

SUSTAINABLE DEVELOPMENT GOALS

ARGENTINA: BASELINE OF INDICATOR 6.5.1. INTEGRATED WATER RESOURCES MANAGEMENT



PREFACE

The 2030 Development Agenda was adopted by the Member States at the United Nations Assembly in September 2015 and promotes actions to achieve the Sustainable Development Goals (SDGs) in the next 15 years.

The GWP Work Program 2016-2019 focuses strongly on supporting countries to achieve the SDG, particularly through the goal of SDG 6.5 on integrated water resources management. A first step in the process is to ensure an adequate baseline in SDG 6.5.1 to determine the status and priorities of water governance. This work was done in collaboration with the partnership project of the Danish Hydraulic Institute and the United Nations Environment Programme.

The IWRM National Focal Point was responsible for managing a process that allowed obtaining responses to a standard questionnaire, reflecting the current situation of IWRM implementation in their country. GWP, through its network of member countries, provided direct support to the countries and institutions responsible for the implementation of the SDGs.

In Argentina, the Under Secretariat of Water Resources (IWRM Focal Point) organized the consultation (including the stakeholder workshop) with the support of the Argentine Water Forum (FADA), which facilitated the discussion among the interested parties, provided guidance on the interpretation of the survey and helped to consolidate a document with contributions from stakeholders. The National Water Plan (NWP), which is implemented by the Under Secretariat of Water Resources, has taken the SDG's as one of its fundamental objectives.

The Under Secretariat of Water Resources and the Argentine Water Forum (GWP Argentina) wish to thank UNEP-DHI Partnership, GWP and GWP South America for the support received as well as the numerous stakeholders who contributed to the country consultations.

INDICATOR SDG 6.5.1.

DEGREE OF INTEGRATED WATER RESOURCES MANAGEMENT IMPLEMENTATION

ARGENTINA FINAL REPORT STAKEHOLDER WORKSHOP

Buenos Aires, October 19 2017

The workshop was organized jointly by the Undersecretariat of Water Resources of the Nation and the Argentine Water Forum (FADA), and it was attended by the company AySA (Water and Sanitation SA). The Undersecretariat was represented by Pablo Storani in his quality of country Focal Point, and FADA was represented by its president, Leandro Díaz, with the collaboration of Maria Josefa Fioriti and Maria Lafage and the facilitation of Ana Mugetti, who was accompanied by Graciela Zivano.

Process development started 20 days before the workshop, when the questionnaire was forwarded to various water management stakeholders involved either directly or indirectly: different sectors of the national government and of the water sector of provincial governments (in particular, the Federal Water Council, COHIFE); basin and aquifer commissions and projects; governmental and non-governmental organizations; academia; etc. The questionnaire was forwarded by email and it included an invitation for the Undersecretary of Water Resources to participate in the workshop and to send back responses in advance.

The Undersecretariat of Water Resources and FADA made a participation confirmation phone call and asked for questionnaires to be forwarded. 15 responses were received in advance, which were analyzed by the facilitators.

The workshop was held on October 19 2017 in the city of Buenos Aires, following the Program submitted in Annex 1; 61 persons participated (Annex 2).

The workshop took place in a friendly, proactive environment; participant engagement to make

contributions and to obtain specific results for each of the topics approached is worthy of mention (Annex 3). Participants mentioned the fact that Argentine provinces have domain over their natural resources -among them, water resources- because Provinces existed before the Nation, as set forth in the Argentine Constitution. Therefore, National Government powers to implement IWRM are limited only to encouraging actions and coordinating inter-jurisdictional basins; funding water infrastructure, drinking water or sanitation; carrying out studies and projects for works, financially supporting some water basin organizations and the COHIFE, advising the Ministry of Foreign Affairs on issues regarding basins with water resources shared with other countries, etc.

Besides, it was clarified that the questionnaire should refer to basin or aquifer systems with shared water resources, rather than trans-boundary basins, as it is only water and not territory that is being shared. The analysis considered the following basins: the La Plata River, the Pilcomayo, Bermejo, Paraná, Uruguay, and Paraguay Rivers, as well as basins shared with Chile and the aquifer systems of Irendá – Toba - Tarijeño and Guaraní.

The voice of those unable to attend who had previously forwarded their responses was heard in the persons of other stakeholders who represented them also formally. Thus, during the workshop, all viewpoints were represented.

