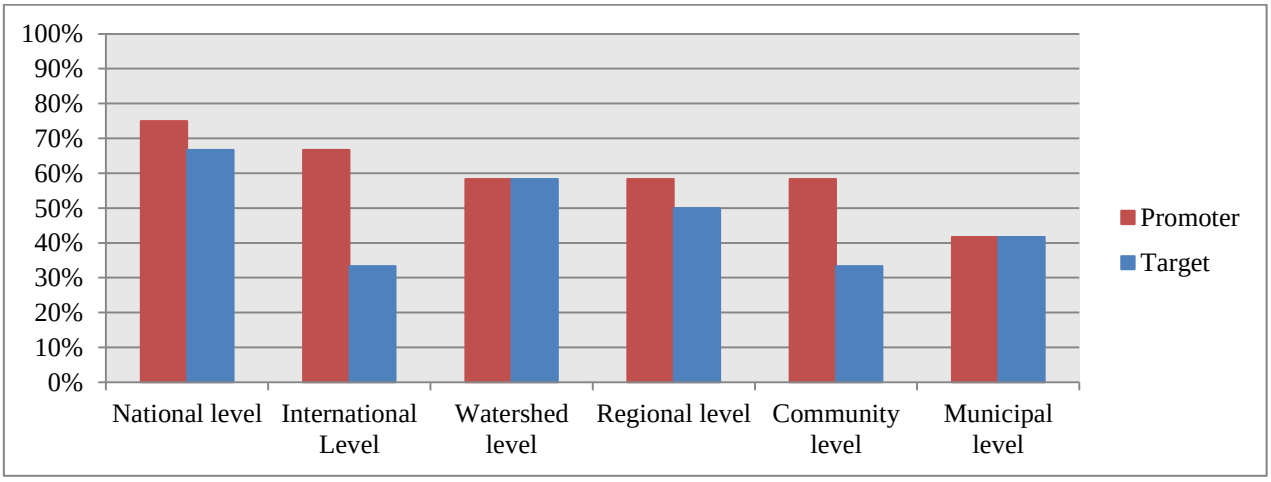
Key words most often associated with stakeholder engagement

Note: The word cloud was created based on the key terms that were ranked first on a scale from 1 to 5.

Experience in stakeholder engagement

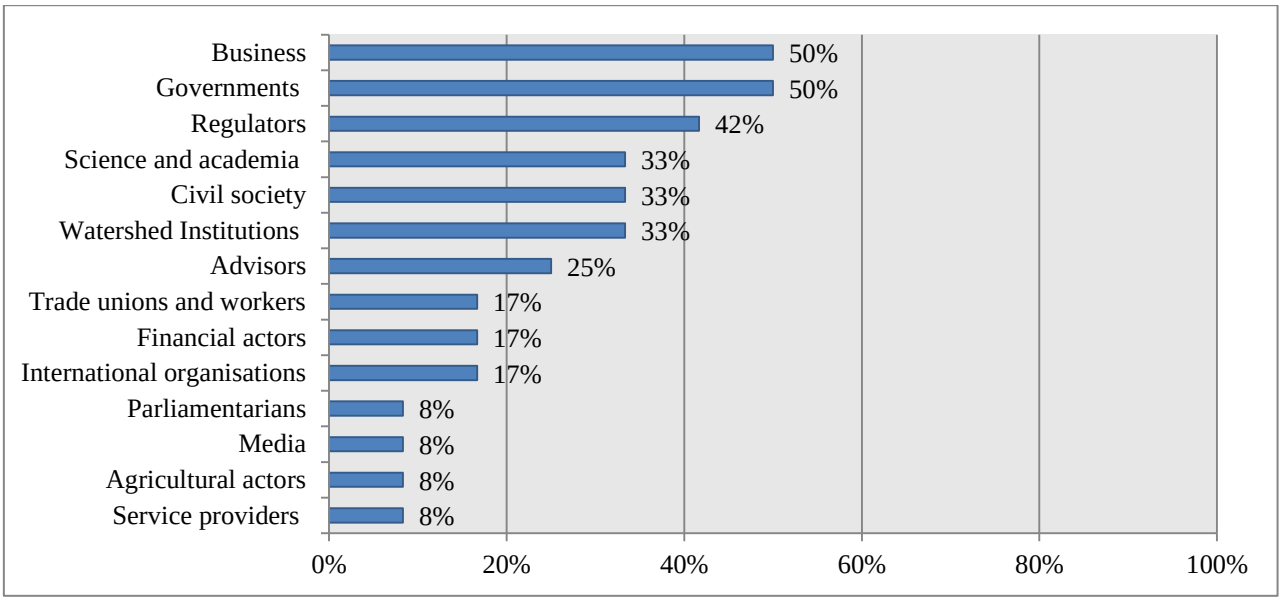


Scale of intervention



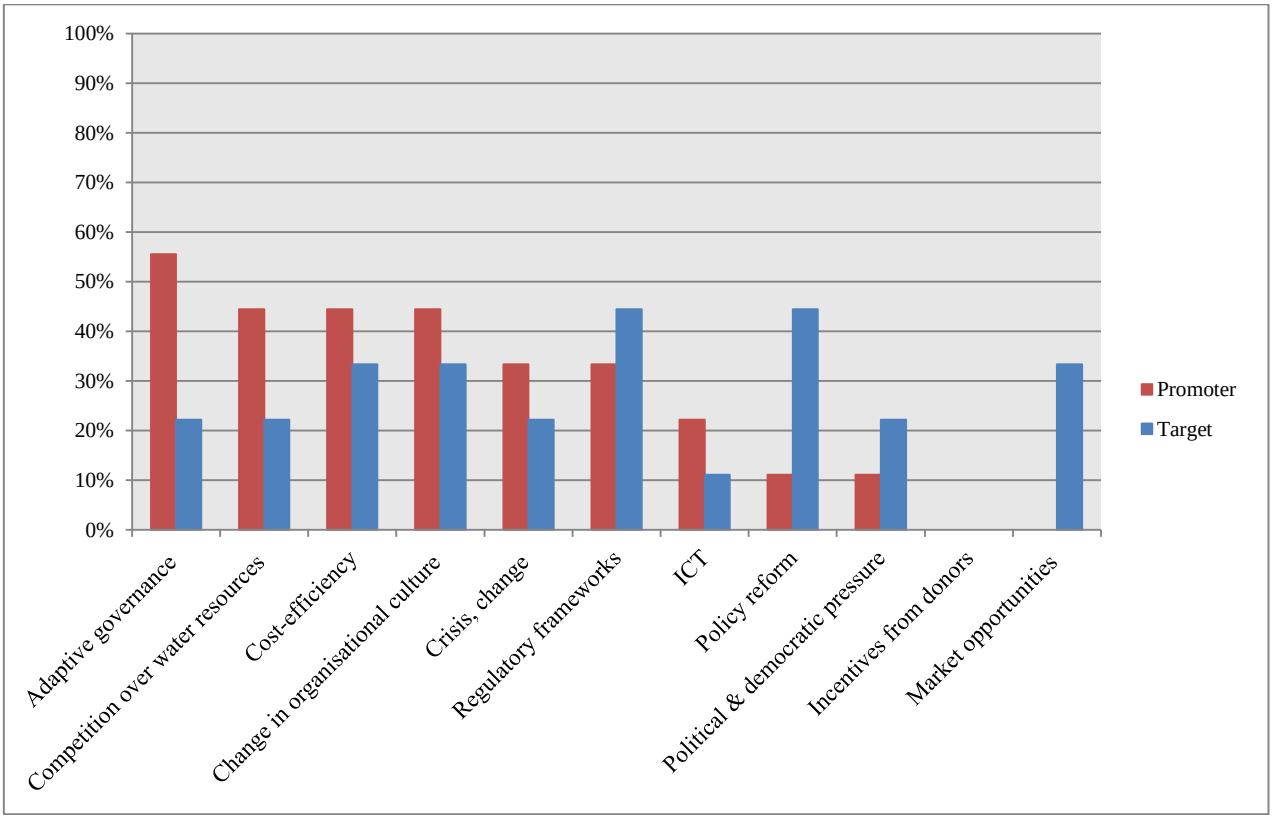
Note: Scale of intervention at which business primarily intervene

Interactions with other stakeholders



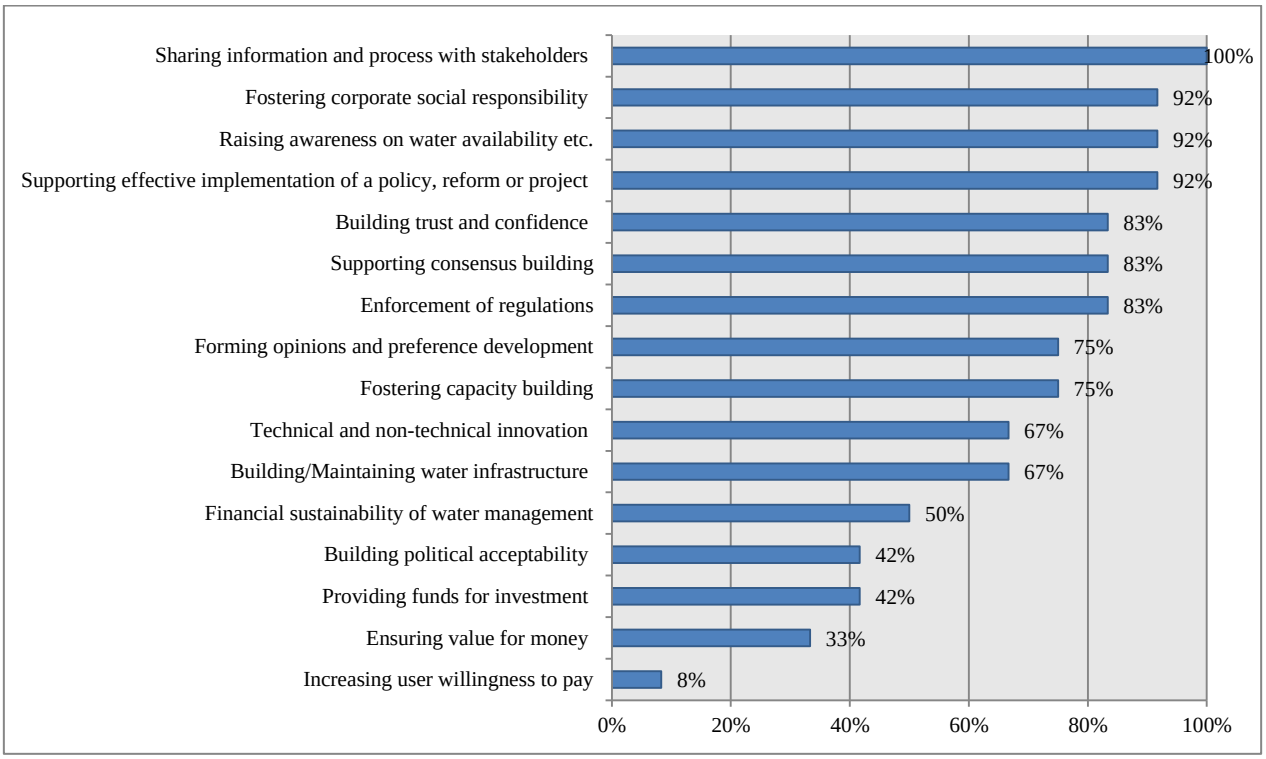
Note: Categories of stakeholders with which business interact "always or very frequently"

Main Drivers



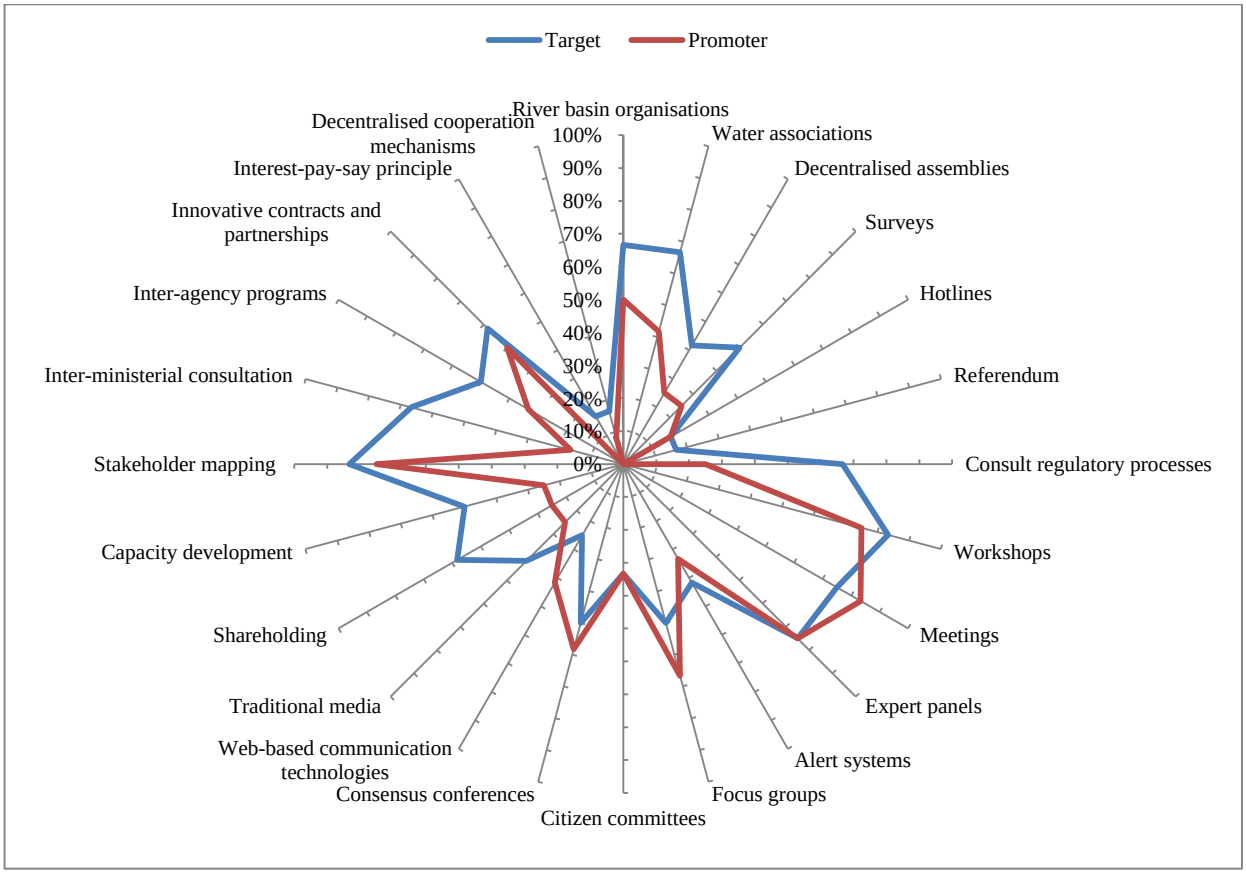
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Perception about stakeholder engagement contribution to better water governance

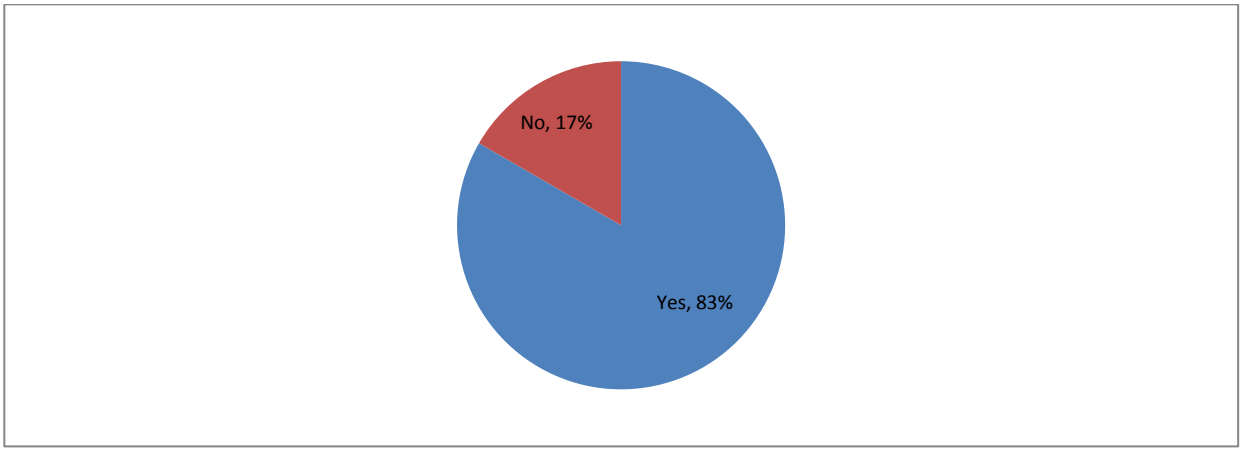


Note: Areas of contribution to water governance for which business responded "yes"

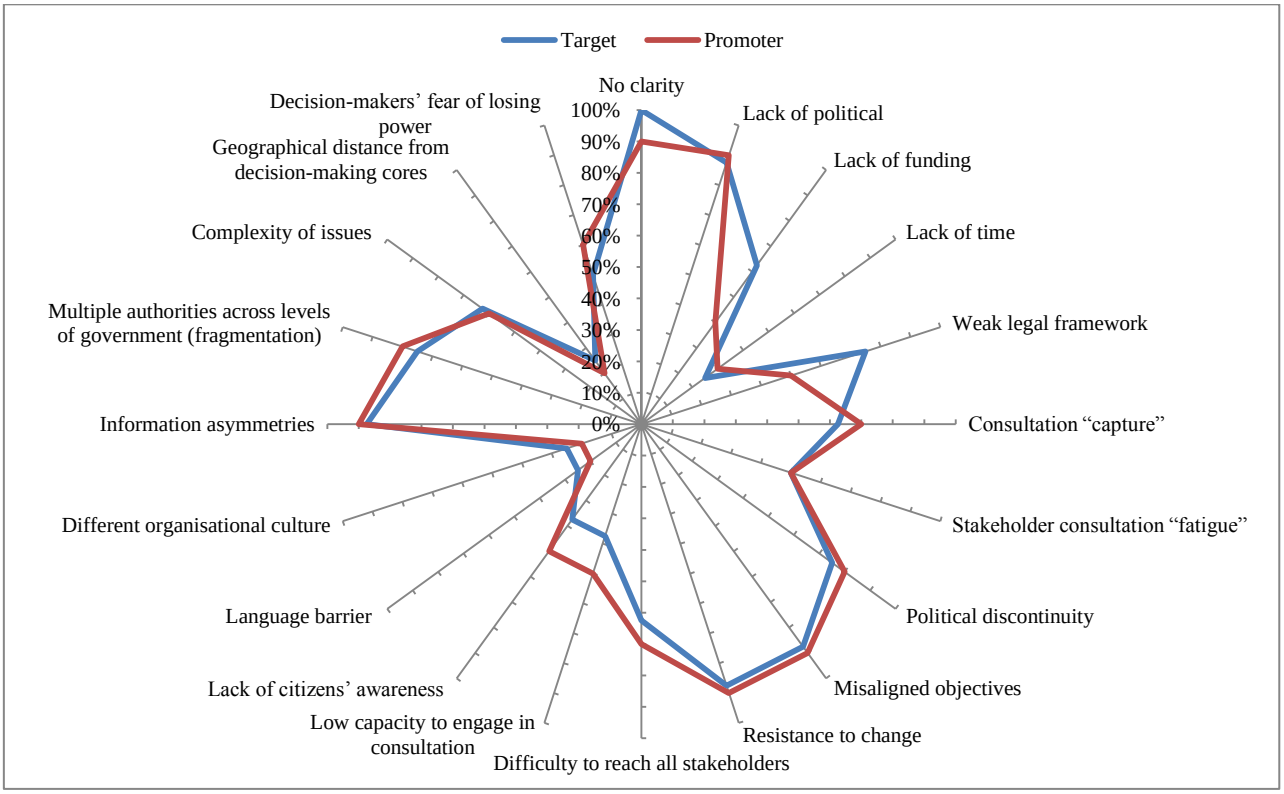
Use of stakeholder engagement mechanisms



Are existing stakeholder engagement mechanisms sufficient?

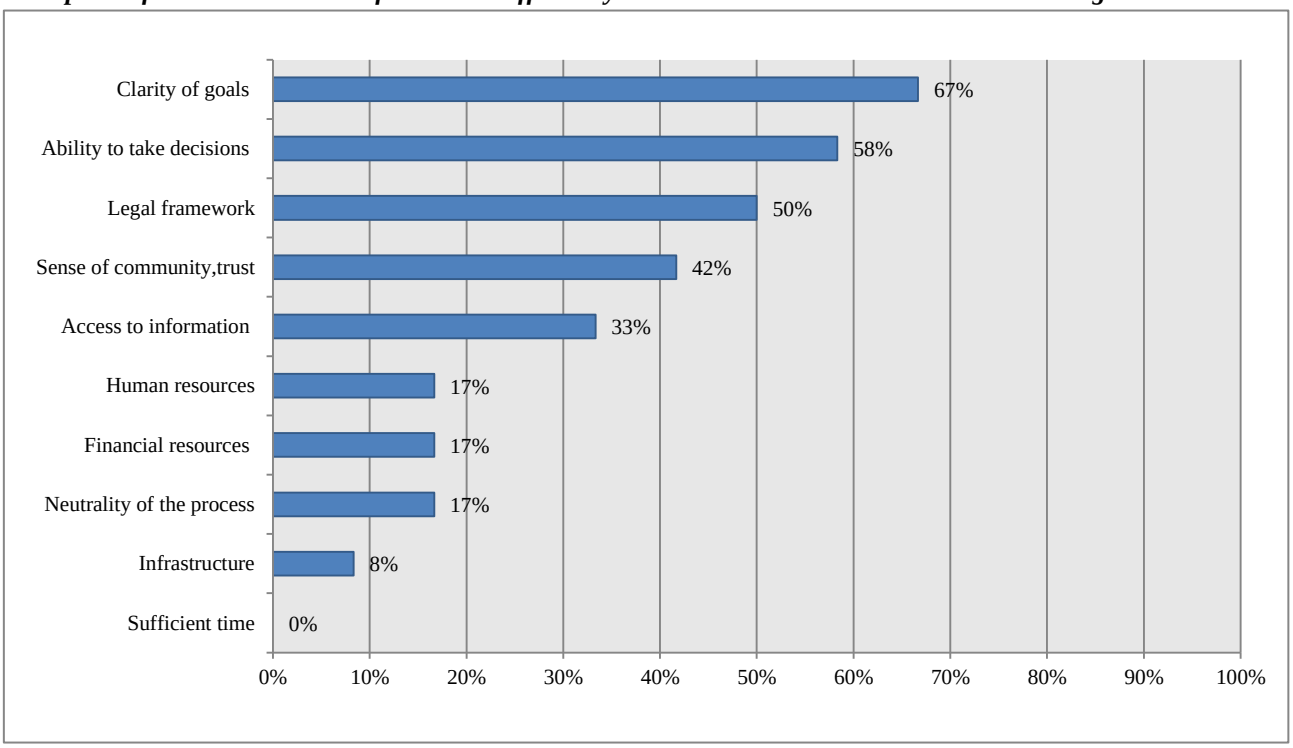


Main obstacles faced to engage stakeholders



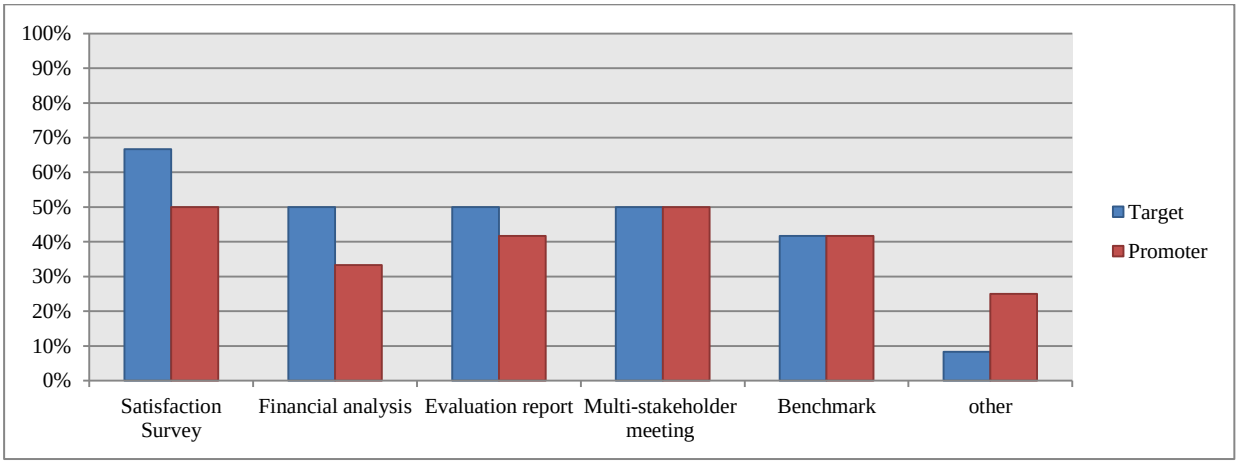
Note: Obstacles considered as "critical" and "important" by business

Perception of critical conditions of success to effectively contribute to water-related decision-making

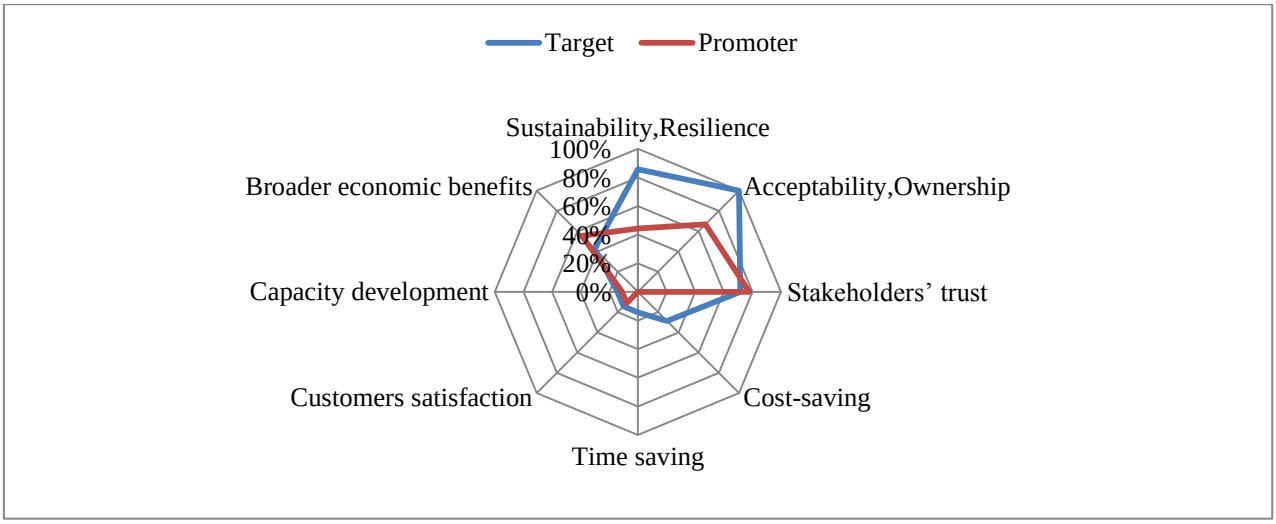


Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Mechanisms used to assess the effectiveness of stakeholder engagement

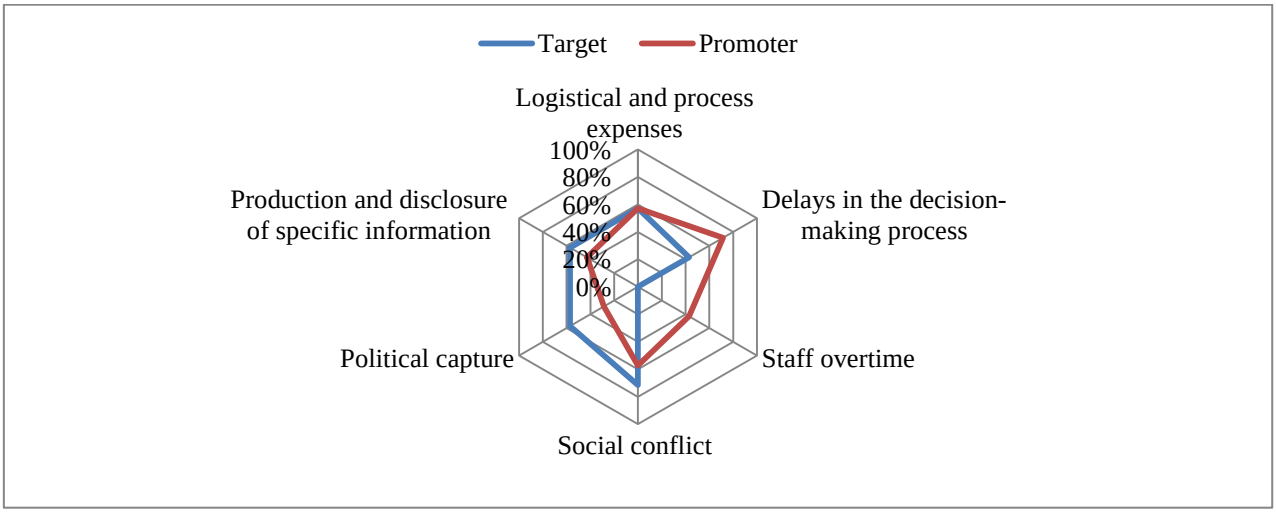


Perception of the main benefits derived by stakeholder engagement



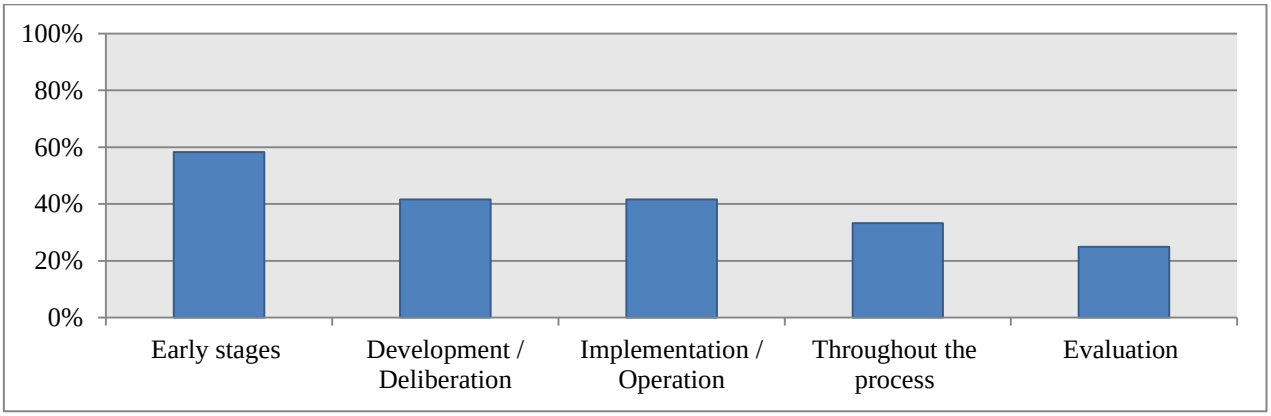
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (8)

Perception of the main costs incurred by stakeholder engagement



Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (6)

Stage of decision-making at which the stakeholder is most influential



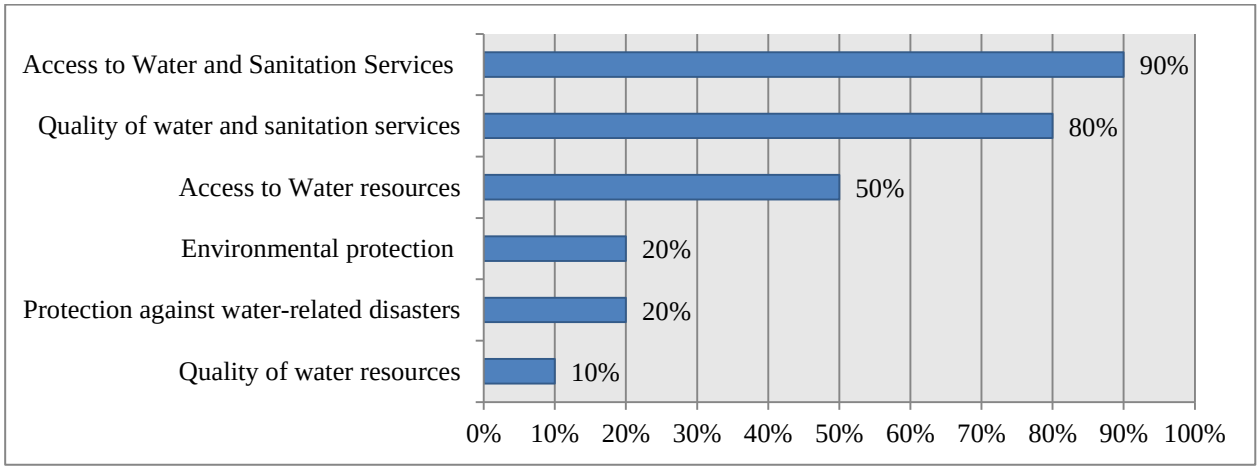
Note: Stages of decision-making at which business consider having a "critical influence"

Financial actors

List of financial actors surveyed

Asian Development Bank (ADB)
France - Agence française de développement (AFD)
Germany - German Development Bank (KfW)
Germany - German Agency for International Cooperation (GIZ)
Indonesian Urban Water Sanitation and Hygiene Project - IUWASH
Inter-American Development Bank (IADB)
Netherlands - Association of Dutch Insurers
Spain - Spanish Agency for International Cooperation and Development (AECID)
Sweden - Swedish International Development Cooperation Agency (SIDA)
United States - United States Agency for International Development (USAID)

Areas of interest

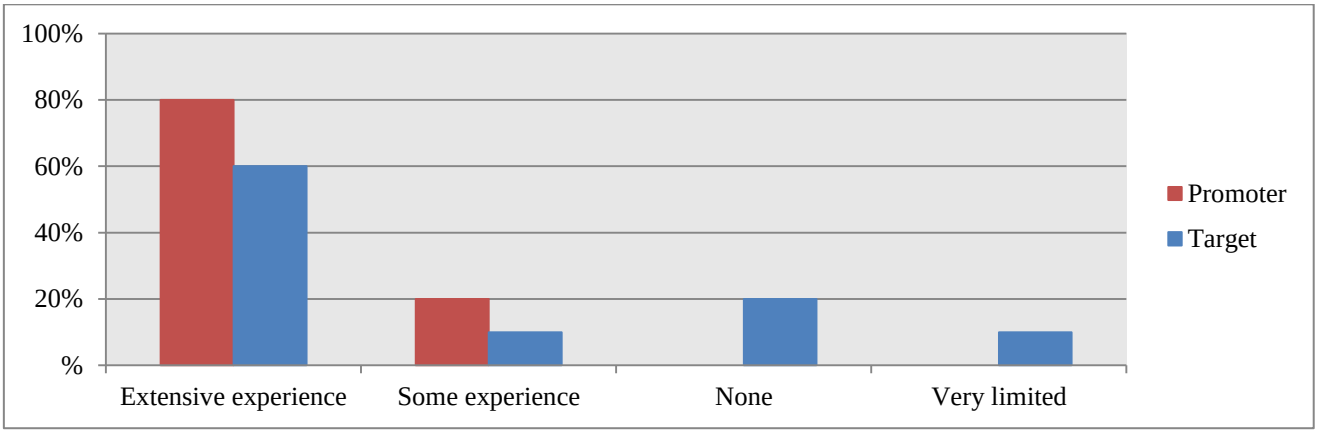


Note: Areas of interest of financial actors ranked from 1 to 3 on a scale from (1) to (6)

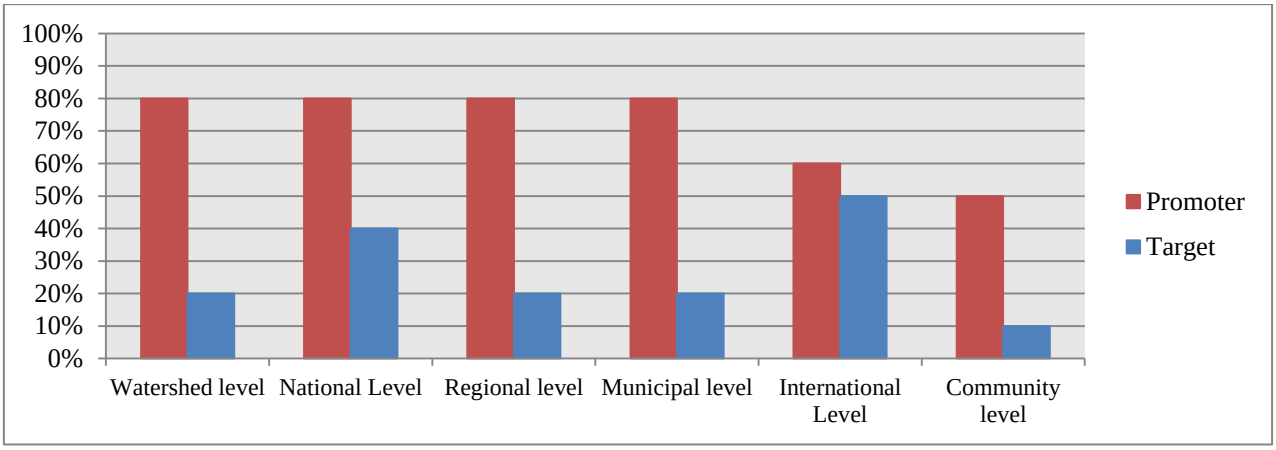
Key words most often associated to stakeholder engagement

Note: The word cloud was created based on the key terms that were ranked first on a scale from 1 to 5.

Experience in stakeholder engagement

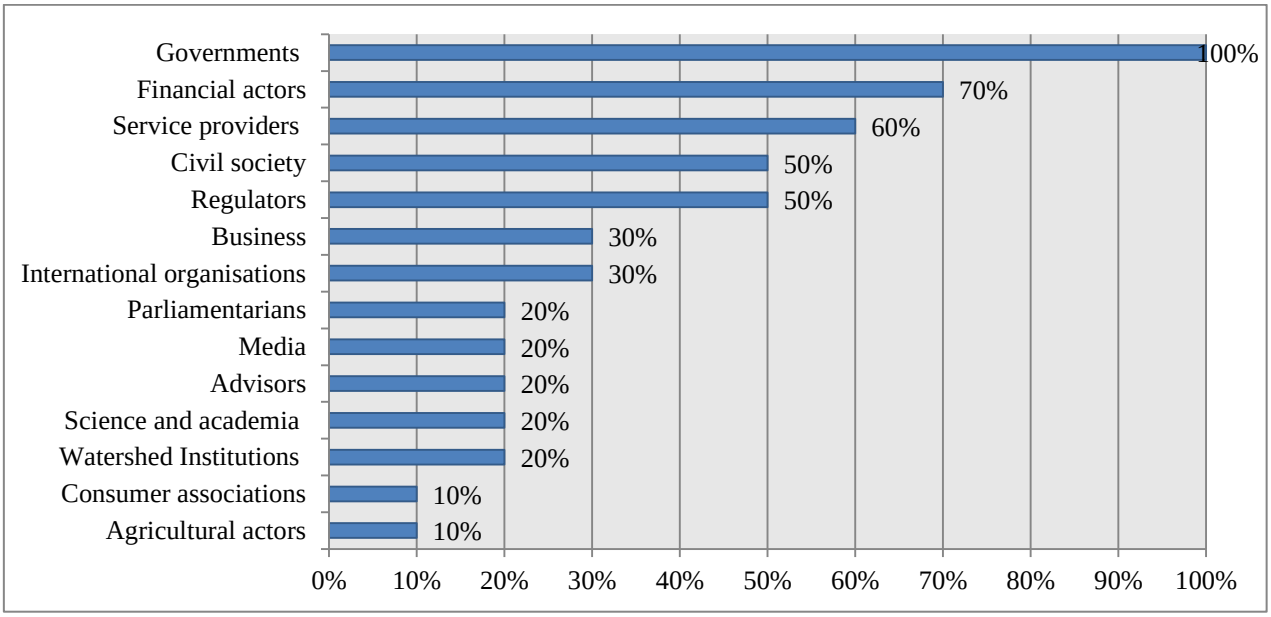


Scale of intervention



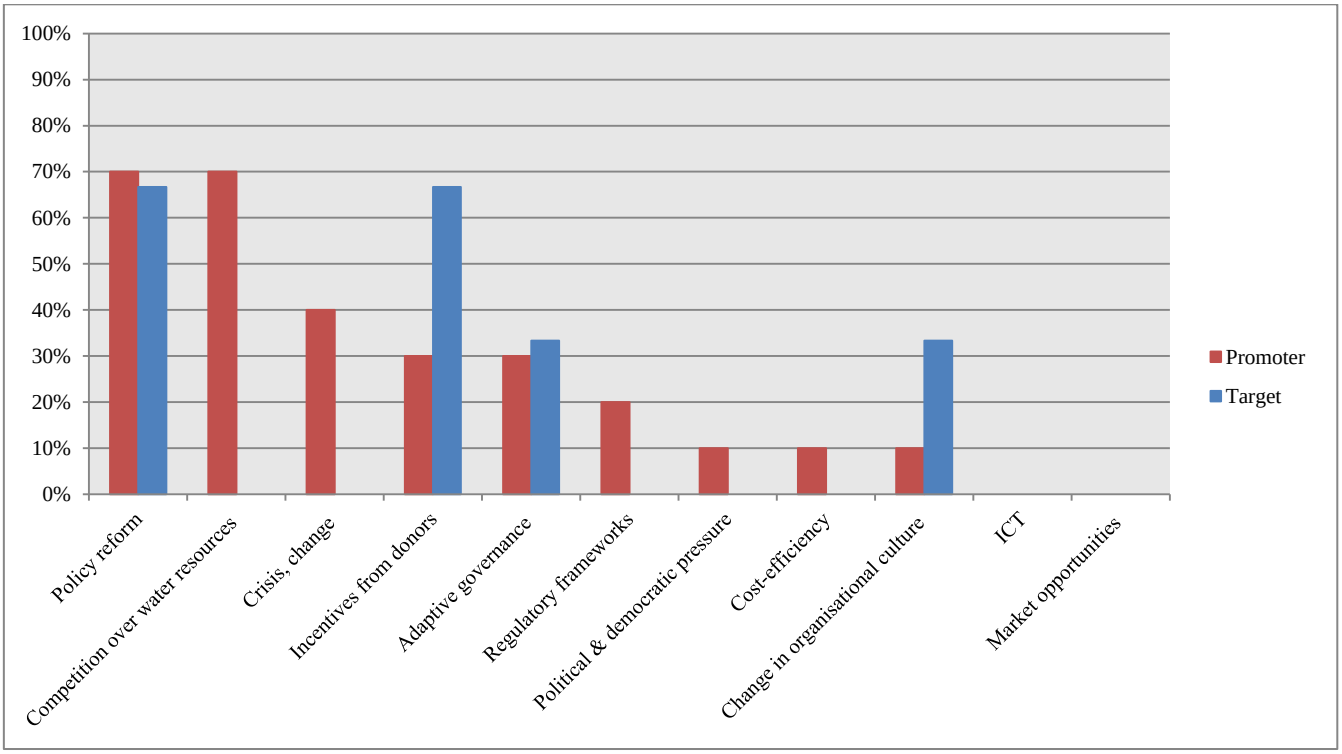
Note: Scale of intervention at which financial actors primarily intervene

Interactions with other stakeholders



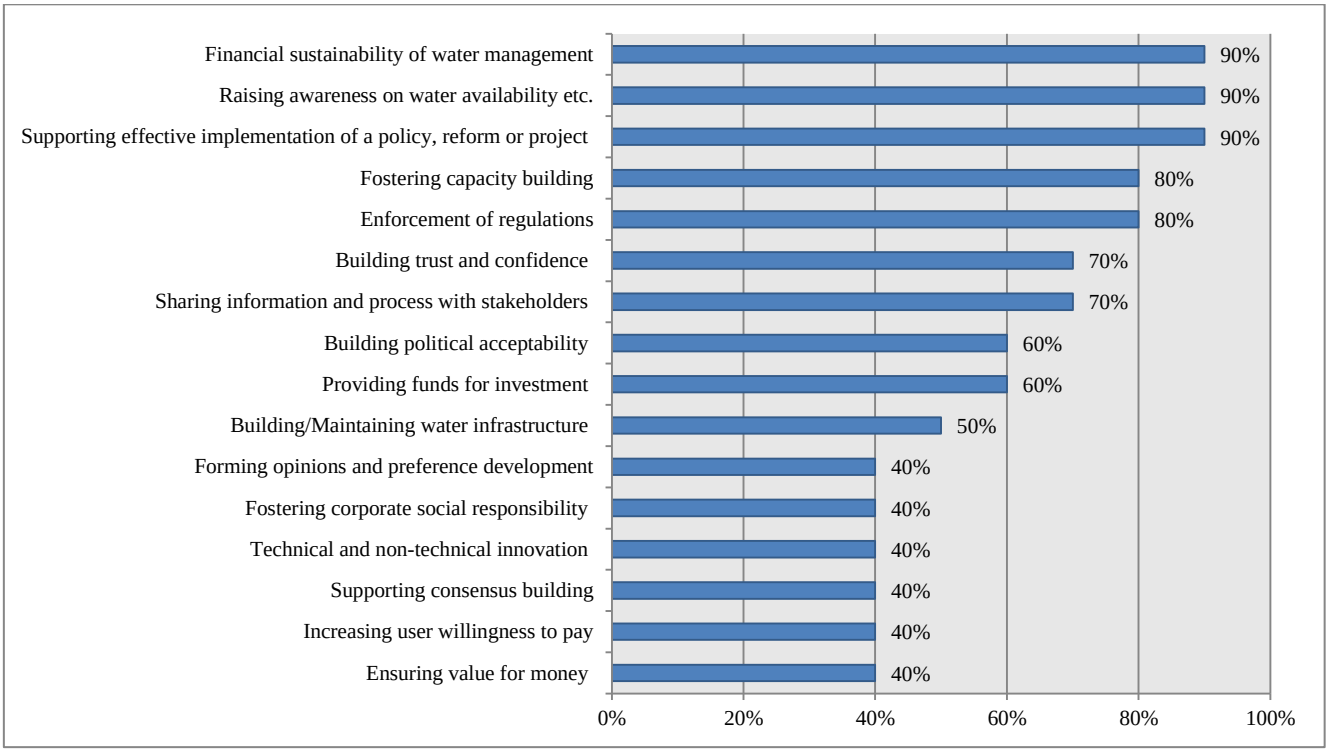
Note: Categories of stakeholders with which financial actors interact “always or very frequently”

Main drivers



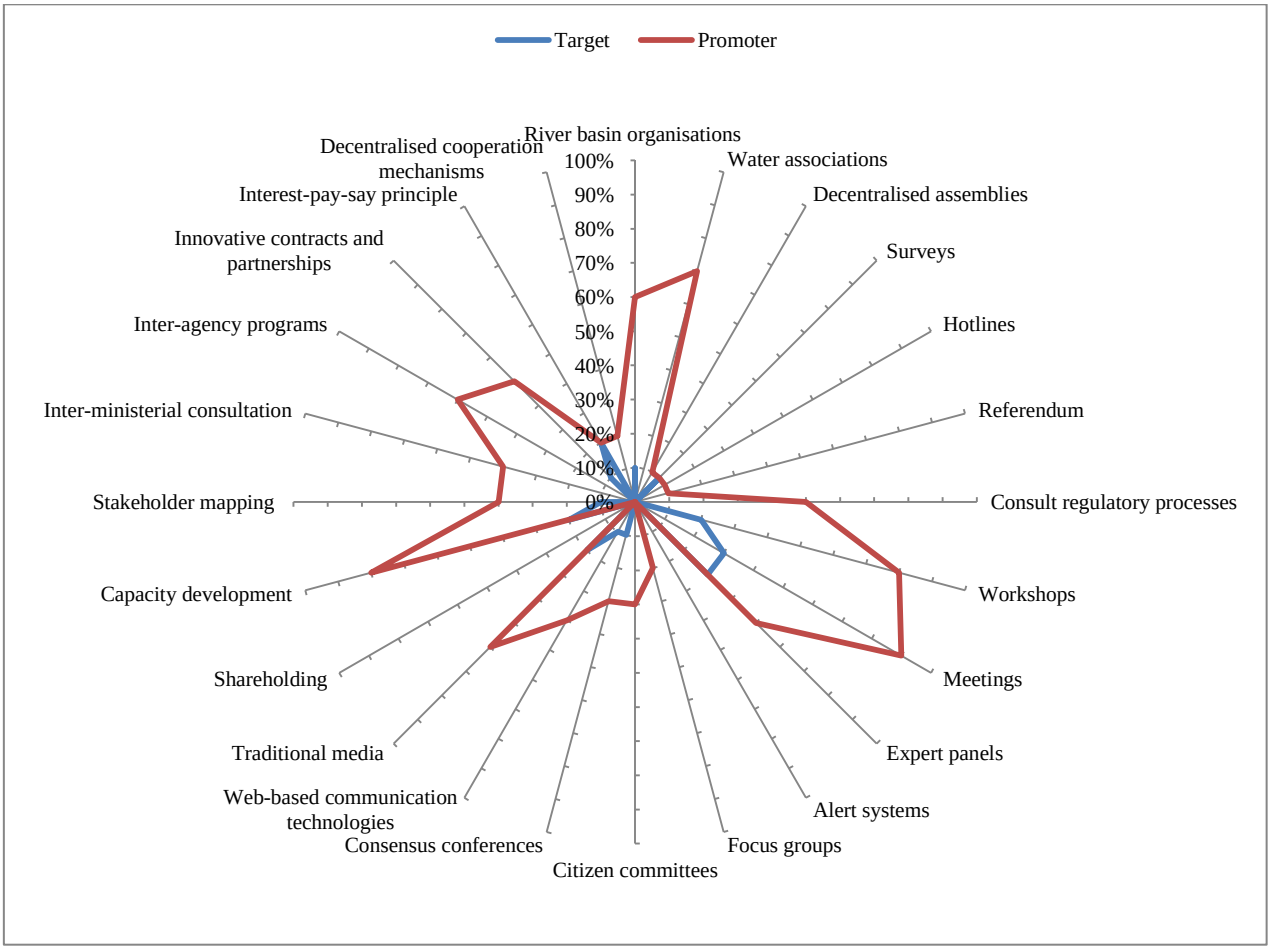
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Perception about stakeholder engagement contribution to better water governance

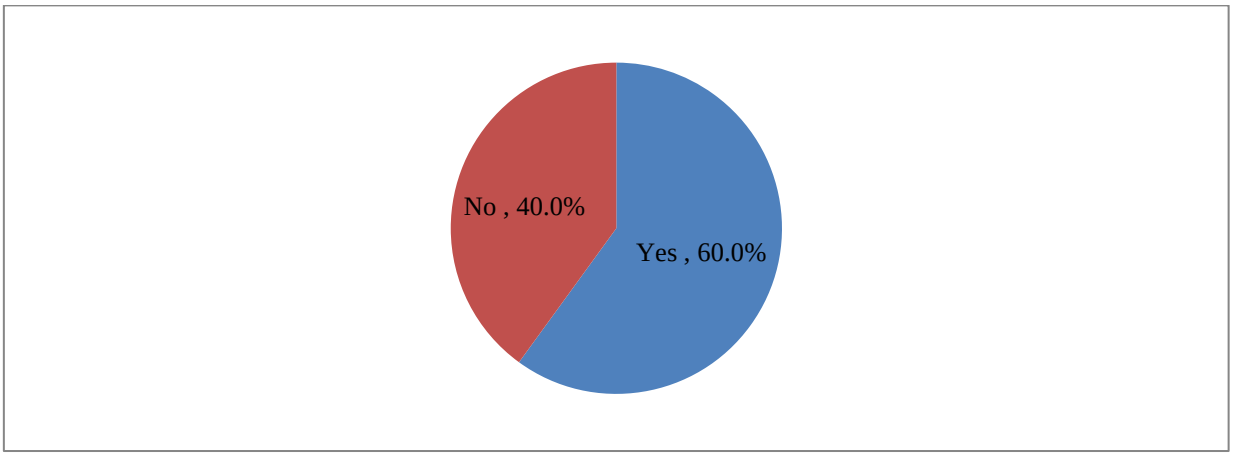


Note: Areas of contribution to water governance for which financial actors responded "yes"

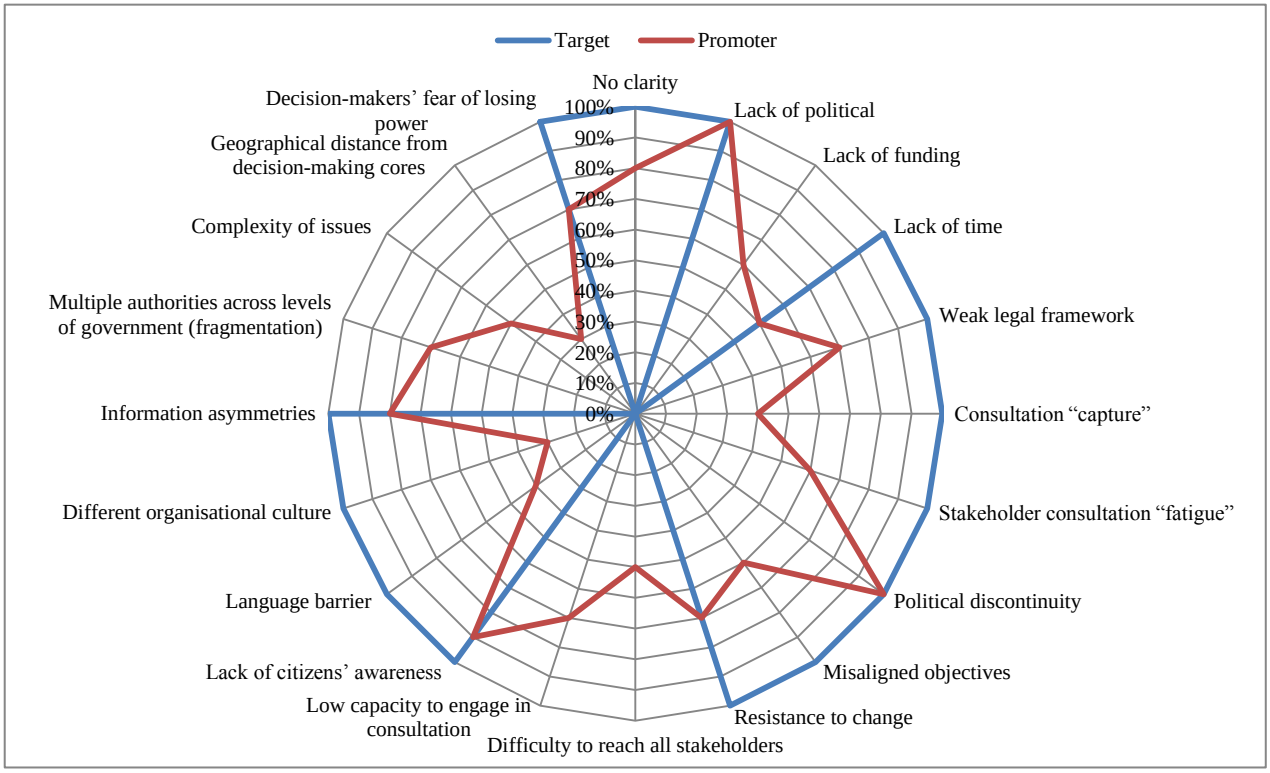
Use of stakeholder engagement mechanisms



Are existing stakeholder engagement mechanisms sufficient?