Indicator 6.5.1.-Degree of integrated water resources management implementation was scored with a value of 38.2, showing that the greatest strength is centered in institutions and participation, particularly at the national level (Annex 4).

FACILITATED DISCUSSION CONCLUSIONS

SECTION 1 ENABLING ENVIRONMENT

It becomes evident that the enabling environment is one of the incipient strengths although there are still many challenges to overcome.

The most important challenges are:

- Converting the Guiding Principles of Water Policy into a National Framework Law or into Provincial Laws. For the above, legislative lobbying is necessary; and
- Overcoming heterogeneity in the planning and implementation processes of basin and aquifer management plans, providing basin and aquifer organizations with the necessary institutional, operating, and financial capacities.

Agreements:

With regards to the enabling environment for IWRM consolidation, there was consensus on valuing and reclaiming the proactive, participative formulation process of the Guiding Principles of Water Policy as an IWRM driver and promoter, and then connecting the above with the current National Water Plan statements (and its four action axes).

However, it was regretted that this Guiding Principles-enabled scenario has not resulted in an effective legal framework with strong endorsement, although in fact, their use and application has turned them into soft law.

Divergences:

- National water resources laws: the point was discussed in depth for deciding whether the question

applies. The point of divergence relates to the existence of a national legal framework or whether each province must update their legal framework.

- Existence of IWRM-based basin and/or aquifer management plans: it was another point for divergence, as there was consensus that numerous plans and projects are in place - not all of them based on IWRM, and with regional heterogeneity in their effective application, though progress is being made in this direction.
- Provincial water resources laws: there was also a discussion regarding the situation of provincial laws fostering IWRM, based on provincial heterogeneity, as evidenced by the level of detail in questionnaire responses.

SECTION 2 INSTITUTIONS AND PARTICIPATION

Institutions and participation were identified as the most significant country strength, particularly at the national level.

The main challenges are:

- Discussing the need to introduce the gender issue in water management, considering any applicable international guidelines;
- Improving capacity development at all levels, making scholarships available for COHIFE to encourage better use of the offer already in place;
- Creating incentives for systematic, sustained public participation in the provinces, adopting appropriate institutional arrangements; and
- Improving organizations at the provincial and basin levels, tapping on lessons learned from the most advanced institutions, and fostering institutional strengthening.

Agreements:

There was consensus that it is not possible for the Nation to engage directly in water issues because provinces have domain over waters. Therefore, participative processes must take place at the provincial and basin levels, although the Nation may encourage and may contribute to promoting enabling environments.

There was also consensus on increasing promotion to seek specific participation opportunities but the examples given referred to progressive inter-area articulation.

Divergences:

In connection with gender issues, there was extensive discussion on the meaning of the question. Three not-necessarily converging aspects were considered, and the decision was made by vote. There were participants who claimed that, in fact, there are no express mentions to favor water policy gender issues (except in the La Plata River Basin), whereas others thought that the meaning of the question was different (for example, these issues might only apply in local situations where water is a scarce resource and the role of women to help their families with resource availability is burdensome). Finally, there were participants who mentioned that records exist of female participation discrimination in water issues. At this point, there was a request for divergence, justifying widespread discrimination beyond the specific water issue, which was beyond the scope of the meeting.

Other diverging aspects stemmed (like in other sections) from heterogeneous provincial situations, and some specific cases.

SECTION 3 MANAGEMENT INSTRUMENTS

Even if the Guiding Principles put forward several management instruments to be used at the national and provincial level, effective application needs to keep making progress to go beyond the degree of implementation attained up to the present.

The main challenges would be how to improve management of water-related ecosystems at the national level, joining efforts with the provinces through COFEMA (Federal Environmental Council), and also encouraging from the Nation effective provincial coordination in order to overcome the lack of basin and aquifer management plans, orienting them towards IWRM.

There were no divergences during discussions.

SECTION 4 FINANCING

Financing is the major challenge to be faced at all levels of water management, in particular for the sake of meeting the objectives established in the Guiding Principles and for implementing the instruments agreed to by the water community.

Even if the Water Fund allows infrastructure works to be carried out, the consequences of climate change are strongly affecting the country, and growing funds must be made available to repair flood damage and to adopt flood and drought adaptation measures.

Progress made in basin water resources management shared with other countries stems mainly from international donors' funds.