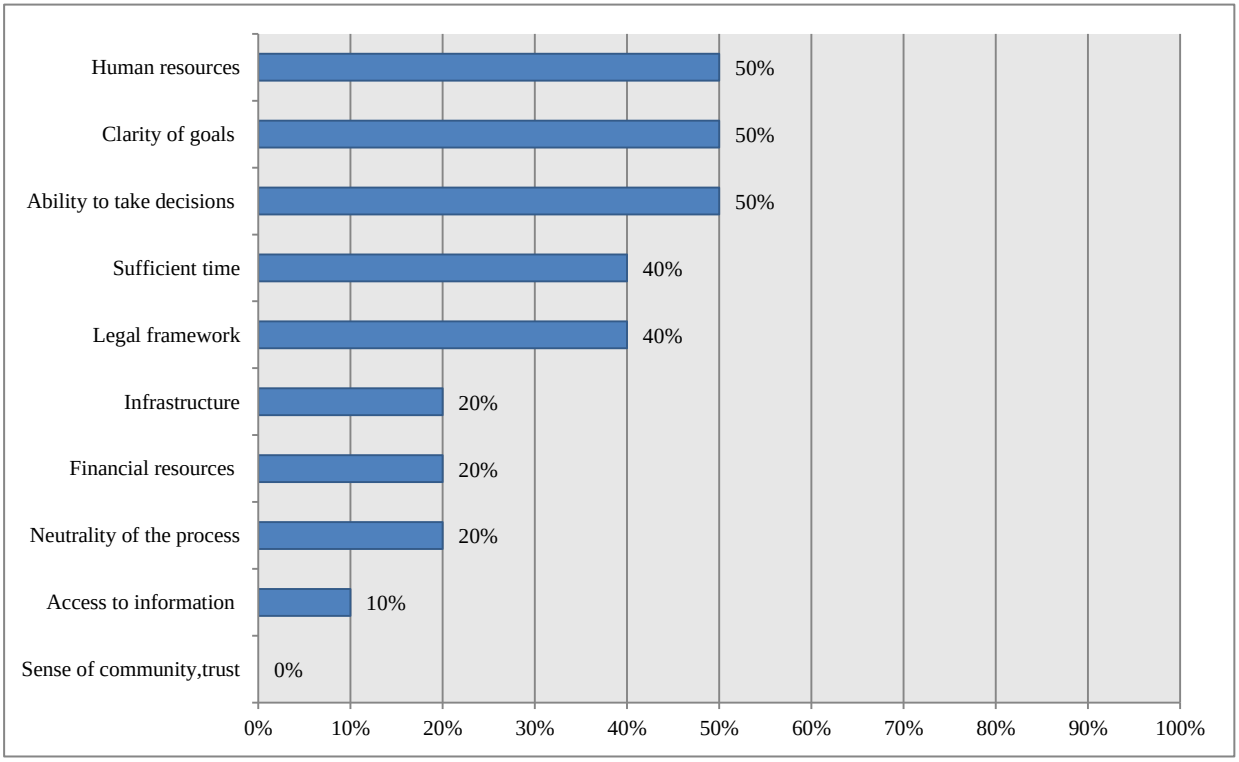


Main obstacles faced to engage stakeholders



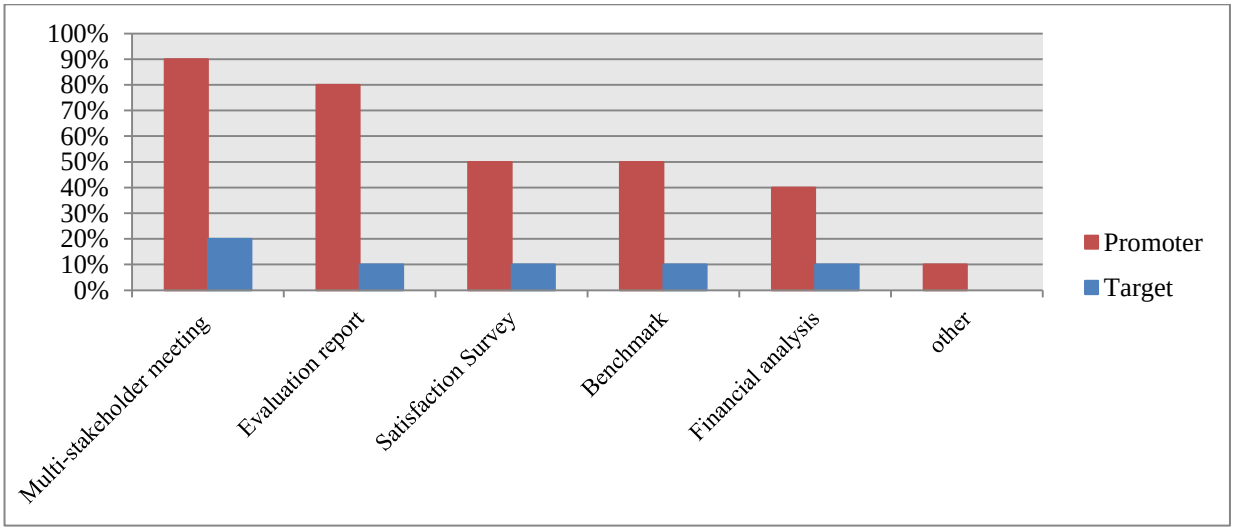
Note: Obstacles considered as "critical" and "important" by financial actors

Perception of critical conditions of success to effectively contribute to water-related decision-making

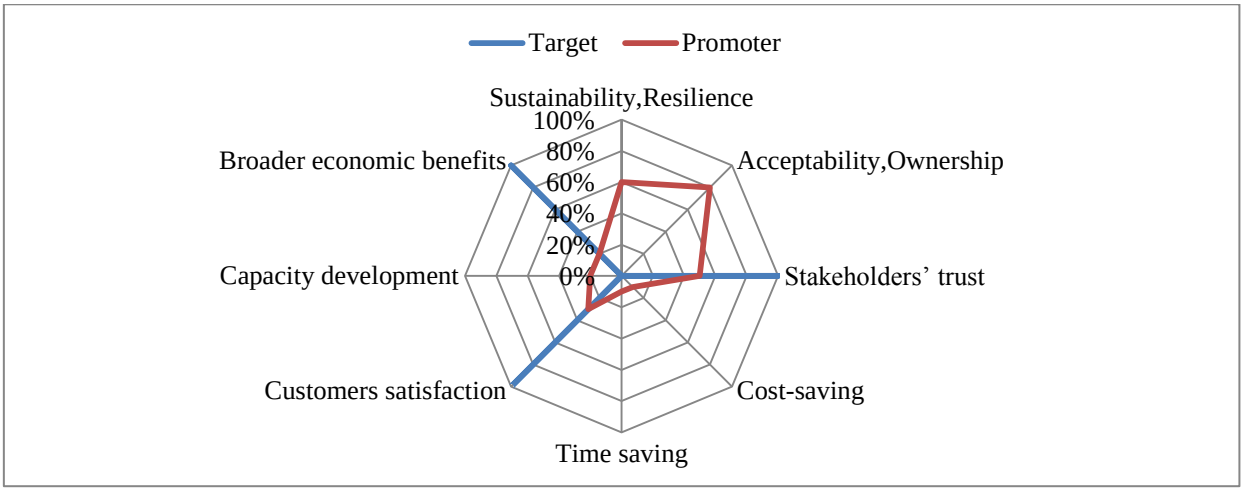


Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Mechanisms used to assess the effectiveness of stakeholder engagement

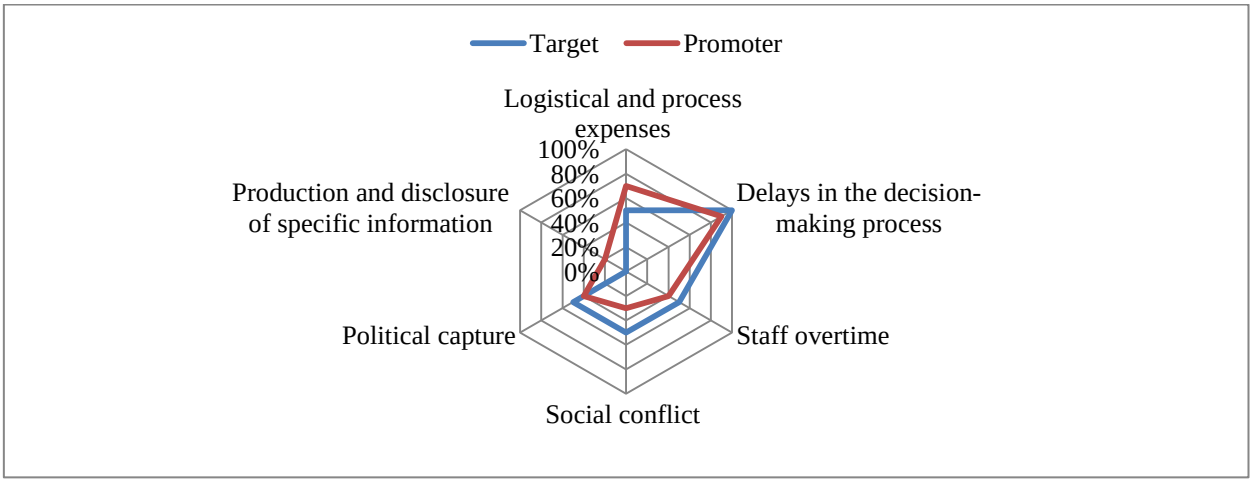


Perception of the main benefits derived by stakeholder engagement



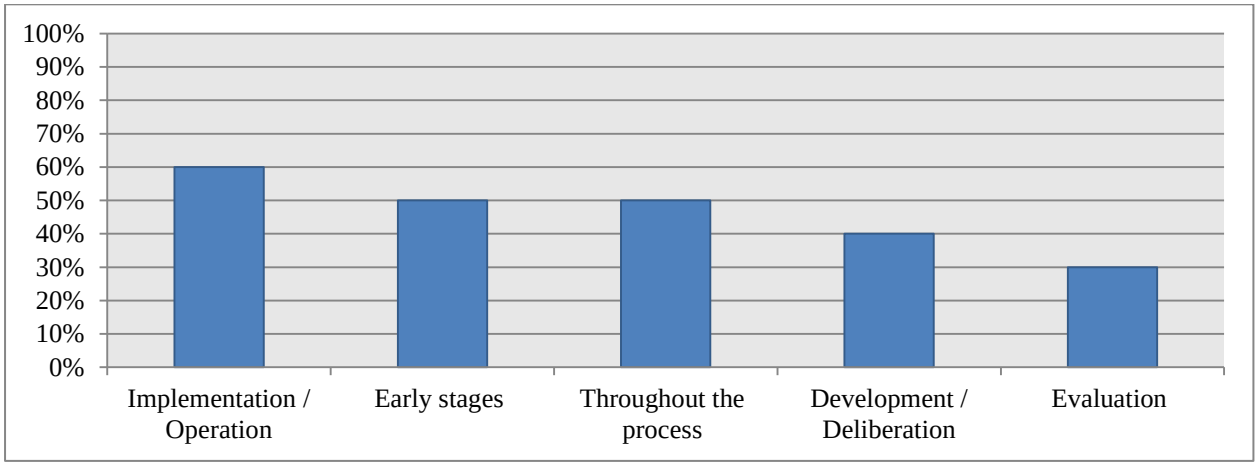
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (8)

Perception of the main costs incurred by stakeholder engagement



Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (6)

Stage of decision-making at which the stakeholder is most influential



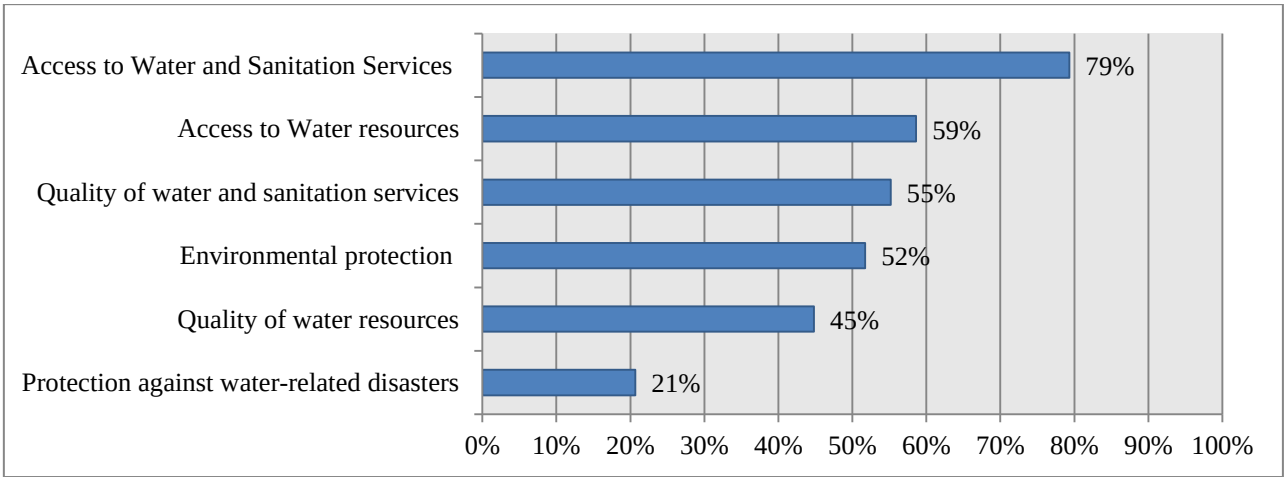
Note: Stages of decision-making at which financial actors consider having a “critical influence”

Civil society

List of civil society organisations surveyed

Armenian Women for Health and Healthy Environment
Association Aide aux Familles et Victimes des Migrations Clandestines
Both ENDS
Bulgaria - Bulgarian Water Association
Business & Professional Women International
Friends of the Earth Middle East
Germany - Wasser in Buergerhand
Global Water Initiative
Global Women Development Promoters
GRET
HANDS-NGO
International Commission on Large Dams
International Institute for Sustainable Development
IRC
Millennium Water Alliance
Movimiento Agua y Juventud
Portugal - Portuguese Water Partnership
Réseau Projection
SustainUS
Transparency International
Uganda - Kirinda Youth Environmental Management and Poverty Alleviation Program
Uganda - National Association of Professional Environmentalists
Vewin
Water Integrity Network
Water Youth Network
WaterAid
WaterLex
Waterlution
WWF - World Wildlife Fund

Areas of interest

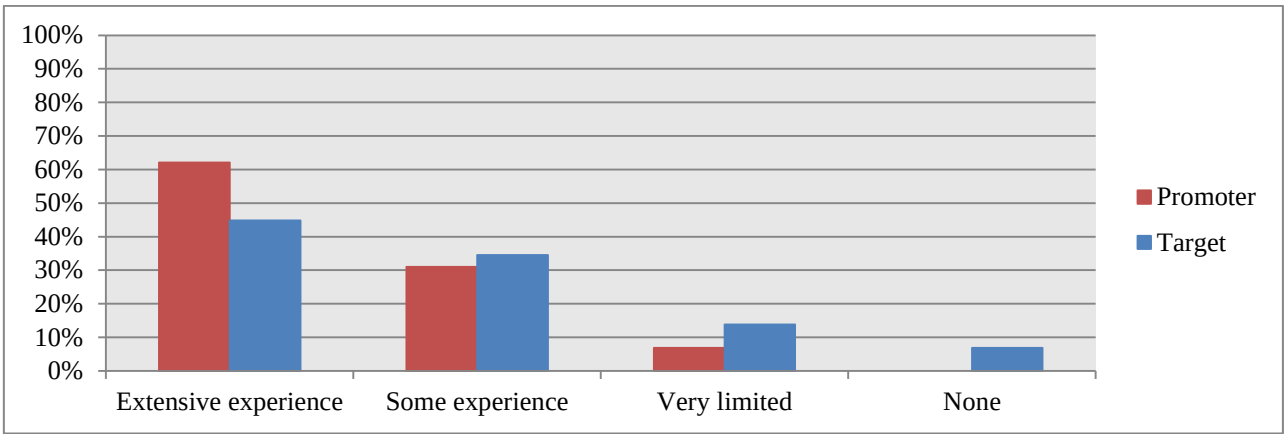


Note: Areas of interest of civil society organisations ranked from 1 to 3 on a scale from (1) to (6)

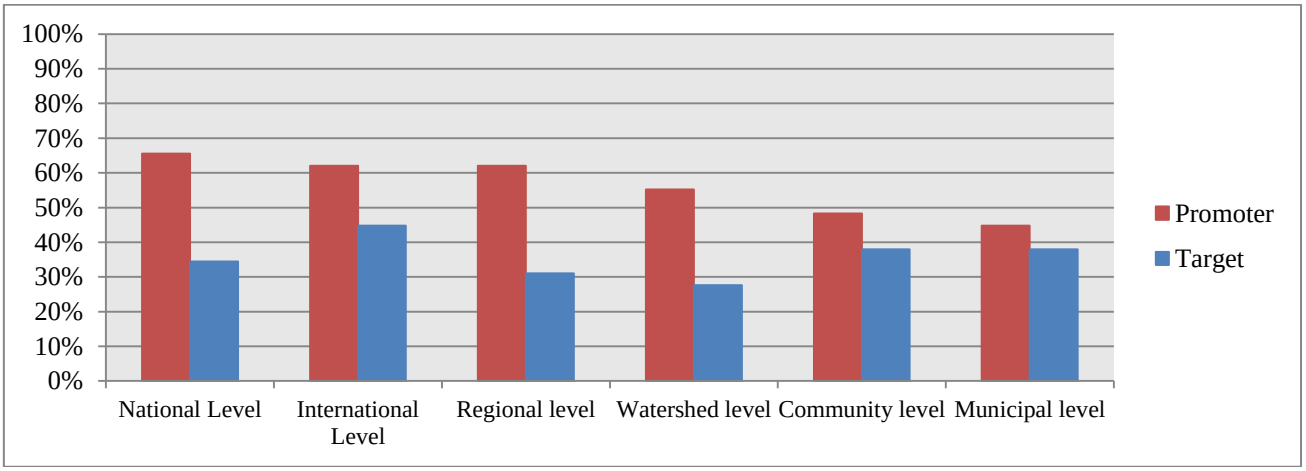
Key words most often associated to stakeholder engagement

Note: The word cloud was created based on the key terms that were ranked first on a scale from 1 to 5.

Experience in stakeholder engagement

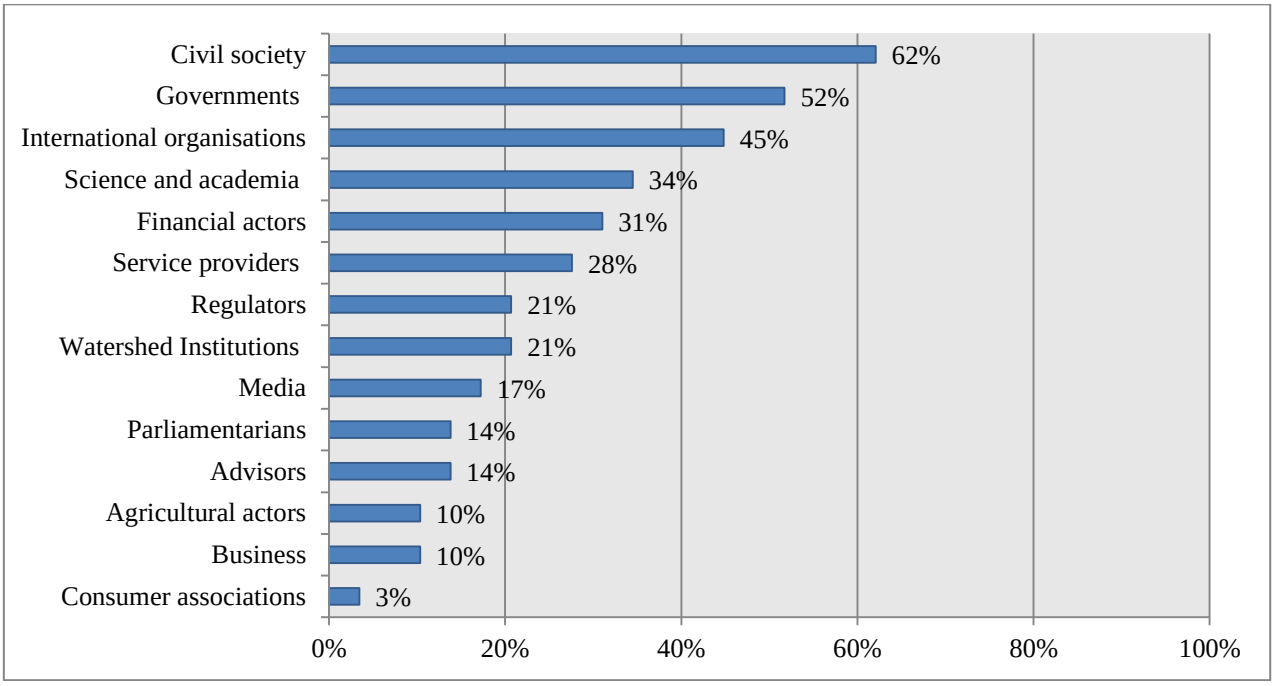


Scale of intervention



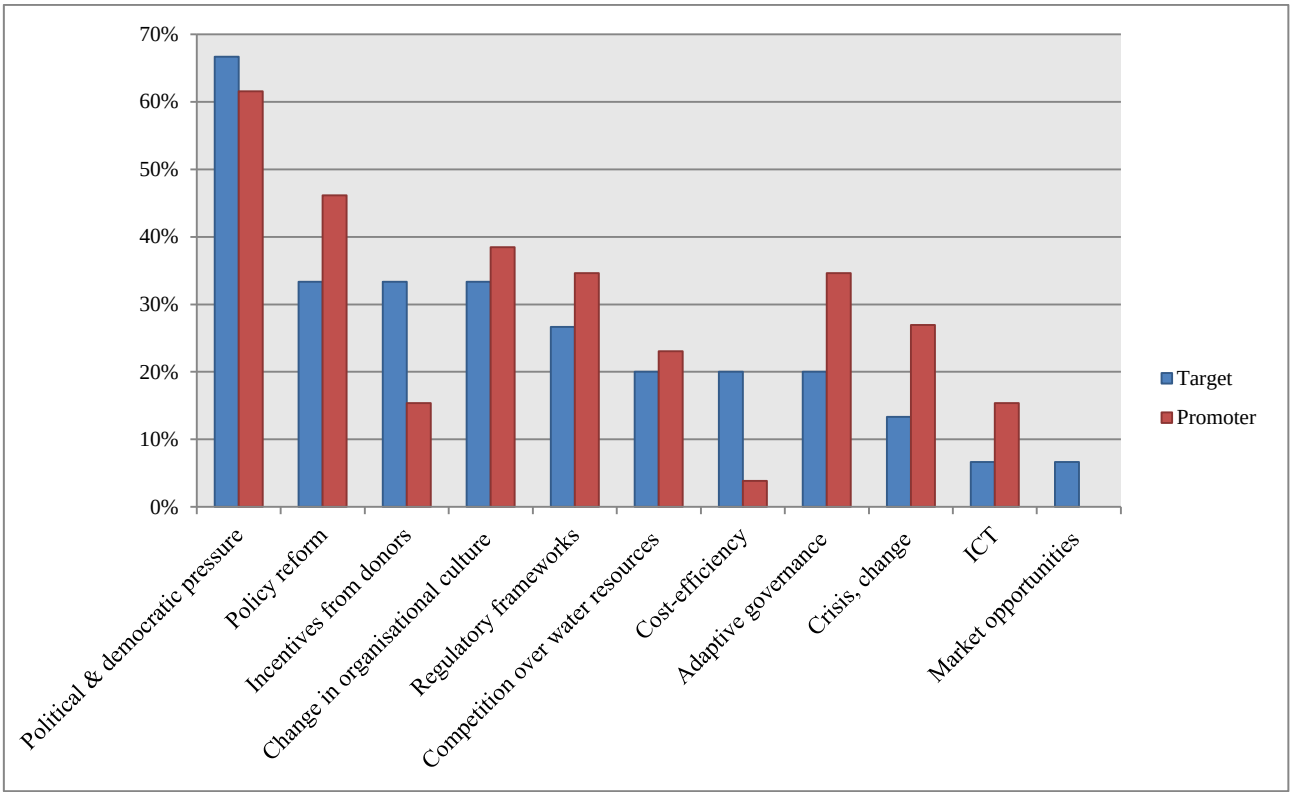
Note: Scale of intervention at which civil society primarily intervenes

Interactions with other stakeholders



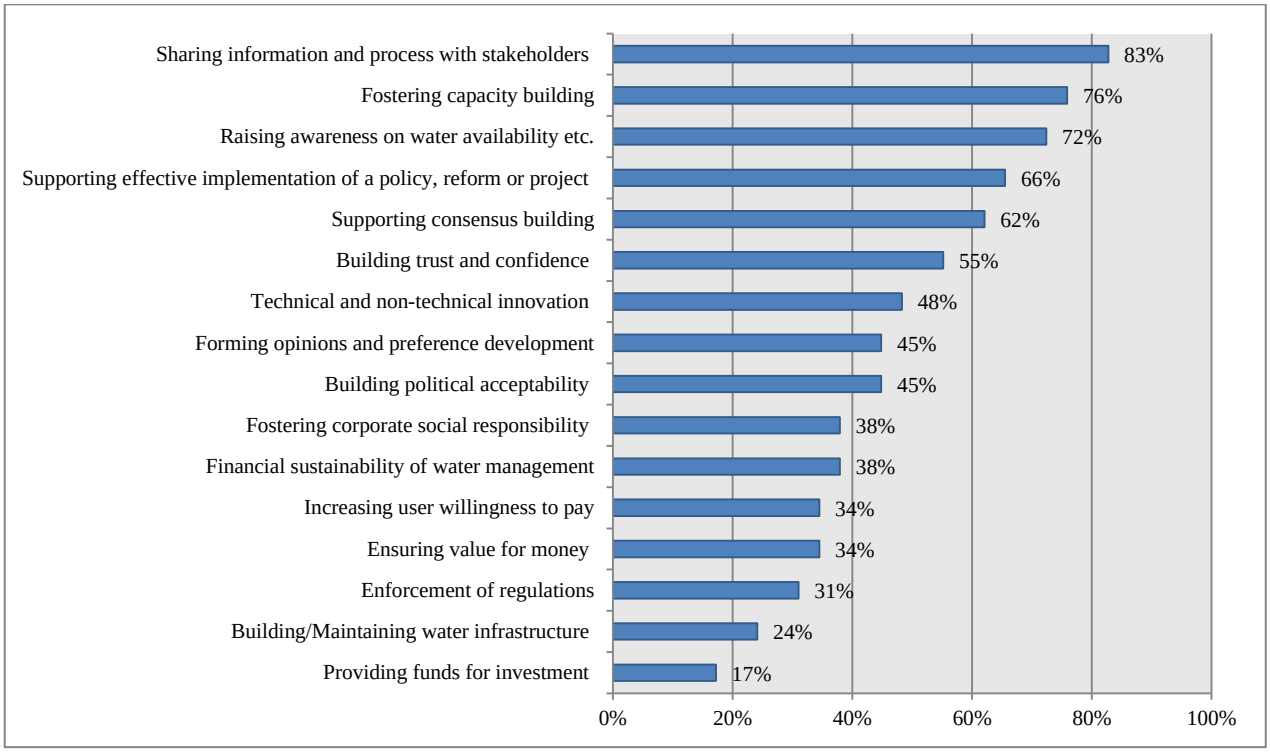
Note: Categories of stakeholders with which civil society interact "always or very frequently"

Main Drivers



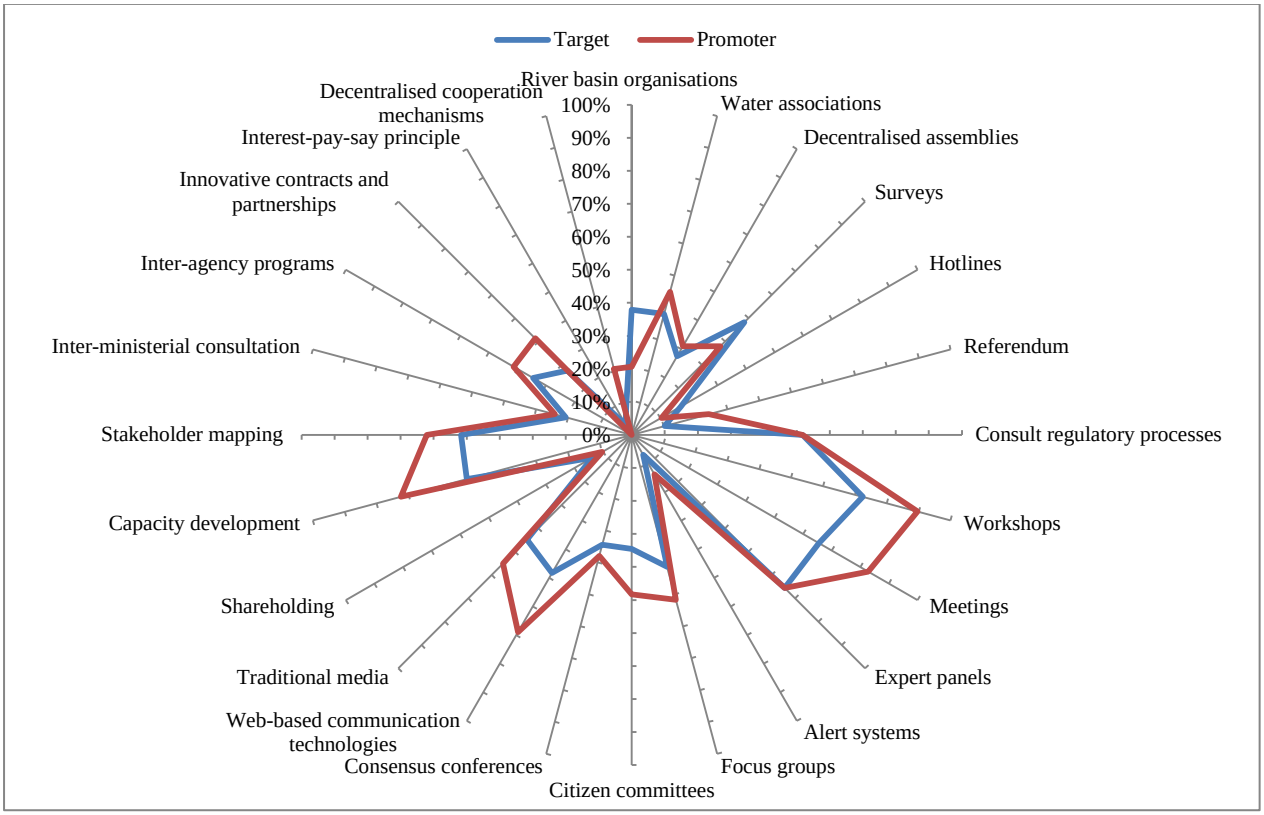
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Perception about stakeholder engagement contribution to better water governance

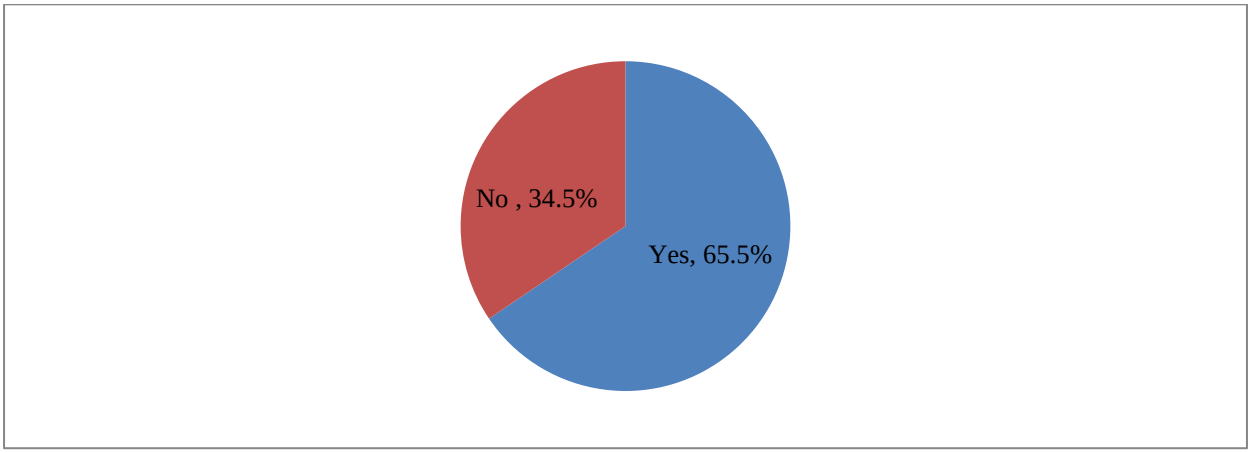


Note: Areas of contribution to water governance for which civil society responded "yes"

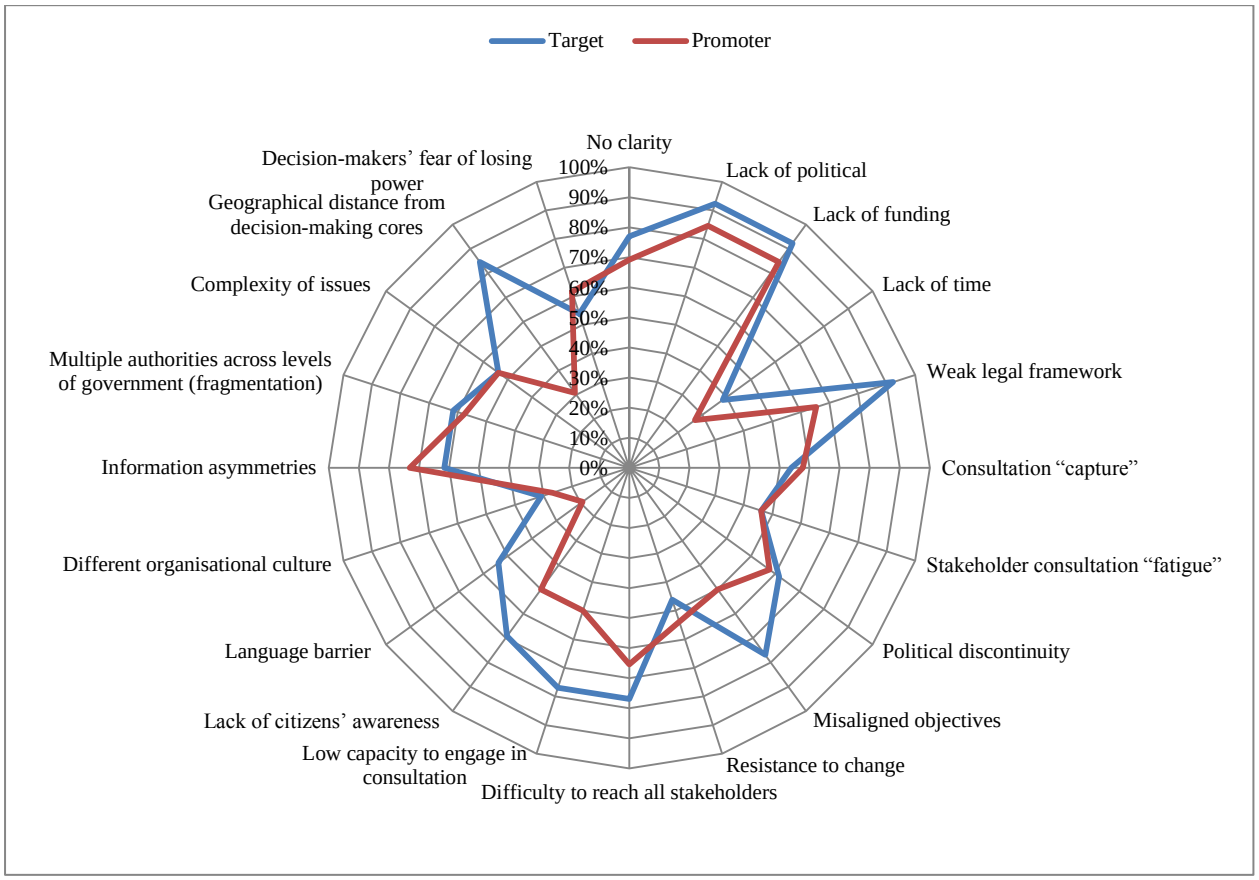
Use of stakeholder engagement mechanisms



Are existing stakeholder engagement mechanisms sufficient?

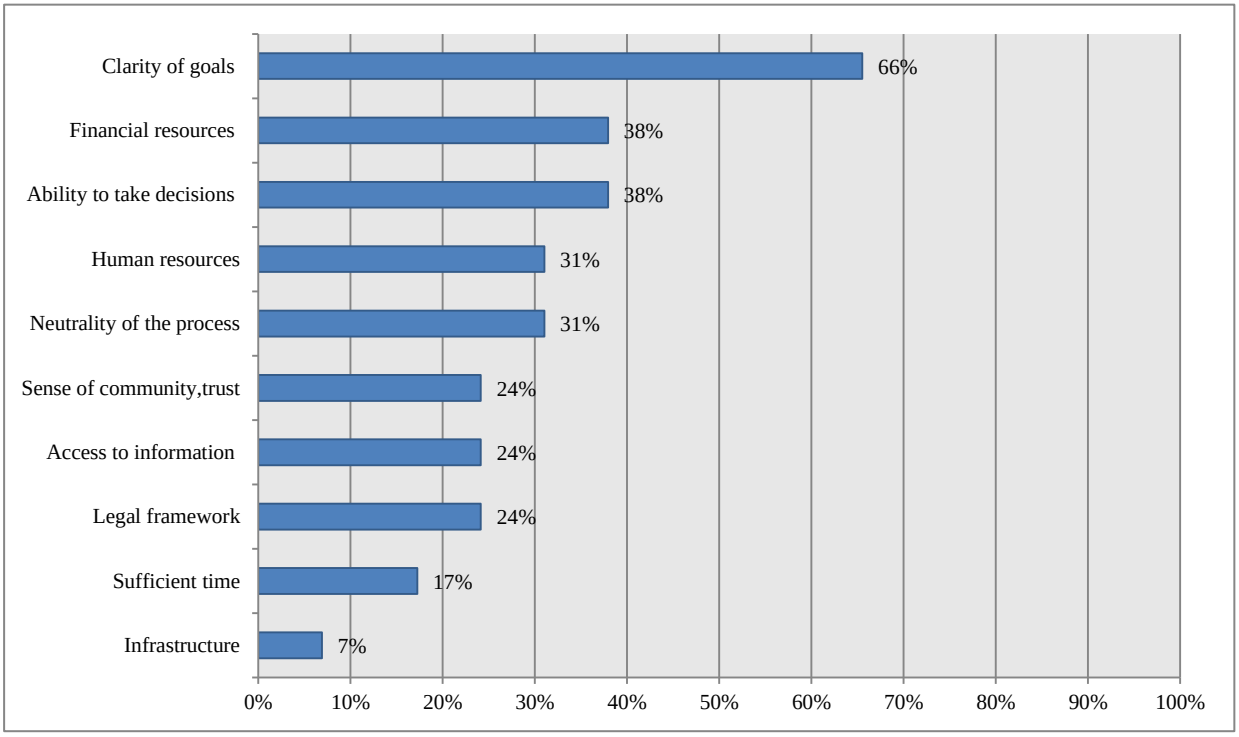


Main obstacles faced to engage stakeholders



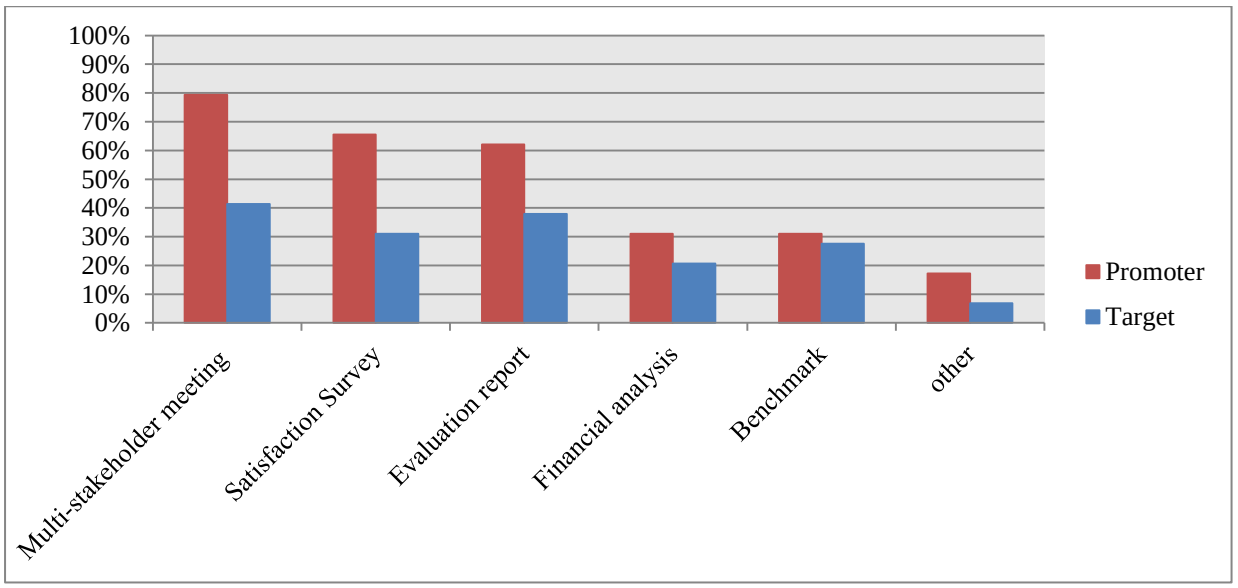
Note: Obstacles considered as "critical" and "important" by civil society

Perception of critical conditions of success to effectively contribute to water-related decision-making

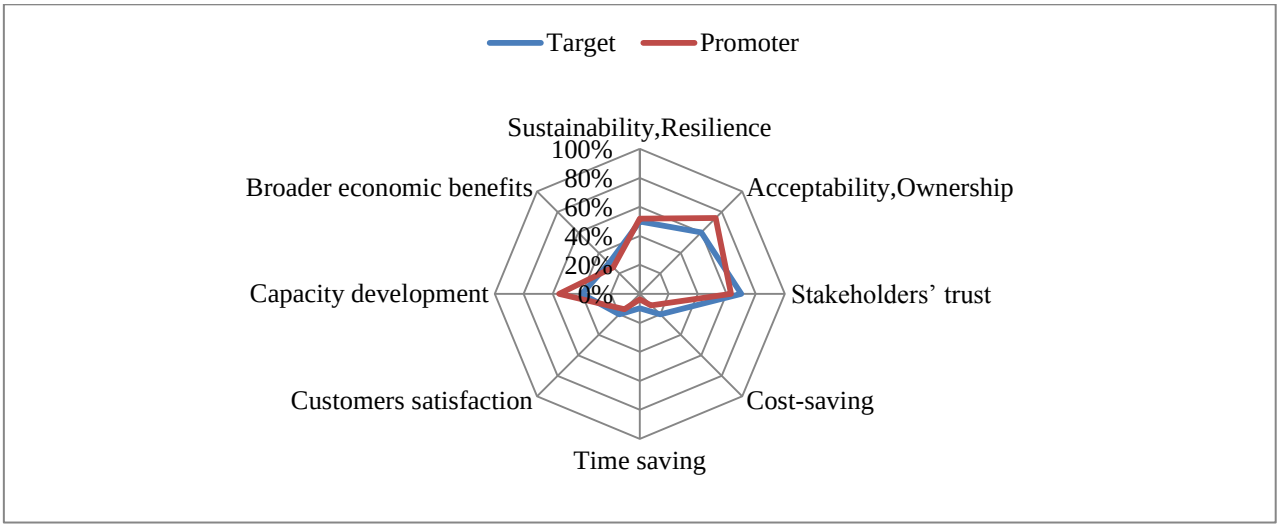


Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Mechanisms used to assess the effectiveness of stakeholder engagement

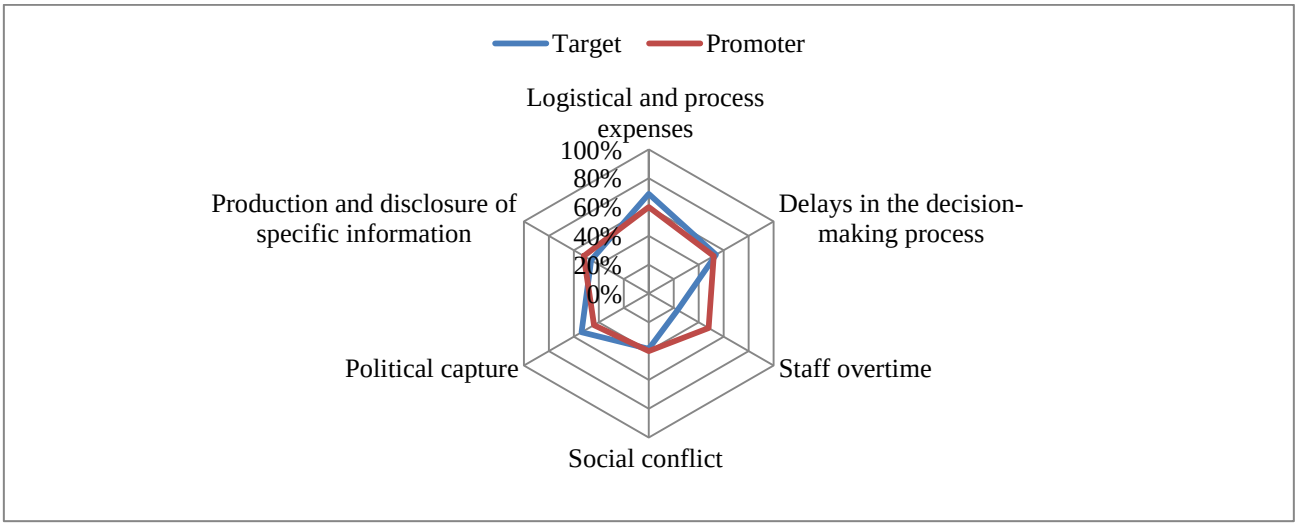


Perception of the main benefits derived by stakeholder engagement



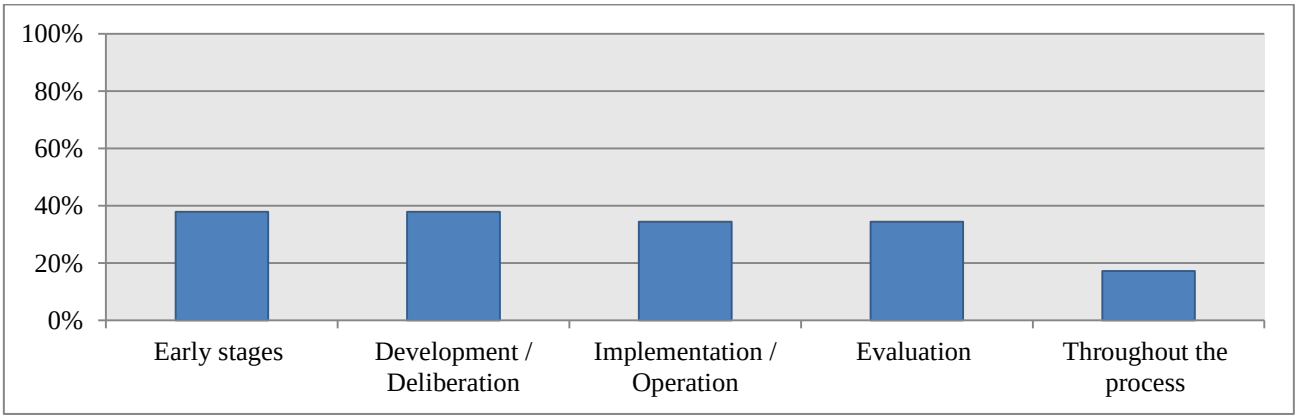
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (8)

Perception of the main costs incurred by stakeholder engagement



Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (6)

Stage of decision-making at which the stakeholder is most influential



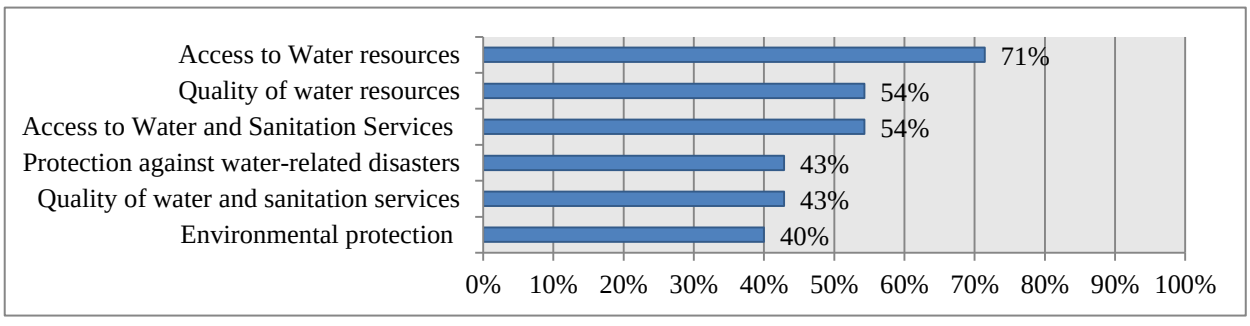
Note: Stages of decision-making at which civil society considers having a "critical influence"

Science and academia

List of scientific and academic institutions surveyed

Canada - University of British Colombia - Program on Water Governance
Chile - Department of Agricultural Economics, Pontifica Universidad Catolic
Ethiopia - Arba Minch University
France - Institut de recherche pour le développement
France - IRSTEA
France - National Centre for Scientific Research
France - Sorbonne Business School
France - University of Paris - Panthéon-Sorbonne
France - University Paris Est
International Water Resources Association
Italy - Foundation for the Environment - Turin School of Local Regulation
Korea - Korea Environment Institute
MESONexusTeam
Mexico - Instituto para el Desarrollo Regional del Tecnológico de Monterrey
Mexico - Third World Centre for Water Management
Mexico - Universidad Autonoma Metropolitana
Netherlands - Delft University of Technology - Nile Basin Discourse
Netherlands - Deltares
Netherlands - KWR Watercycle Research Institute
Netherlands - Landcare Research NZ Ltd
Netherlands - UNESCO-IHE
Netherlands - Utrecht University
Netherlands - Water Governance Centre
Netherlands World Water Academy
Slovenia - University of Ljubljana
South Africa - UniSA
Spain - Botin Foundation
Spain - Universidad Politecnica de Cataluna
Sweden - Stockholm International Water Institute
Thailand - Chulalongkorn University
United Kingdom - University of Exeter
United States - University of Arizona – Water Resources Research Centre
United States - University of Pennsylvania
United States - Water Health
United-States - Tufts University

Areas of interest

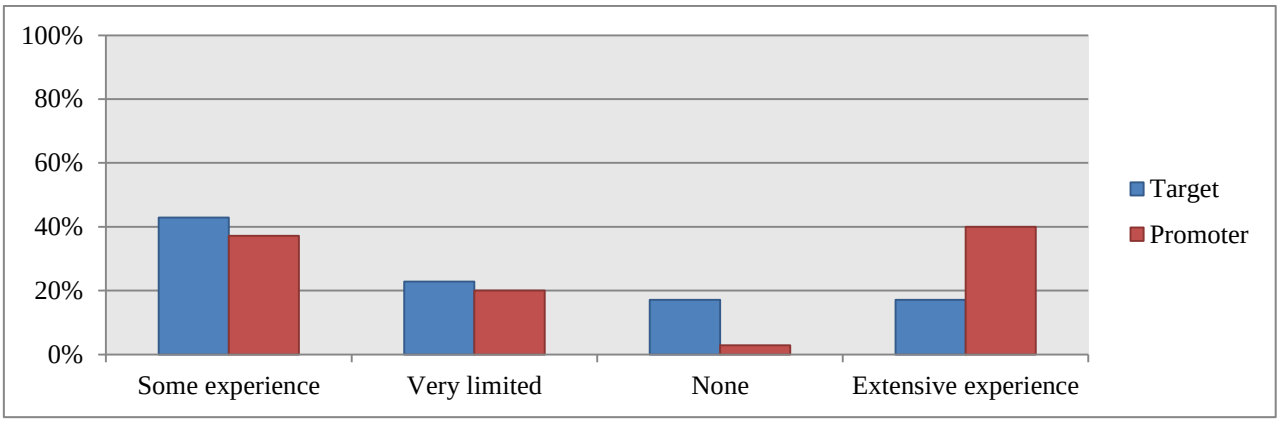


Note: Areas of interest of science and academia ranked from 1 to 3 on a scale from (1) to (6)

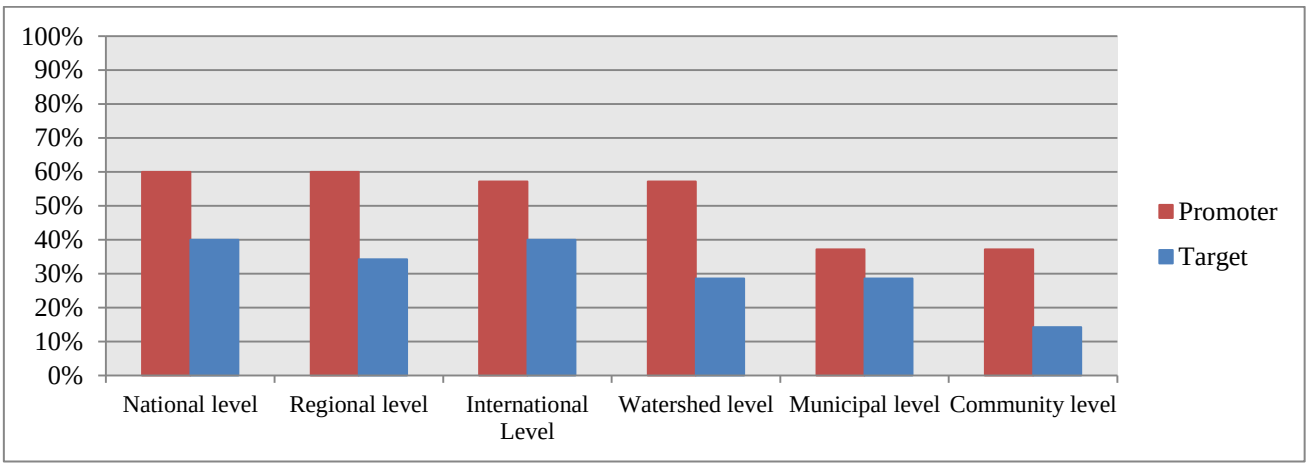
Key words most often associated to stakeholder engagement

Note: The word cloud was created based on the key terms that were ranked first on a scale from 1 to 5.

Experience in stakeholder engagement

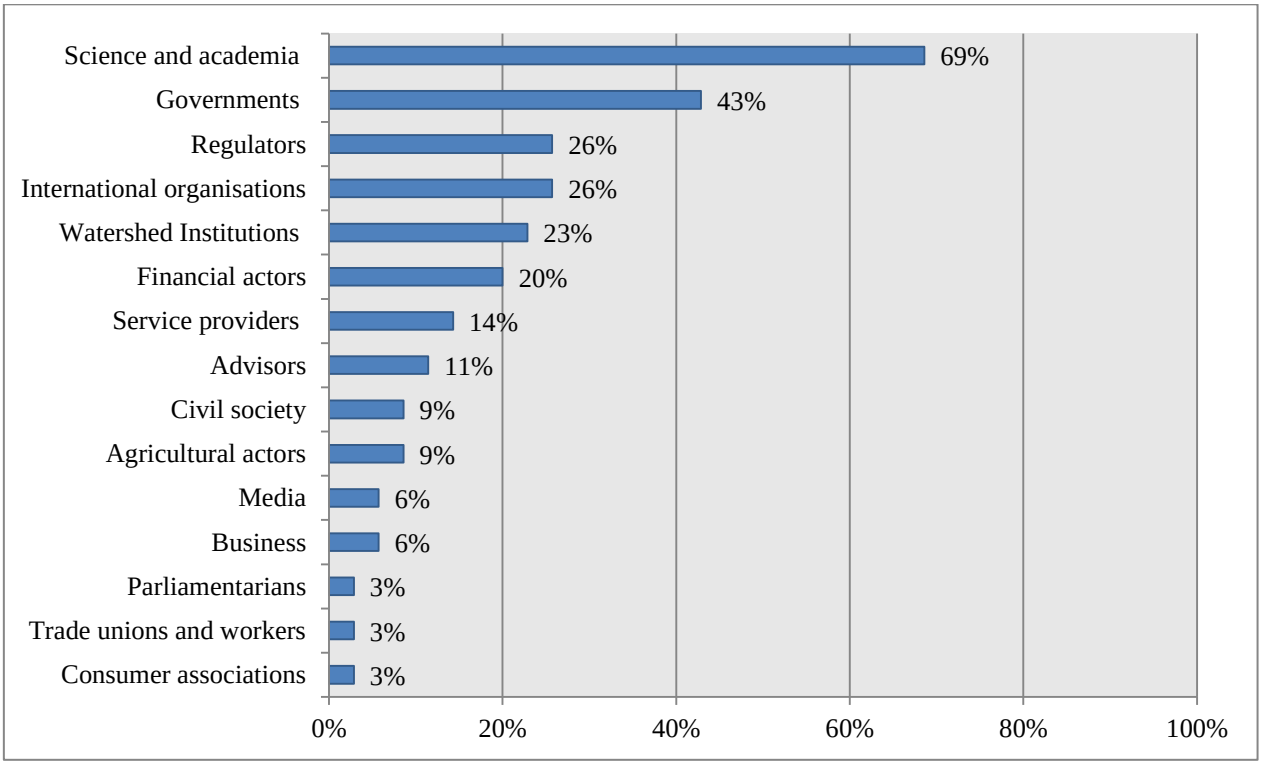


Scale of intervention



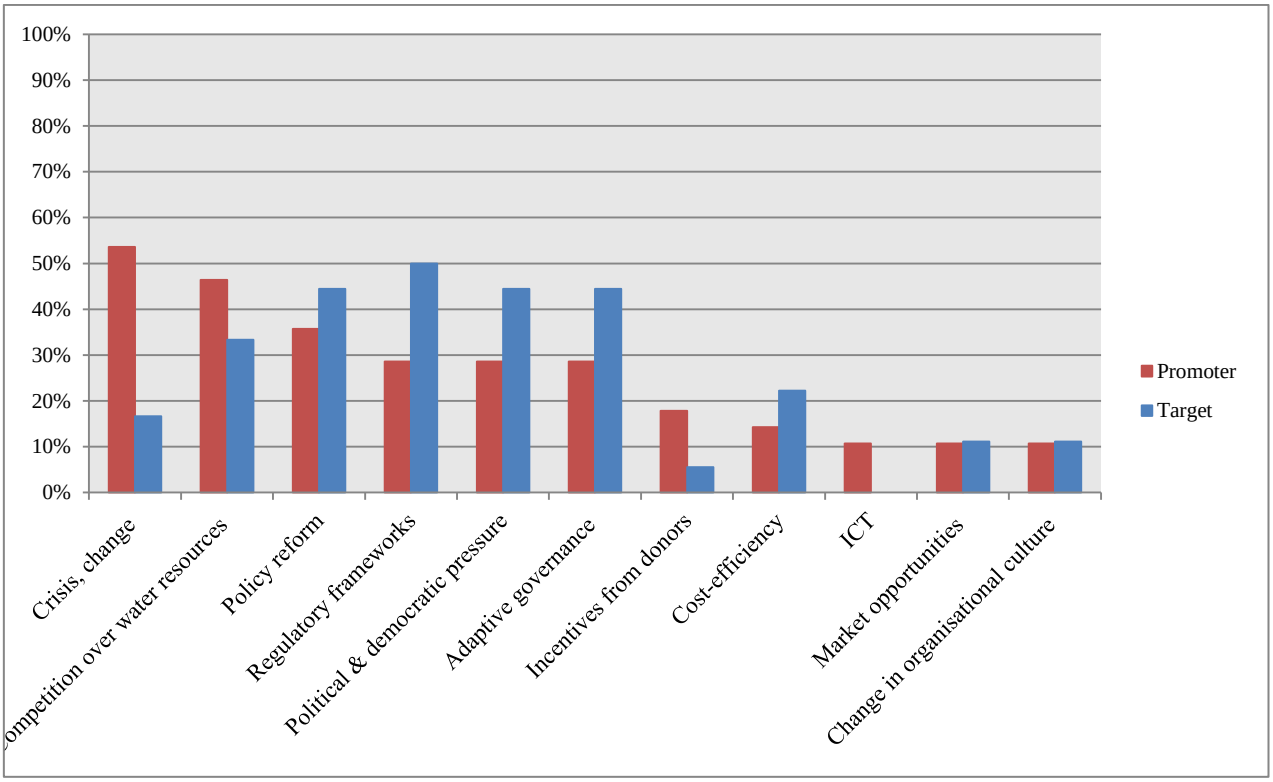
Note: Scale of intervention at which science and academia primarily intervene

Interactions with other stakeholders



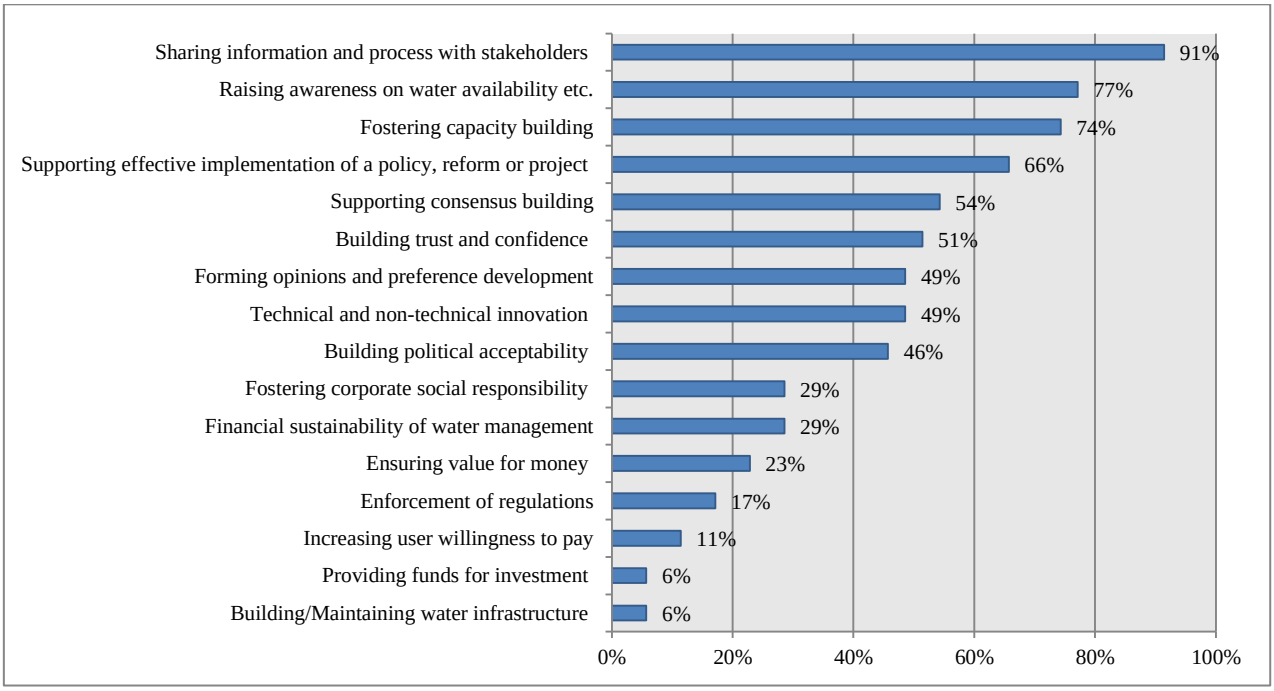
Note: Categories of stakeholders with which science and academia intervene "always or very frequently"

Main drivers



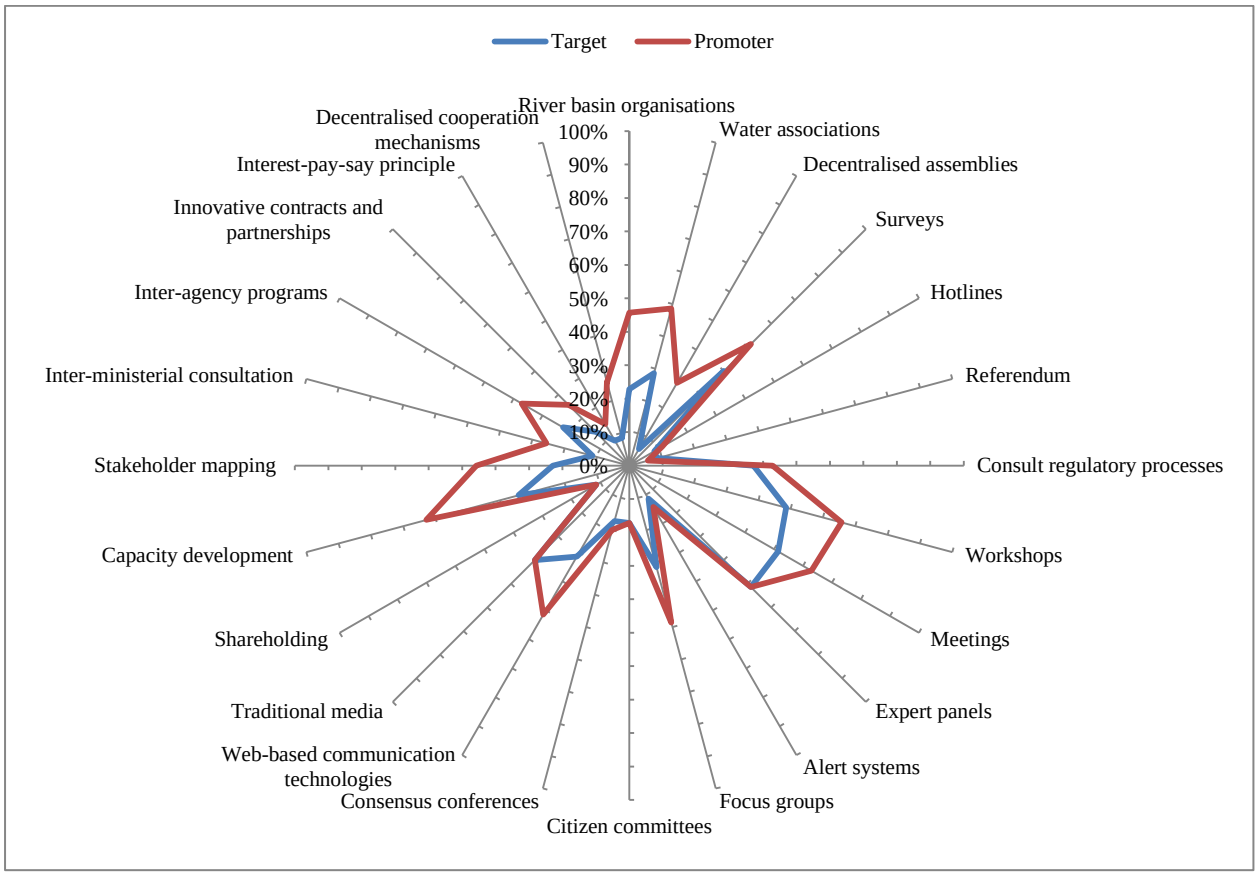
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Perception about stakeholder engagement contribution to better water governance

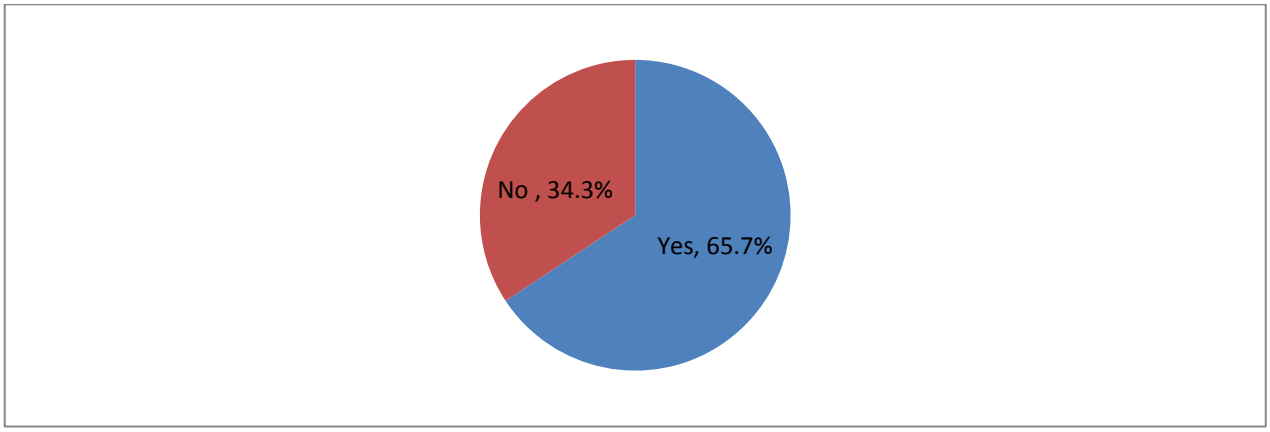


Note: Areas of contribution to water governance for which science and academia responded "yes"

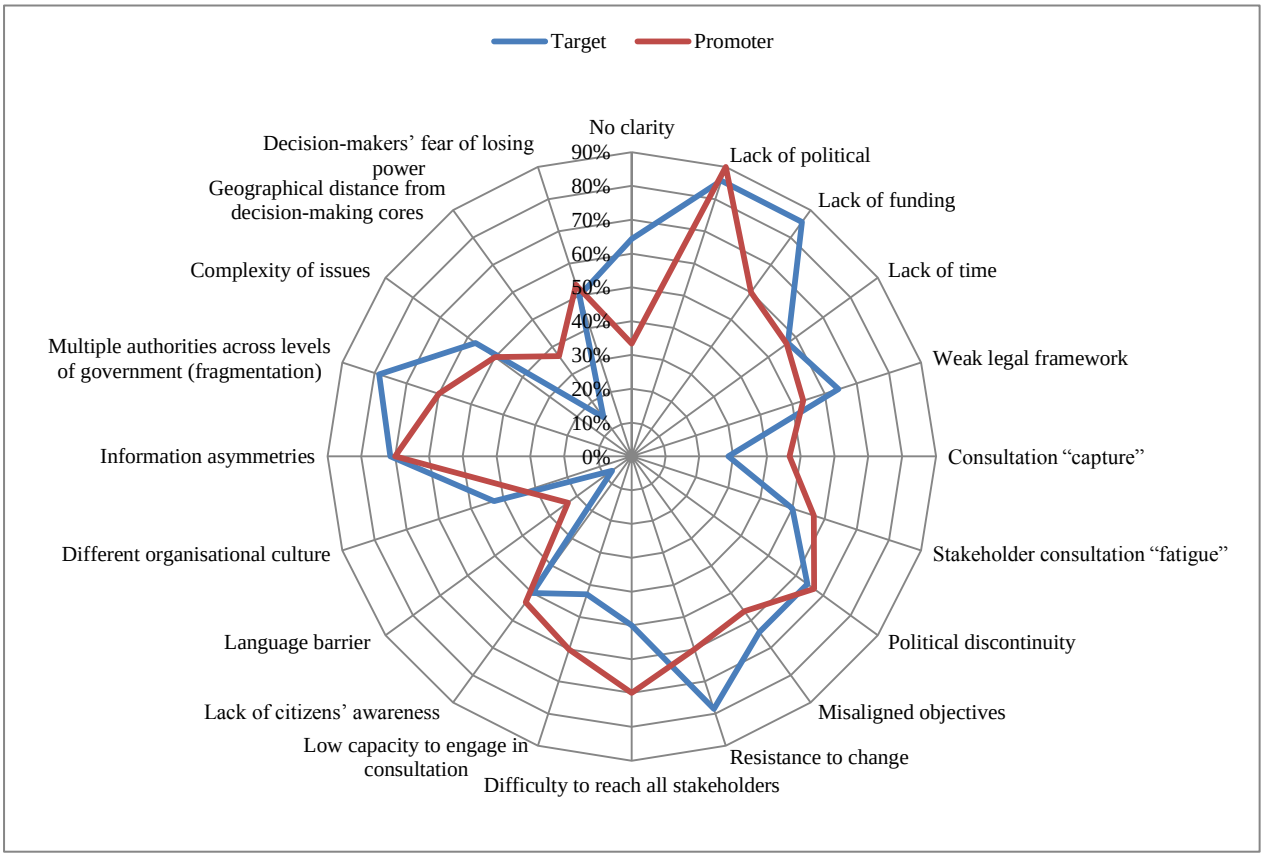
Use of stakeholder engagement mechanisms



Are existing stakeholder engagement mechanisms sufficient?

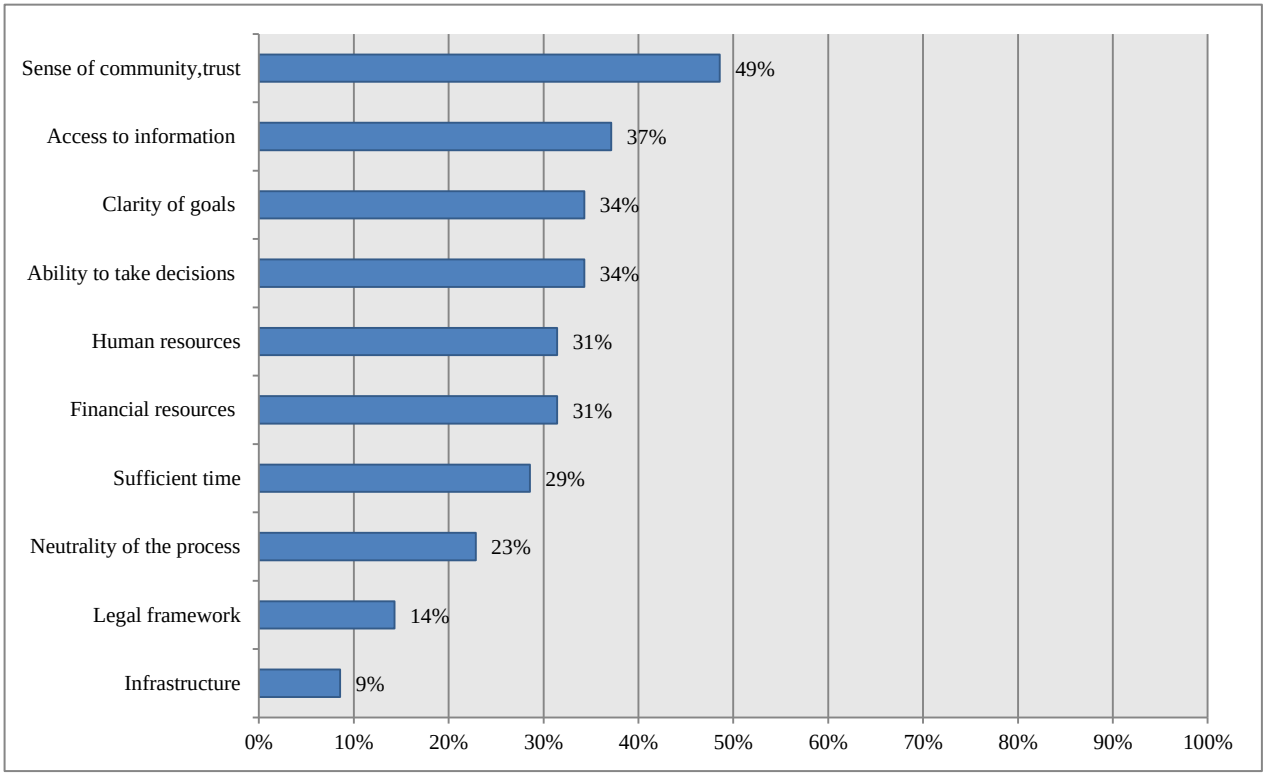


Main obstacles faced to engage stakeholders



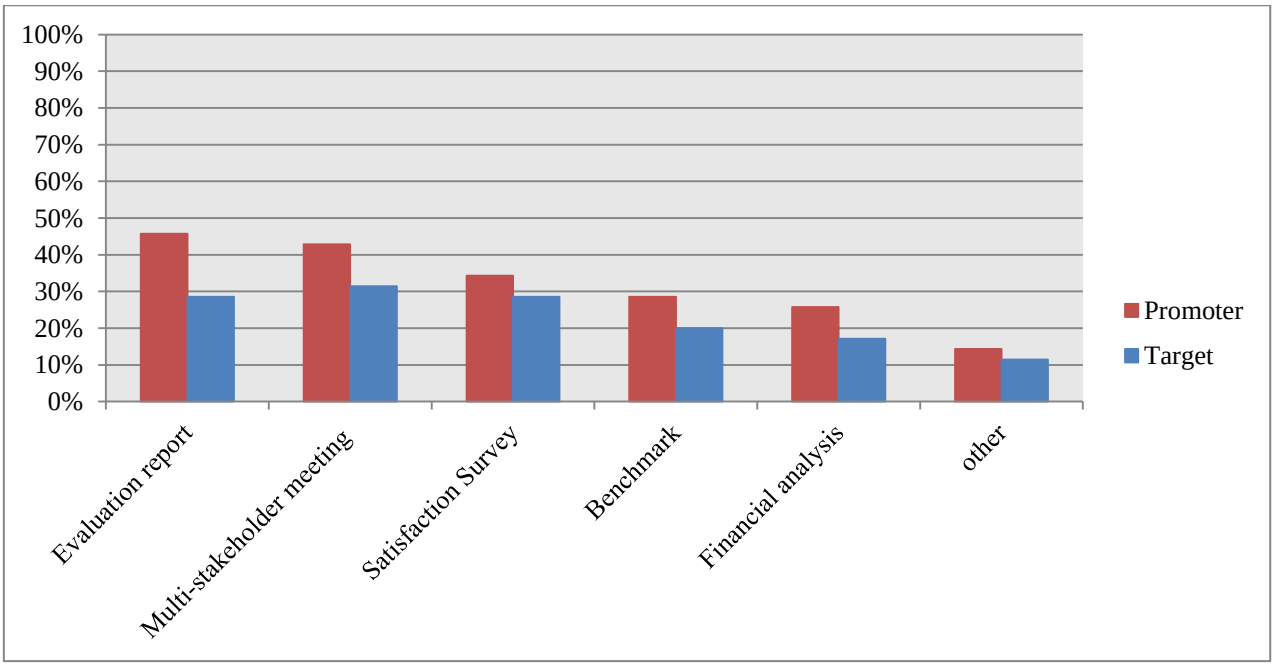
Note: Obstacles considered as "critical" and "important" by science and academia

Perception of critical conditions of success to effectively contribute to water-related decision-making

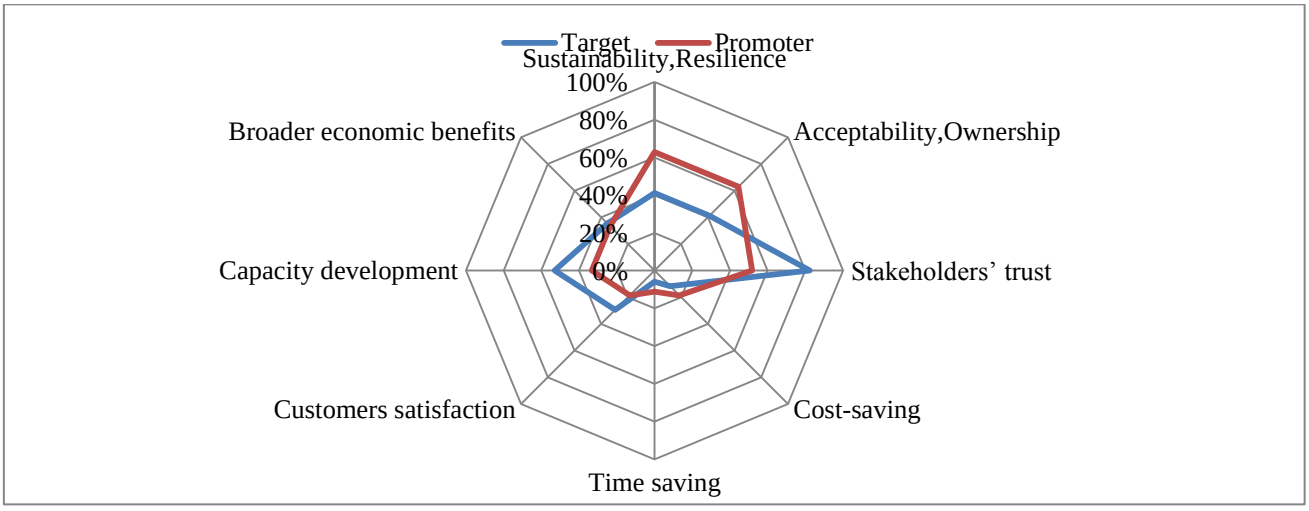


Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Mechanisms used to assess the effectiveness of stakeholder engagement

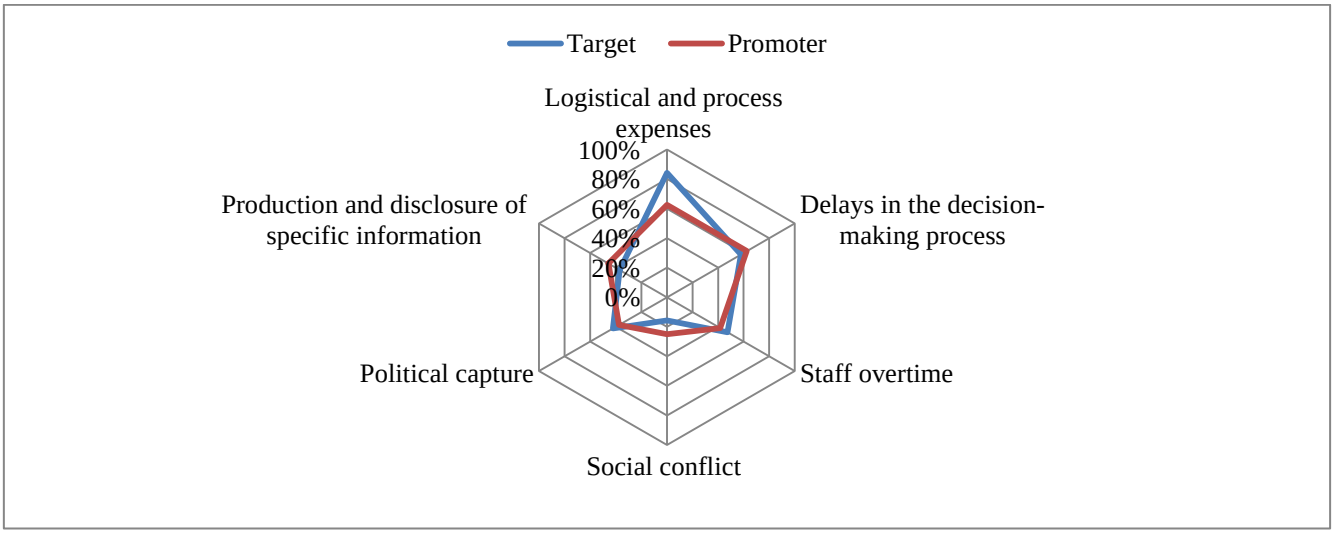


Perception of the main benefits derived by stakeholder engagement



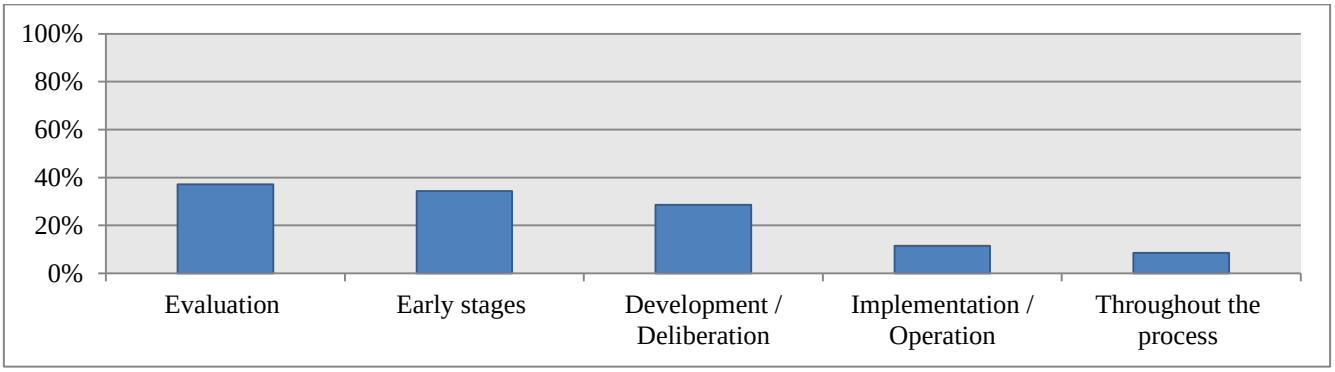
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (8)

Perception of the main costs incurred by stakeholder engagement



Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (6)

Stage of decision-making at which the stakeholder is most influential



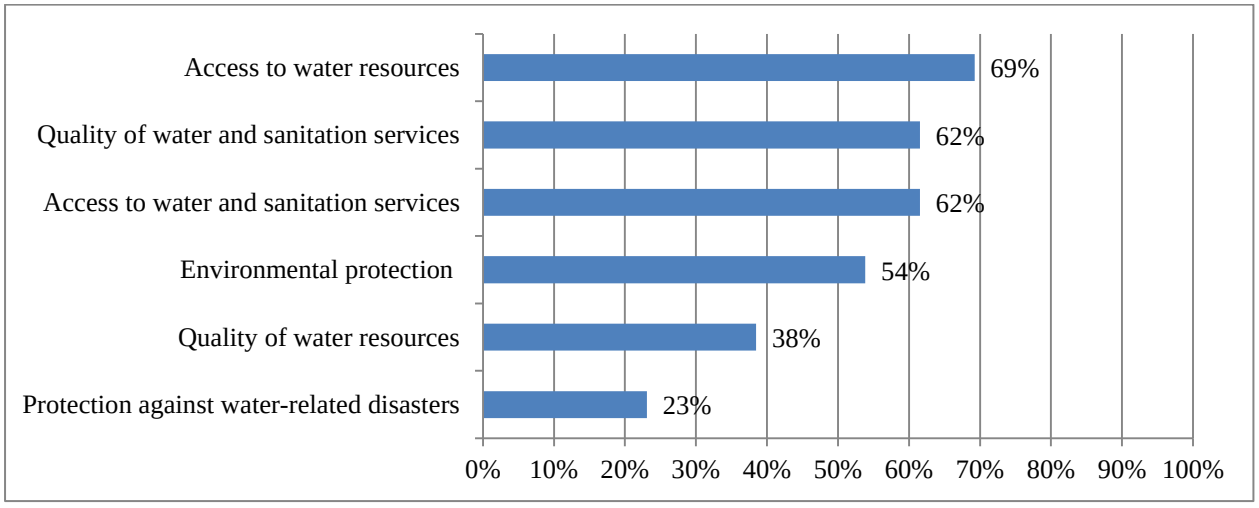
Note: Stages of decision-making at which science and academia consider having a "critical influence"

Advisors

List of advisors surveyed

Afcap Consulting
Alexandra and Associates Pty Ltd
ALFAR PROJECT CO.
ARCADIS
Bixler Consulting
Fundacion Chile
ICATALIST
José Fradé – Independent consultant
J2C Water Ltd.
Royal HaskoningDHV - Business Line Water Technology
TransformationFirst Asia Pte Ltd
TreeVelop
Twynstra Gudde management consultants

Areas of interest

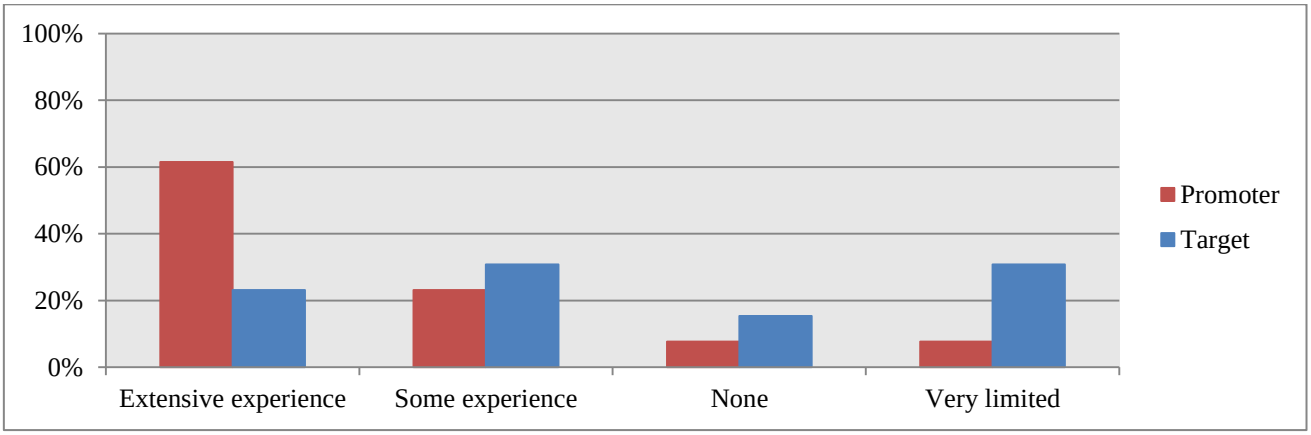


Note: Areas of interest of advisors ranked from 1 to 3 on a scale from (1) to (6)

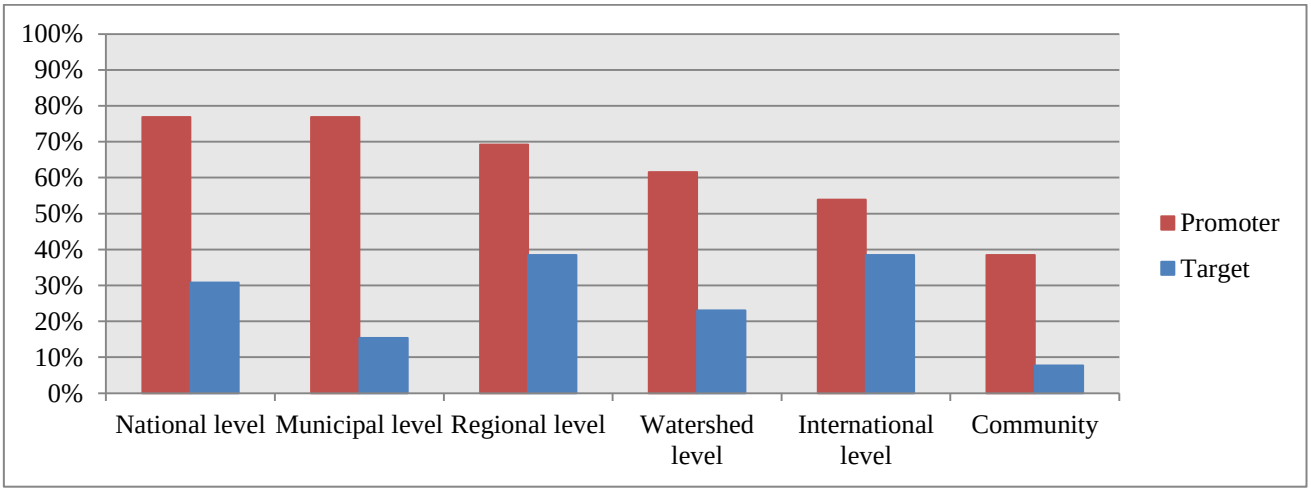
Key words most often associated to stakeholder engagement

Note: The word cloud was created based on the key terms that were ranked first on a scale from 1 to 5.

Experience in stakeholder engagement

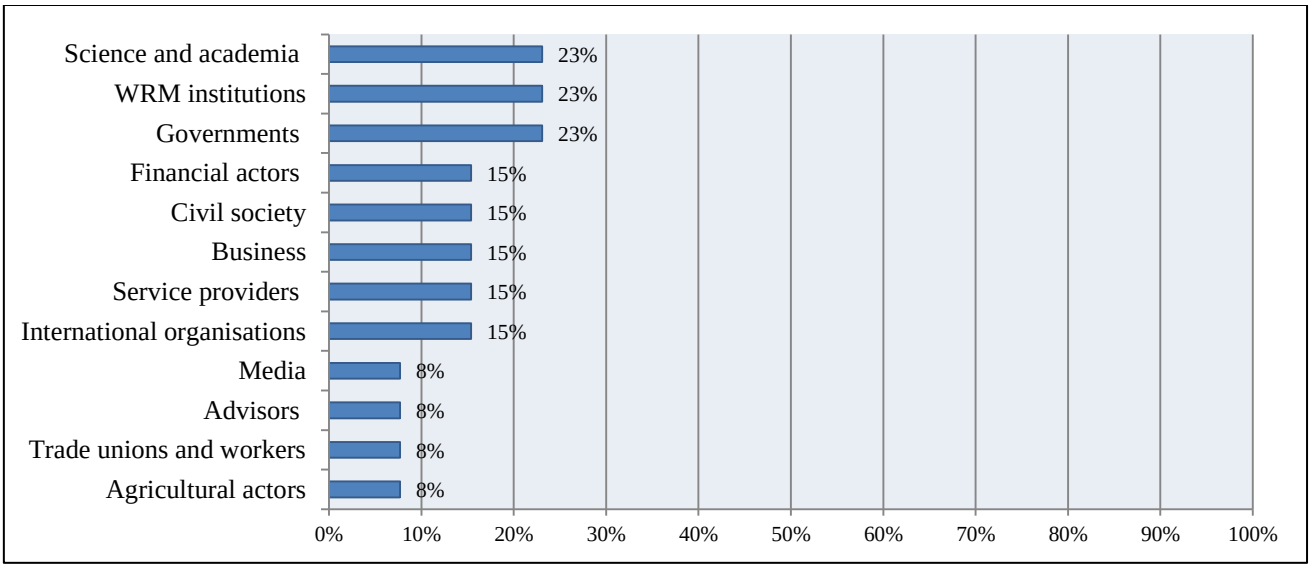


Scale of intervention



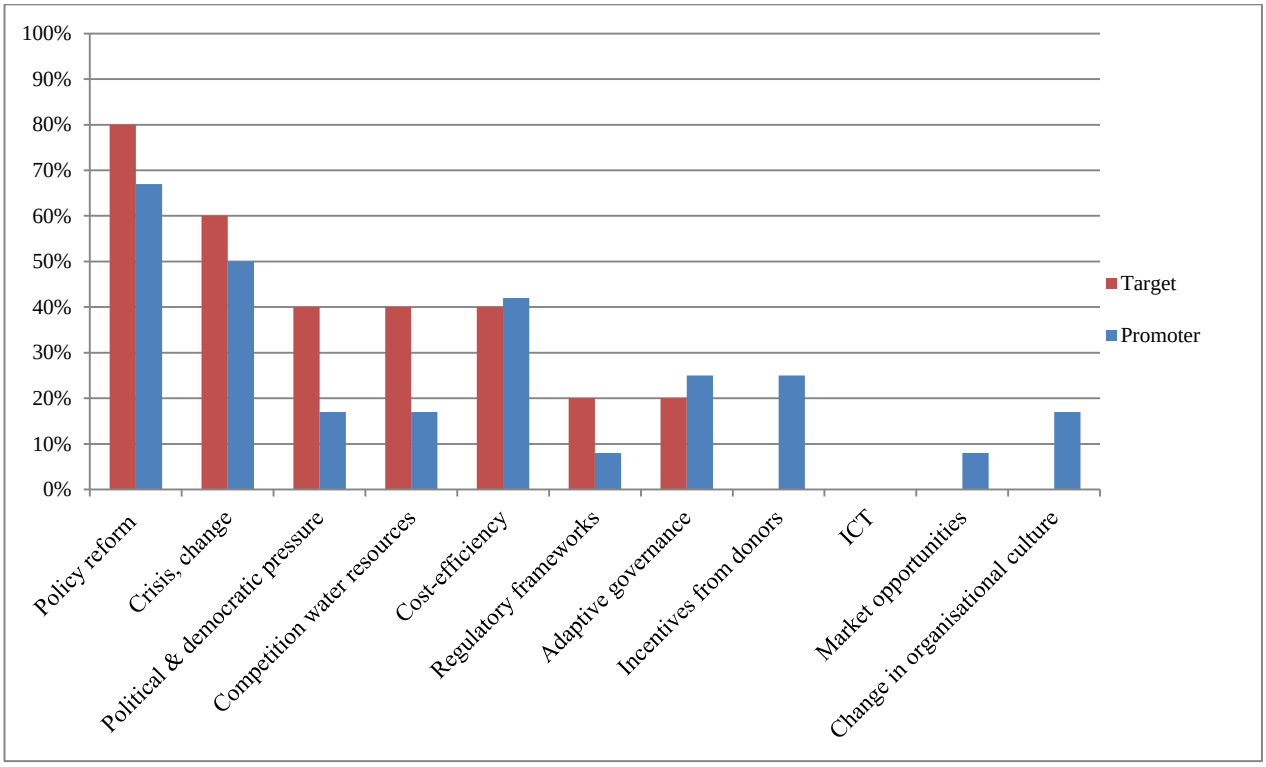
Note: Scale of intervention at which advisors primarily intervene

Interactions with other stakeholders



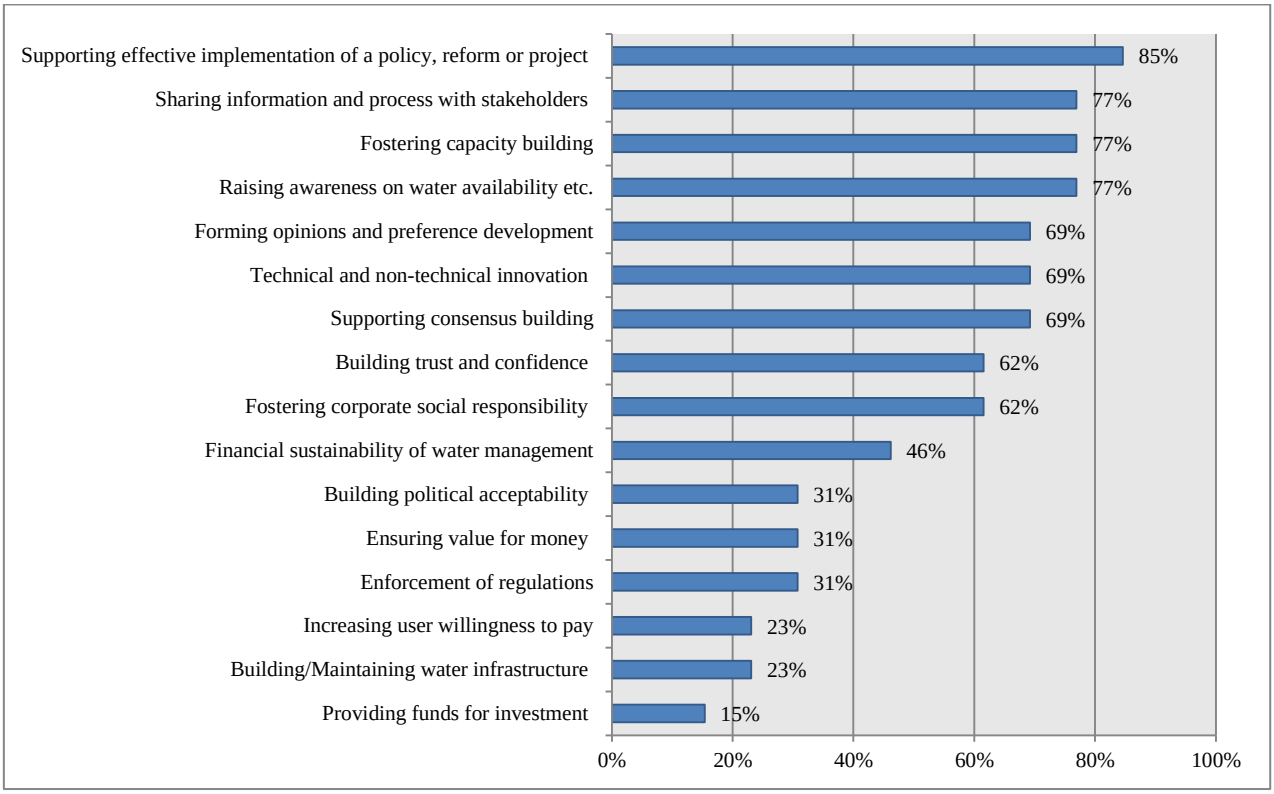
Note: Categories of stakeholders with which advisors intervene "always or very frequently"

Main drivers



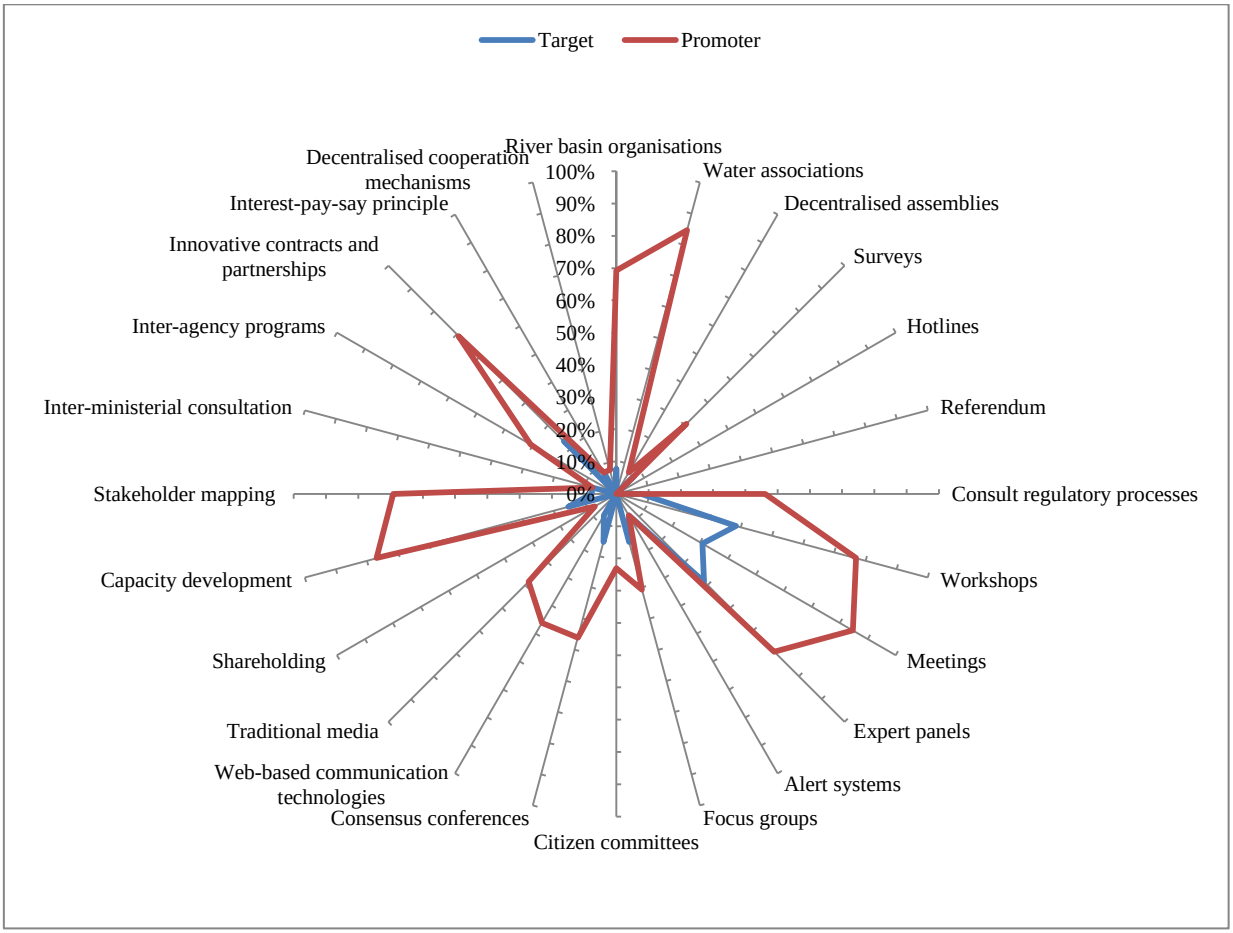
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Perception about stakeholder engagement contribution to better water governance

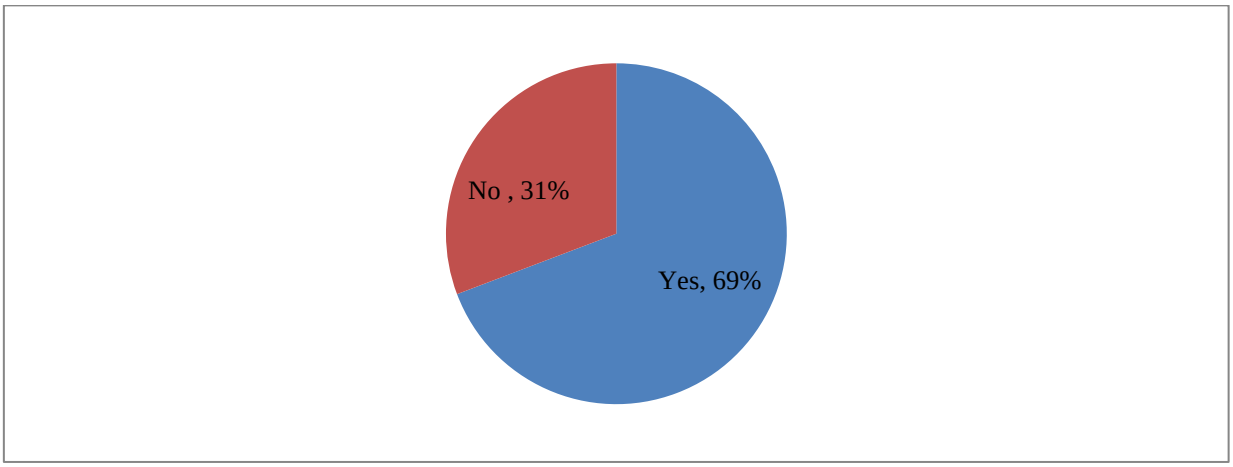


Note: Areas of contribution to water governance for which advisors responded "yes"

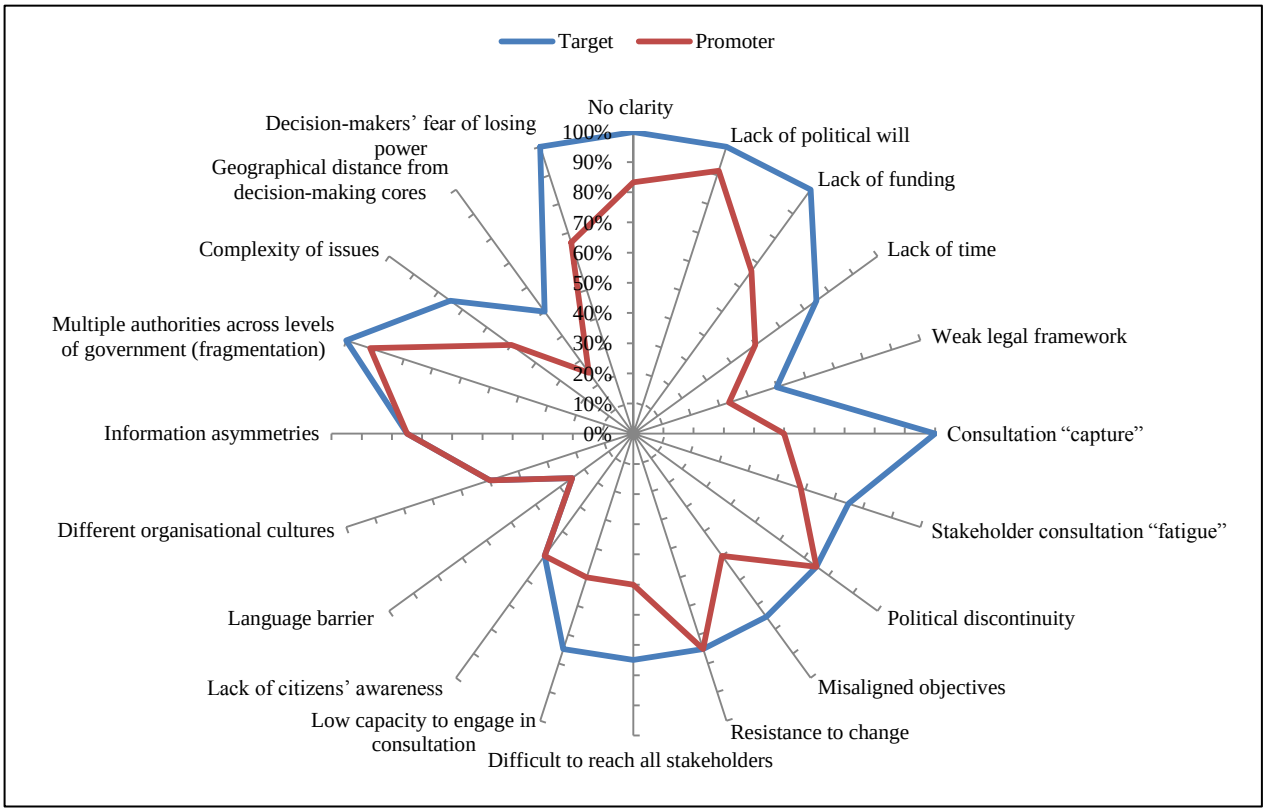
Use of stakeholder engagement mechanisms



Are existing stakeholder engagement mechanisms sufficient?

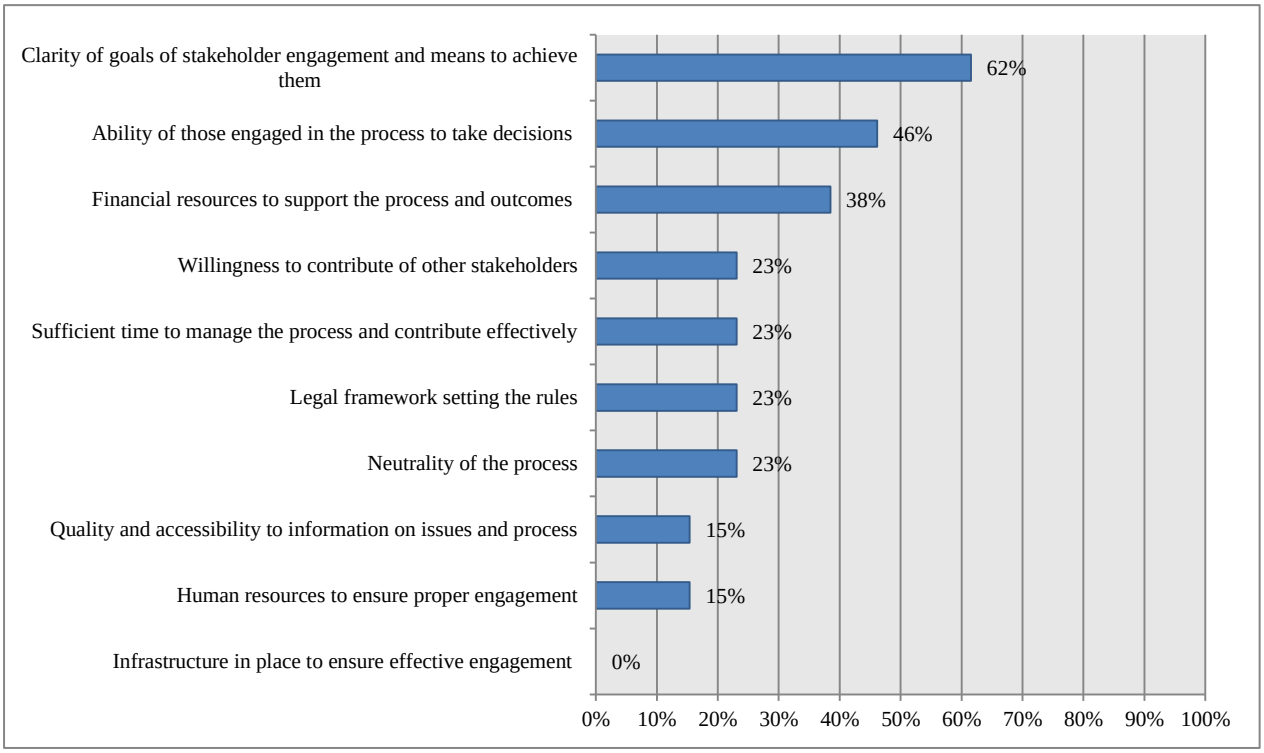


Main obstacles faced to engage stakeholders



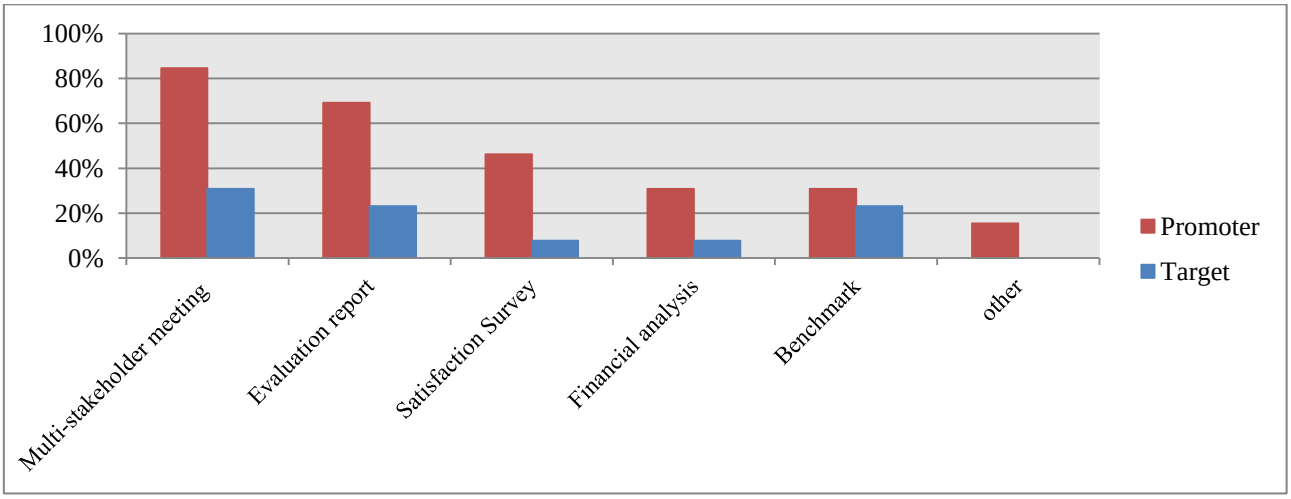
Note: Obstacles considered as "critical" and "important" by advisors

Perception of critical conditions of success to effectively contribute to water-related decision-making

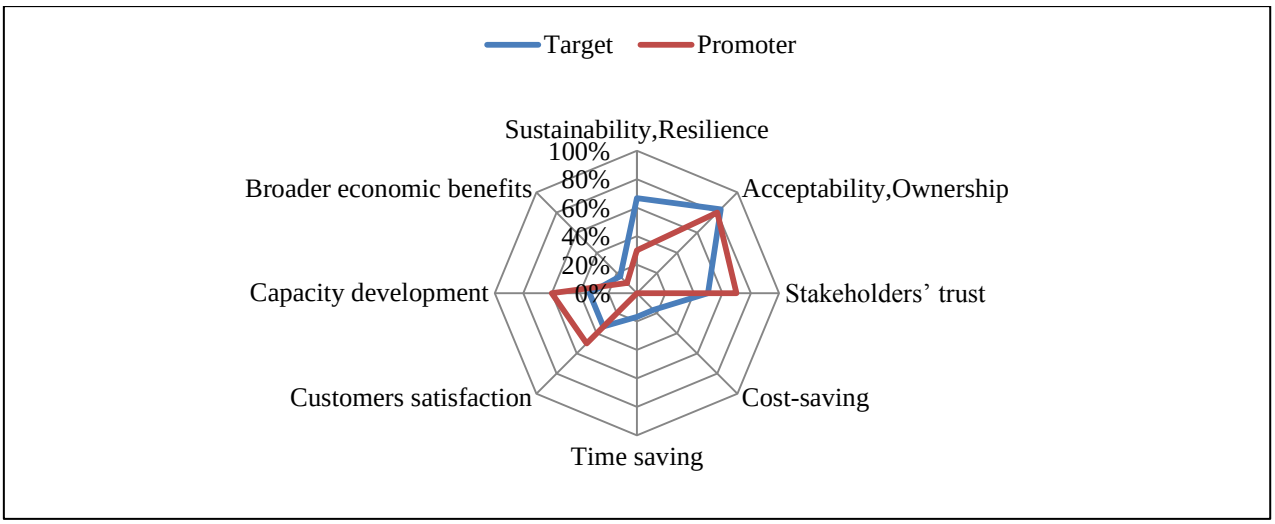


Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (10)

Mechanisms used to assess the effectiveness of stakeholder engagement

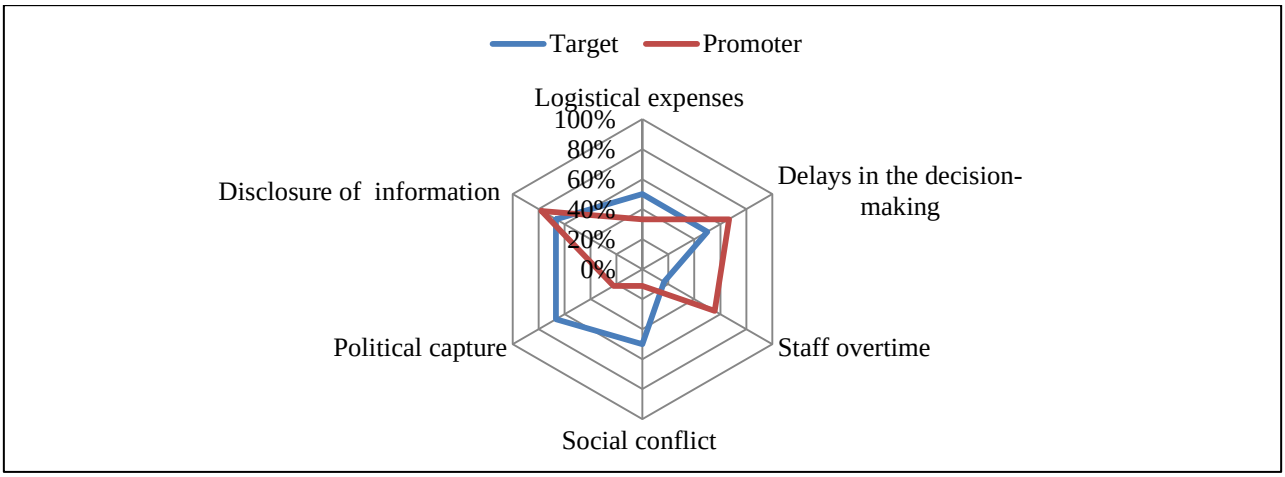


Perception of the main benefits derived by stakeholder engagement



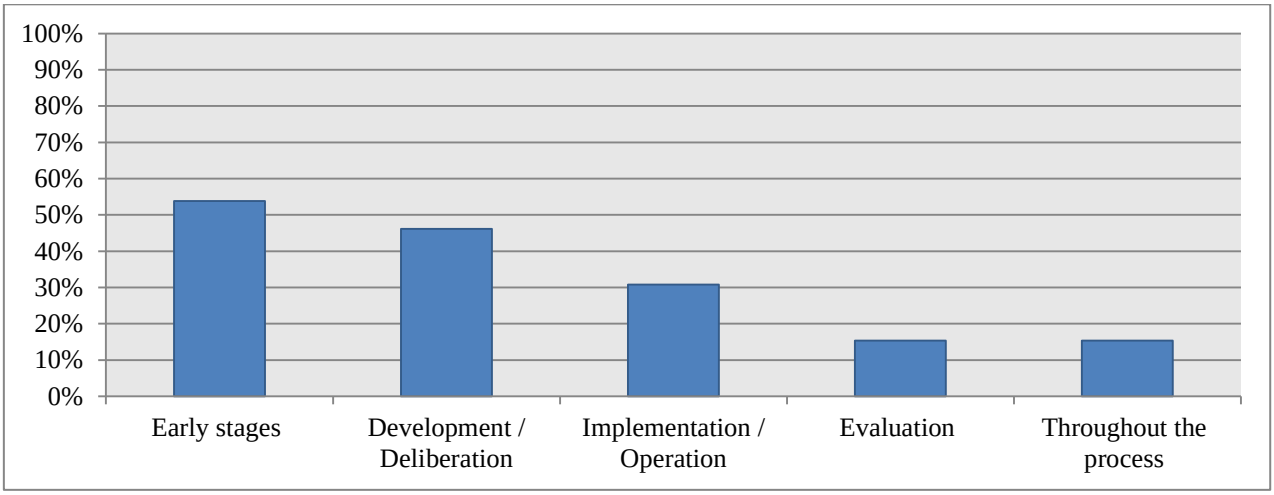
Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (8)

Perception of the main costs incurred by stakeholder engagement



Note: This graph processes responses that were ranked from 1 to 3 on a scale of (1) to (6)

Stage of decision-making at which the stakeholder is most influential



Note: Stages of decision-making at which advisors consider having a "critical influence"

ANNEX B: Parliamentarians in water-related stakeholder engagement

The perspective of the Dutch House of Representatives

The House of Representatives of the Netherlands took part in the Survey and the qualitative and quantities data it provided sheds some light on the experience of parliamentarians with water-related decision-making. The House of Representatives is one of the two chambers of the Dutch Parliament which also consists of the Senate. It is responsible for voting on political issues following close examination of documents, working visits, opportunities for the public to make their opinions heard, and consultations with the voters and the general public.

The primary force driving stakeholder engagement according to the Dutch house of Representative is the call for adaptive governance and flexible and resilient management mechanisms to cope with future challenges. Indeed, the expected sea-level rise in the Netherlands because of climate change has led the government and the House of Representatives to favour a tripartite approach, with extensive information-sharing and stakeholder engagement, to adapt the country. They created the Delta Programme, set-up the Delta Fund and appointed the Delta Commissioner to ensure that the Netherlands are safe from floods. The House of Representatives also identified the influence of crisis, change and emergency-driven situation (ranked n°2), and of political and democratic pressure (ranked n°3) in pushing for more inclusive decision-making.

For what concern water-related decision-making, the experience of the Dutch House of Representatives with stakeholder engagement has been very limited or absent. Its main areas of interest in the sector relate to the protection again water-related disasters, and the quality of water resources and water and sanitation services, and it mostly associate to stakeholder engagement concepts such as “democracy”, “awareness” and civil society. The House of representatives intervenes at all territorial scales, from the international to the community levels. It also interacts with a wide range of actors, most frequently with other parliamentarians, supra-national organisations and the national government, but also often with regulators, civil society, customer associations, business, regional water authorities, agricultural actors, as well as financial actors, academics and trade unions.

The parliamentarian chamber pointed out to some critical obstacles they face when taking part or promoting stakeholder engagement. Most importantly, the lack of clarity on the expected use of their inputs in the decision-making process. It was also pointed out that the lack of political will and leadership, funding and time, and weak legal framework to support stakeholder engagement were all critical barriers as well.

The Dutch House of Representatives uses a combination of mechanisms to engage in water-related decision-making, mostly as a target of engagement processes, than as a promoter, and considered there are sufficient. These include regional water authorities, surveys, polls and hotlines, meetings and workshops, consultation in regulatory process as well as consensus conferences and web-based technologies. However, it does not use referendum to collect views of citizens on water issues.

For what concerns stakeholder engagement assessment, the Dutch House of Representatives uses several evaluation tools to regularly assess the impact of their contribution, as target, on decision-making, including satisfaction survey, financial analysis, evaluation report and multi-stakeholder meetings. Results and conclusions are made available on the official website. Building on these evaluations, the House of Representatives has identified broader economic benefits such as better policy coherence and synergies across project as being the primary benefit that stakeholder engagement yields. Building stakeholders’ trust and acceptability and ownerships were ranked as n°2 and n°3. Regarding the monetary and non-monetary costs of engagement, the House of Representatives firstly pointed to political capture, followed by the production and disclosure of specific information, and to social conflict. Overall, the Dutch parliamentarian chamber considers having significant influence over all stages of a water policy or projects, from the early stages to the evaluation, and sees stakeholder engagement critically contributing, amongst other, to: i) supporting effective policy implementation; ii) raising awareness on water availability, risks, quality and costs; ii) fostering capacity building; iv) providing funds for investment; v) developing technical and non-technical innovation; and iv) building trust and confidence.

Moving forward, the Dutch House of Representatives considers there is a missing link in stakeholder engagement where public authorities can play a role. It entails for central and sub-national governance to more actively include stakeholders in decision-making on water and to move away from too much top-down processes and towards more bottom-up or balanced approaches. To make it happen, key conditions of success should be in place including good and accessible information (ranked n°1), sufficient time to manage engagement processes and contribute effectively (ranked n°2), and the needed human resources to ensure proper engagement (ranked n°3).

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance (2014).

ANNEX C: Agricultural actors and stakeholder engagement

The perspective of the European Irrigation Association

The European Irrigation Association (EIA) took part in the OECD Survey on stakeholder engagement to shed light on the specific experiences and perception of agricultural actors regarding stakeholder engagement.

Key highlights from their responses include a primary interest in environmental protection, followed by the quality of and access to water resources. Their experience with engagement processes has remained rather limited and on an ad hoc basis (both as targets and promoters) and the key words they most often associate with these initiatives are "interests", "satisfaction" and "coordination".

The experience of EIA shows they most often interact with agricultural actors and international organisation but only sporadically with governments, business, science and academia and civil society, and very rarely with watershed institutions. On the one hand, EIA considers cost-efficiency and the search for value for money as the main driving forces for stakeholder engagement, followed by the call for adaptive governance to cope with future challenges. On the other hand, EIA considers the lack of political will and funding, and weak legal framework as critical obstacles to stakeholder engagement, as well as the difficulty to reach out certain types of stakeholders.

The EIA uses a wide range of formal and informal engagement mechanisms, primarily as promoters of engagement processes, such as water associations, decentralised assemblies, consultation in regulatory processes, interest-pay-say principle as well as web-based technologies, citizens committees and capacity development. Overall, EIA considers having only some influence over decision-making processes, and only during the early stages, the development phase, and the evaluation. To assess the performance of their engagement initiatives, the EIA uses tools such as satisfaction surveys, financial analysis, evaluation reports, multi-stakeholder meetings and certification. These evaluations have shown that delays in decision-making and social conflicts are the two most important costs while customer's satisfaction and broader economic benefits (i.e. irrigators increasingly recognised the important of sustainable water management) policy coherence, synergies across projects) are the main benefits yielded by stakeholder engagement.

As regards the role of governments, the EIA consider that central authorities should support stakeholder engagement by setting up legal frameworks on the topic and ensuring their implementation. Sub-national governments could also assist stakeholder engagement through control, monitoring and support.

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance (2014).

ANNEX D: Trade unions and stakeholder engagement

The perspective of the European federation of Public Service Unions

The European federation of Public Service Unions (EPSU) participated in the OECD Survey and shared some insights on the experience of trade unions and workers regarding water-related stakeholder engagement. They testified having only some experience with the topic and not being submitted to any requirement for engaging in water decision-making. The words "democracy", "rights" and "capacity" are the key terms they most often associated with stakeholder engagement.

In the water sector, EPSU primarily interacts with trade unions and workers, and is often in contact with parliamentarians, service providers and civil society. However, EPSU only very rarely communicates with business, agricultural actors, donors, and consumer associations. Policy reform and project under discussion is the primary driver for stakeholder engagement according to EPSU, followed by the regulatory frameworks for public participation in place. EPSU considers that participation should always be part of regulation, along with transparency and accountability. However, EPSU sees the lack of clarity regarding the use of stakeholders' inputs and the risk of consultation "capture" as critical barriers they encountered when taking part in engagement processes.

EPSU uses different mechanisms to take part in water-related decision-making such as surveys and referendums, water associations, ICTs, and decentralised cooperation mechanisms. Overall, EPSU considers they have a high degree of influence of decision-making processes. EPSU assesses having only little influence over the different stages of the engagement. When evaluating the performance of engagement processes they are involved in (mostly through multi-stakeholder policies and analysis of policies), EPSU identifies logistical expenses, political capture and staff overtime as the most important costs while acceptability and ownership (e.g. through their involvement in the "Right2water" initiative), broader economic benefits (e.g. improved relation with service providers and governments), and capacity development as the main benefits yielded from engagement processes. To increase these benefits, EPSU points to the role that governments, at various levels, can play to further support the involvement of civil society organisations in decision-making processes.

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance (2014).

ANNEX E: Media and stakeholder engagement

Highlights form the survey

In the OECD Survey, two media representatives offer some insights on their experience with stakeholder engagement, one being specialised on water issues while the other is not.

Within the water box: the experience of *Circle of Blue*

Circle of Blue is a front-line reporting and information platform specialised on water issues that works with leading scientists and data experts to document emerging and recognized crises. *Circle of Blue* reports having extensive experience as both promoter and target of stakeholder engagement, intervening mostly as the international, national and regional levels. *Circle of Blue* primarily interacts with watershed institutions, business, civil society, science and academia and other media channels. It first associates the key words awareness and media to stakeholder engagement.

From *Circle of Blue*'s perspective, crisis, change and emergency-driven situations are the most important drivers for inclusive decision-making. These shocks are inflection points and teaching moments that can be leveraged of the right processes and response mechanisms are in place. Also, policy reforms are important levers for action and when they impact government structures, they can encourage cross-agency awareness and collaboration to bridge competing values and priorities. As regards obstacles, persistence is often lacking in engagement processes, which failed to follow-through. Also, stakeholder engagement can be considered as inconvenient and a lack of political will prevent coordinated awareness on water issues, trusted data and inclusive debate.

Circle of Blue often prepares evaluation report on their engagement processes which point to the production and disclosure of specific information used during meetings and decision-making, as the most important costs they have to bear, followed by political capture and staff overtime. Oppositely, stakeholders' trust is the first benefit they yield. Overall, *Circle of Blue* considers having significant influence over decision-making.

Outside the water box: the experience of *Xmediaworks*

Xmediaworks offers consultancy services to governments, research institutes, and business on online communication and information related to education, health and public services. *Xmediaworks* has only some experience on stakeholder engagement, mostly on an ad hoc basis, and associate with it the key word "shared understanding". Through its work, *Xmediaworks* often interacts with governments, science and academia, and consulting firms.

Xmediaworks sees crisis and emergency-driven situations as the main driving force for stakeholder engagement, considering that senses of fear and threat often get actors' intentions. Also, the search for value for money, and ICTs as new forms of interaction opportunities are considered important drivers. Oppositely, *Xmediaworks* identified resistance to change, difficulty to reach out certain types of stakeholders and the lack of citizens' awareness as critical barriers to inclusive decision-making.

Xmediaworks very rarely evaluate their engagement processes and consider having no influence over decision-making processes. Nevertheless, *Xmediaworks* points to delays in decision-making as the most important cost of stakeholder engagement, followed by the production and disclosure of information, while sustainability and resilience is the main benefit.

Source: OECD Survey on Stakeholder Engagement for Effective Water Governance (2014).

ANNEX F: Cross case-study list

Case study title	Institution(s) submitting the case study	Water-related issue(s) at stake	Promoter(s) of the engagement process (categories of stakeholders)
	Africa		
Utilising a water services vulnerability assessment and associated prioritised action plan process to support effective governance and sustainable water services	Department of Water and Sanitation - South Africa	– Drinking water supply – Wastewater management	– National government – Sub-national governments – NGOs – Science & academia
Case study of South Africa's movement towards participatory agent-based social simulation modelling for sharing the benefits of water	University of KwaZulu-Natal – South Africa	– Drinking water supply – Wastewater management – Water disasters – Water resources management – Climate change – Environmental protection – Integration of science and policy – Government-business-civil society cooperation	– National government
Embedding strategic adaptive management as the participative decision framework in the Inkomati Catchment Management Agency	University of the Witwatersrand – South Africa	– Wastewater management – Water disasters – Water resources management – Climate change – Environmental protection – Integrated catchment management	– Watershed institution – Science & academia
Whole system change approach to the rural water sector in Ghana	IRC	– Drinking water supply	– NGO – Service providers – Sub-national government
Restoration of Bukango shallow dam in Bukomansimbi district	KYEMPA - Uganda	– Drinking water supply – Water disasters – Water resources management – Climate change – Environmental protection	– NGO

Participation in the management of the Niger, Senegal and Congo transboundary rivers	International Network of Basin Organisations	–	Water resources management	–	National government – Watershed institution
The management of groundwater as the main source of water in rural areas of Cameroon: the case of the traditional hand dug wells	AFVMC Association	–	Drinking water supply – Water resources management – Environmental protection	–	Sub-national government – Civil society (NGOs & citizens)
Americas					
Participatory approach to IWRM in Quebec	Regroupement des organismes de bassin versant du Québec - Canada	–	Water resources management	–	Sub-national government – Watershed institution
South Saskatchewan River Basin - Adaptation to Climate Variability Project	Alberta WaterSMART - Canada	–	Drinking water supply – Water disasters – Water resources management – Climate change – Environmental protection	–	Business – Watershed institutions – Sub-national government – NGOs
Engaging stakeholders and Aboriginal people on the Great Lakes	Government of Ontario - Canada	–	Drinking water supply – Wastewater management – Water disasters – Water resources management – Climate change – Environmental protection – Ecosystem health	–	Sub-national government
Cheapeake Bay Program	Environmental Protection Agency – United States	–	Drinking water supply – Wastewater management – Water disasters – Water resources management – Climate change – Environmental protection – Restoration	–	National government – Sub-national governments – Civil society

Designing Engagement : Rebuild by Design's Approach to Community Engagement	Rebuild by Design – United States	– Water disasters	– National government – Sub-national governments – NGOs – Science & academia
Water Harvesting Assessment Tool	University of Arizona – Water Resources Research Centre – United States	– Drinking water supply – Water resource management – Climate change – Water harvesting – Stormwater management	– Science & Academia – Sub-national governments
Groundwater, climate and stakeholder engagement: A case study from the Santa Cruz Active Management Area in Arizona, USA	University of Arizona – Water Resources Research Centre – United States	– Drinking water supply – Water disasters – Water resources management – Climate change – Groundwater pumping – Aquifer recharge	– Science & academia
Finding water for riparian and aquatic ecosystems: a roadmap to connect the environment to water planning in Arizona, USA	University of Arizona – Water Resources Research Centre – United States	– Water resources management – Environmental protection	– Science & academia
An examination of learning preferences and sociometric networks in the US municipal water industry	University of Pennsylvania - United States H2GO LLC	– Drinking water supply – Wastewater management – Water resources management	– Science & academia
South Bay Salt Pond Restoration	Deltares - Netherlands	– Water disasters – Climate change – Environmental protection	– National government – Sub-national governments
National Water Management Pact	National Water Agency - Brazil	– Water governance	– National government
Preservation of river sources - replication in its DNA	Tractebel Energia S.A. - Brazil	– Drinking water supply – Environmental protection – Environmental education	– Business – Sub-national government – Civil society
Assessment of Jirau hydropower project with the Hydropower Sustainability Assessment Protocol	GDF Suez Energy Brazil	– Water resources management – Climate change – Environmental protection – Sustainability in hydropower projects	– Business – International organisations

Tecocomulco Lagoon	National Water Commission - Mexico	– Wastewater management – Water resources management – Environmental protection	– Watershed institutions – Sub-national government
	Asia-Pacific		
Water Environment Partnership in Asia	Institute for Global Environmental Strategies - Japan	– Wastewater management – Environmental protection – Water governance	– National government
Enhancing stakeholder engagement through communication with the residents in upstream and downstream for sustainable water resources management	Japan Water Agency	– Drinking water supply – Water resources management – Environmental protection	– Watershed institution
Identifying stakeholders by project base through institutional framework of Japan Water Agency	Japan Water Agency	– Drinking water supply – Water disasters – Water resources management – Environmental protection	– National government – Watershed institution
Rural farmers adapting to climate change impact in drought prone areas of Northeast Thailand	Chi River Basin Committee - Thailand	– Water resource management – Climate change – Environmental protection	– Watershed institution – Science & academia
Role of community participation and partnerships in successful implementation of a water reuse scheme	University of South Australia - Centre for Comparative Water Policies and Laws - Australia	– Wastewater management	– Science & academia
Roles of levies in encouraging changes in individual water consumption behaviour	University of South Australia - Centre for Comparative Water Policies and Laws - Australia	– Water resources management – Roles of economic instruments	– Science & academia
An exploration of community attitudes and intended behaviours toward uptake of stormwater for non-potable uses	University of South Australia - Centre for Comparative Water Policies and Laws - Australia	– Wastewater management – Water disasters – Water resources management – Stormwater reuse	– Science & academia

Sustainable water planning in Australia: a survey of attitudes of water policy entrepreneurs toward sustainability	University of South Australia - Centre for Comparative Water Policies and Laws - Australia	– Water resources management	– Science & academia
Alliance contract and procurement process for water & waste water services in Adelaide, South Australia.	Suez Environnement	– Drinking water supply – Wastewater management – Environmental protection – Minor capital works	– Service provider
Participatory fore sighting for irrigation R&D planning	Tasmanian Institute of Agriculture – New Zealand Alexandra & associates	– Water disasters – Water resources management – Climate change – Environmental protection – Irrigation – Regional development	– Sub-national government – Advisors
Canterbury Water Management strategy	Canterbury Regional Council – New Zealand	– Drinking water supply – Water resources management – Environmental protection	– Sub-national government – Civil society (indigenous communities) – Agricultural actors
NARBO RBO performance benchmarking and stakeholder engagement	Network of Asian River Basin Organisations	– Drinking water supply – Water disasters – Water resources management – Climate change – Environmental protection	– Watershed institutions and their network
	Europe		
Establishing a training approach with farmers to prevent and fight pollution caused by nitrates from agricultural sources. Application to a groundwater body used for drinking water production of a large city	Compagnie Intercommunale Liégeoise des Eaux - Belgium Société Publique de Gestion de l'Eau NITRAWAL	– Drinking water supply – Water resources management – Environmental protection – Protection of water sources	– Sub-national government – Service provider – Agricultural actors – Science & academia
Setting-up a neighbourhood guiding system to manage floods	Vivaqua - Belgium	– Water disasters	– Service provider; business

Optimising water (for food) and energy nexus with local irrigators in Durance valley, France	Electricité de France	– Drinking water supply – Water disasters – Water resources management – Climate change – Environmental protection	– Business
Stakeholder engagement in an inter-departmental service provider in France	Syndicate des Eaux et de l'Assainissement Alsace-Moselle - France	– Drinking water supply – Wastewater management – Environmental protection	– Service provider
Citizens' participation in governance of water services	Société publique locale eau de Grenoble Comité des usagers du service public de l'eau de Grenoble - France	– Drinking water supply – Environmental protection – Water pricing	– Service provider – Water users
New Ideas for Water / Contract for Water Health	Suez Environnement	– Drinking water supply – Wastewater management – Water disasters – Water resources management – Climate change – Environmental protection – Water governance, economic model for water.	– Service provider
Public involvement in WFD implementation in Baden-Wurttemberg	Ministry of Environment - Germany	– Drinking water supply – Wastewater management – Water resources management – Environmental protection	– National government – Watershed institutions
Water in Municipality - Agreement for a Safe Water	Gruppo CAP - Italy	– Drinking water supply	– Service provider – Sub-national governments – NGOs
An Executive Information System to support integrated planning management and stakeholders' involvement in a web-based, shared environment	Arno River Basin Authority - Italy	– Drinking water supply – Wastewater management – Water disasters – Water resources management – Climate change – Environmental protection	– Watershed institution
Delta Programme	Delta Programme Commissioner - Netherlands	– Water disasters – Water resources management – Climate change	– National government – Sub-national governments – Civil society

Integrated Coastal Works Katwijk	Water authority of Rijnland - Netherlands	– water disasters ; climate change ; environmental protection ; coastal economy	– National government ; Sub-national governments ; watershed institutions ; Civil society ; Business
Policy participation on a regional level: dealing with the awareness gap	Water authority of Rijnland - Netherlands	– Wastewater management – Water disasters – Water resources management – Climate change – Environmental protection	– Sub-national government
Participatory monitoring as instrument to achieve intermediate outcomes in stakeholder participation processes in Loosdrecht, Netherlands	Deltares - Netherlands	– Water resources management; climate change – Environmental protection	– Watershed institution – Science & academia
Sand Motor Delfland	Deltares - Netherlands	– Water disasters – Climate change – Environmental protection	– National government – Sub-national government
Westergouwe	Water authority of Schieland en de Krimpenerwaard - Netherlands	– Spatial planning	– Sub-national government
Pilot Rietkreek	Water authority of Brabantse Delta - Netherlands	– Water resources management – Climate change – Environmental protection	– Agricultural actors – Watershed institutions
Overdiepse Polder	Water authority of Brabantse Delta - Netherlands	– Water disasters – Climate change	– Agricultural actors – Sub-national government – Parliamentarians
How Room for the River tackled the NIMBY threat	Ministry of Infrastructure and Environment - Netherlands	– Water disasters – Climate change	– National government – Sub-national government – Watershed institution
Kampen flood brigade	Water authority of Groot Salland - Netherlands	– Water disasters	– Watershed institution – Sub-national government
Women for Water	Portuguese Association of Water and Wastewater services	– Drinking water supply* – Wastewater management – Water disasters – Water resources management – Climate change	– Service provider

		–	Environmental protection		
Young Water Professionals	Portuguese Association of Water and Wastewater services	–	All water-related issues	–	Network of service providers
Depollution of the Ave basin, Portugal	Aguas do Noroeste, S.A - Portugal	–	Wastewater management Water resource management Environmental protection	–	Sub-national government Science & academia Service provider
Project "Water Heroes"	Empresa Municipal De Água E Saneamento De Beja - Portugal	–	Drinking water supply Wastewater management Environmental protection	–	Service provider Sub-national government
ERSAR Mobile App	Water and Waste Services Regulation Authority (ERSAR) - Portugal	–	Drinking water supply Wastewater management Environmental protection Urban waste management	–	Regulator
Spanish experiences in watershed management	Ministry of Agriculture - Spain	–	Water resource management Environmental protection	–	National government Watershed institution Agricultural actors
School of Mayors	El Duero River Basin Authority - Spain	–	Drinking water supply Wastewater management Water disasters Water resources management Environmental protection	–	Watershed institution
Remote management of irrigation networks as a tool for saving water in public spaces	Samcla, sl - Spain	–	Water resources management	–	Service provider Business
People power in the UK water sector	Water UK	–	Economics of water	–	Regulator Service provider Consumer association
The catchment-based approach in England	UK Environment Agency Water UK	–	Water resources management	–	National government

Customer engagement in setting water prices and investment priorities in Scotland	Scottish Government	– Drinking water supply – Price and investment priority setting	– Regulator – Service provider – National government
Implementation of IWRM in Ukrainian river basins	Global Water Partnership - Ukraine	– Water disasters – Water resources management	– National government – Watershed institutions
Public participation in the Danube River Basin: Experiences from the ICPDR	International Commission for the Protection of the Danube River	– Water disasters – Climate change – Environmental protection	– National government – Financial actors & donors
Global			
Water Youth Network: Empowering young people through a professional youth network	Water Youth Network	– All water-related issues	– Civil society
Hydro Sustainability Assessment Protocol- Multi-stakeholder Engagement to Promote Sustainable Hydropower	Transparency International	– Water disasters – Water resources management – Climate change – Environmental protection – Hydropower	– International organisations

ANNEX H: List of respondents to the OECD Survey

Afcap Consulting
Afghanistan - Ministry of Energy and Water
African Minister's Council on Water
Alexandra and Associates Pty Ltd
ALFAR PROJECT CO.
Algeria - SEAAL (Société des Eaux et de l'assainissement d'Alger)
Anglo American
Aqua Publica Europea
AquaFed
ARCADIS
Armenian Women for Health and Healthy Environment
Asian Development Bank (ADB)
Association Aide aux Familles et Victimes des Migrations Clandestines
Australia - Independent Competition & Regulatory Commission
Australia - Murray-Darling Basin Authority
Australia - Water Corporation of Western Australia
Bangladesh - Water Development Board
Belgium - Flemish Environment Agency
Belgium - SA AQUAWAL
Bixler Consulting
Both ENDS
Brazil - Municipal Council of Sesimbra
Brazil - Municipal regulatory agency for water services of Esgoto
Brazil - National Water Agency
Brazilian Business Council for Sustainable Development
Bulgaria - Bulgarian Water Association
Business & Professional Women International
Canada - City of Vancouver
Canada - New Brunswick Department of Environment and Local Government
Canada - Province of Ontario
Canada - Regroupement des organismes de bassins versants du Québec
Canada - South Nation River Conservation Authority
Canada - University of British Colombia - Program on Water Governance
CH Industries
Chile - Department of Agricultural Economics, Pontifica Universidad Catolic
Chile - General Directorate for Water
China - Ministry of Water Resources, Development Research Centre
Circle of Blue
Coca-Cola Hellenic Bottling Company S.A.
Colombia - Ministry for Environment, Housing and Territorial Development
Costa Rica -Institute for aqueducts and sewerage
Czech Republic - Ministry of Agriculture
Denmark - Nature Agency
Economic Commission for Latin America and the Caribbean
El Salvador - Under-secretary for territorial development and decentralisation
Électricité de France
Ethiopia - Arba Minch University
EUREAU
European Federation of Public Service Unions

European Irrigation Association
European Union Water Management Association
Finland - Finnish Environment Institute
Food and Agriculture Organisation
France - Agence de l'eau Rhône-Méditerranée-Corse
France - Agence française de développement (AFD)
France - Association Française des Établissements Publics Territoriaux de Bassin
France - Eau de Paris
France - Institut de recherche pour le développement
France - IRSTEA
France - Ministry of Sustainable Development and Energy
France - National Centre for Scientific Research
France - Sorbonne Business School
France - SYDEC
France - Syndicat des eaux d'Ile de France
France - Syndicat des Eaux et de l'Assainissement - Alsace Moselle
France - University of Paris - Panthéon-Sorbonne
France - University Paris Est
Friends of the Earth Middle East
Fundacion Chile
GDF SUEZ
Germany - Federal Ministry for the Environment, Nature conservation, Building and Nuclear Safety
Germany - German Agency for International Cooperation (GIZ)
Germany - German Development Bank (KfW)
Germany - Wasser in Buergerhand
Germany - Wupperverband
Global Environmental Facility - International Waters Focal Area
Global Institute for Water, Environment and Health
Global Water Initiative
Global Water Partnership
Global Water Partnership - Slovenia
Global Water Partnership - Ukraine
Global Women Development Promoters
GRET
HANDS-NGO
House of Representatives of The Netherlands
Hungary - Ministry of Interior
ICATALIST
Indonesia - Perum Jasa Tirta II Jatiluhur
Indonesian Urban Water Sanitation and Hygiene Project - IUWASH
Inter-American Development Bank –(IADB)
International Commission for the Protection of the Danube River
International Commission on Large Dams
International Institute for Sustainable Development
International Network of Basin Organizations
International Water Resources Association
IRC
Italy - Authority for electricity, gas and water systems
Italy - Cap Holding Spa
Italy - Foundation for the Environment - Turin School of Local Regulation
Italy - Metropolitana Milanese Spa

Italy - SMAT S.p.A.
Italy - Tuscany Water Authority
Italy - UNIACQUE SpA
J2C Water Ltd.
Japan - Japan Water Agency
Japan - Ministry of Land, Infrastructure, Transport and Tourism, Water Resources Department
José Fradé – Independent consultant
Korea - Korea Environment Institute
Korea - K-Water
Korea - Seoul Metropolitan Government
League of Arab States
Luxemburg - Ministry for Sustainable Development and Infrastructure
Malta - Malta Resources Authority
Mediterranean Institute for Water (IME)
MESONexusTeam
Mexico - Instituto para el Desarrollo Regional del Tecnológico de Monterrey
Mexico - National Association for Water and Sanitation
Mexico - National Water Commission
Mexico - Third World Centre for Water Management
Mexico - Universidad Autonoma Metropolitana
Millennium Water Alliance
Movimiento Agua y Juventud
Netherlands - Association of Dutch Insurers
Netherlands - Association of Dutch Water Authorities
Netherlands - Delft University of Technology - Nile Basin Discourse
Netherlands - Deltares
Netherlands - Dutch Water Authority of Brabantse Delta
Netherlands - Dutch Water Authority of Rijnland
Netherlands - KWR Watercycle Research Institute
Netherlands - Landcare Research NZ Ltd
Netherlands - Ministry of Infrastructure and Environment
Netherlands - UNESCO-IHE
Netherlands - Utrecht University
Netherlands - Water Governance Centre
Netherlands World Water Academy
Network of Asian River Basin Organizations
New Zealand - Canterbury Regional Council
New Zealand - Ministry for the Environment
Norway - Norwegian Environment Agency
Palestinian territories - Environment Quality Authority
Panama – National Environmental Authority
Paraguay - Coordination unit for the drinking water and sanitation programme of El Chaco
Paraguay - National Service for Environmental sanitation
Poland - Ministry of the Environment
Portugal - AC E.M.
Portugal - Aguas de Coimbra
Portugal - Aguas de Portugal SA
Portugal - APDA (Portuguese Water Supply and Wastewater Association)
Portugal - Portuguese Water Partnership
Portugal Water and Waste Services Regulation Authority
Réseau Projection

Royal HaskoningDHV - Business Line Water Technology
Russia - Russian Water and Wastewater Association
Russian Federation - Federal Agency of Water Resources, Department for International Cooperation
Sasol
Scientific Information Centre of Interstate Commission for Water Coordination in Central Asia
Scotland - Scottish Government
Slovak Republic - Verejné prístavy AS
Slovenia - Ministry of Agriculture and the Environment
Slovenia - University of Ljubljana
South Africa - UniSA
South Africa - Water Research Commission
Spain - ACUAMED
Spain - AEAS (Spanish Association of Water and Sanitation)
Spain - Botin Foundation
Spain - Consortium for environmental services management of the Badajoz province
Spain - Jucar River Basin Authority
Spain - Ministry of Agriculture, Food and the Environment, General Directorate for Water
Spain - River Basin Authority of Segura
Spain - Spanish Agency for International Cooperation and Development (AECID)
Spain - Universidad Politecnica de Cataluna
Sri Lanka - Mahaweli Authority
SUEZ Environnement
SustainUS
Sweden - Stockholm International Water Institute
Sweden - Swedish International Development Cooperation Agency (SIDA)
Thailand - Chulalongkorn University
Thailand - Department of Water Resources
Thailand - Mun River Basin Committee
The Coca-Cola Company
Titan Cement - Greece
Tractebel Energia – Brazil
TransformationFirst Asia Pte Ltd
Transparency International
TreeVelop
Turkey - Turkish Water Institute
Twynstra Gudde management consultants
Uganda - Kirinda Youth Environmental Management and Poverty Alleviation Program
Uganda - National Association of Professional Environmentalists
UNDP Global Water Solidarity
UNESCO International Hydrological Program
Union for the Mediterranean
United Kingdom - Environment Agency
United Kingdom - University of Exeter
United Kingdom - Water UK
United States - Environmental Protection Agency
United States - Hampton Roads Sanitation District
United States - Kent County Department of Public Works
United States - United States Agency for International Development (USAID)
United States - University of Arizona – Water Resources Research Centre
United States - University of Pennsylvania
United States - Water Health

United-States - Tufts University
UN-Water Decade Programme on Advocacy and Communication
Vewin
Water Committee of the National company for mining, oil and energy - Peru
Water Integrity Network
Water Youth Network
WaterAid
WaterLex
Waterlution
World Business Council for Sustainable Development
World Wildlife Fund
Xmediaworks