Worthy of notice are the advances made under the National Water Plan when it stipulated public-private cooperation to fund execution and operation of works in the sector.

There was general consensus in the debate because the few disparities stemmed from individual situations.

CLOSING COMMENTS

taken by facilitators at the end of the meeting

Meeting usefulness-assessment took place in a very positive, relaxed atmosphere; participants pointed out the importance of the work accomplished, and the potential transcendental significance of evaluating workshop results, expressing that they may be interpreted as mandates for future assertive decision making. There were participants who even played down the total average obtained by the indicator, considering the positive road traveled since the Guiding Principles participative process exemplifying framework was established. These opinions at the closing of the meeting coincided fully with the spirit of the initial presentations, which highlighted meeting significance in setting up an IWRM-status baseline in Argentina and in identifying any necessary corrections.

An isolated, more self-critical, voice was raised which did not support the hypothesis centering the problem on the federal nature of the country, but, rather, on poor capacity and motivation to continue deepening the road we have taken.

Also, many participants pointed out the weak water-sector institutional status at the national level -recalling it was born as a Secretariat of State; this situation curtails Undersecretariat capacity to influence decision making and, therefore, it dwindles its own management capacity. In this context, it was also pointed out that the above creates a major gap with many municipalities of inland Argentina, internally-weak in their lack of professional skills. This is an issue that needs to be reverted for a more extensive application.

ACHIEVEMENTS

It arises from the report and from questionnaire responses that the country may boast relevant achievements both at the national level as well as at other levels, and the most outstanding ones are the following:

- The consensus obtained with the Guiding Principles of Water Policy formulation participative process, which must be considered as a true policy of state, as the Guiding Principles were developed before, during and after a severe institutional crisis (2000 to 2003), and are also permanently advocated as the rationale of many management instances.
- The creation of the Federal Water Council –which, since 2003, has allowed consensual water management among the provinces and the National State, as well as enabled the implementation of articulated projects. It should be pointed out that it is one of the two Federal Councils chaired by the provinces.
- The existence of some basin organizations having a tradition in water management, such as COIRCO (the Colorado River Inter-jurisdictional Commission) and AIC (Inter-jurisdictional Authority of the basins of the Limay, Neuquén and Negro Rivers), which have been adopting integrated management approaches.
- The addition of new basin organizations, such as ACUMAR (the Matanza-Riachuelo River Basin Authority) which has faced the challenge of implementing basin integrated management since its creation.
- The organizational framework for basins sharing water resources with neighboring countries, which started in 1969 with the creation of CIC Plata (La Plata River Basin Countries Intergovernmental Coordinating Commission), and was continued with the creation of other organizations for other rivers or basins.
- Progress made towards a joint treaty for the Guarani Aquifer System, by affording the management principles to be adopted by MERCOSUR, approved by law in Uruguay, Argentina and Brazil. Paraguay's approval is at a very advanced stage.
- Planning for basins sharing water resources with neighboring countries (such as the La Plata River Basin, and the Bermejo and Pilcomayo Basins), as well as the Program for trans-boundary ground water management of the Guarani Aquifer, and other initiatives currently underway for the basins sharing water resources with Chile.

NEXT STEPS

Perhaps, the greatest challenge is to keep moving forward and put into practice the 49 Guiding Principles, which intersect all water aspects: natural, environmental, social, managerial, institutional, legal, and economic, including any management tools.

At the country level, the National Water Plan implementation should be remarked, whose central axes are water and sanitation, adaptation to climate extremes, water for agriculture production (irrigation), and multipurpose and biomass uses; and whose crosswise axes are preservation of water resources, capacity strengthening, innovation and participation - for a 2019 time horizon.

Basin management plans to be prepared during stage one of the National Water Plan include: Strategic Water

Resources Plan for the Salí Dulce River Basin, Medrano Stream Basin Master Plan, Master Plan for River Basin ordering of the Municipality of Quilmes, La Picasa Basin Master Plan, Water Plan for the North Eastern Region of the Pampas Plains, Desaguadero River Basin Master Plan; Program for Ordering and Using Water Resources of the Basins of the Limay, Neuquén and Negro Rivers; General Plans for Water Resources Use in Argentina-Chile shared watersheds, and the Carcarañá River Master Plan (https://www.argentina.gob.ar/sites/default/files/plan_National_agua_.pdf).

At the Federal level, the Federal Water Council will continue to work on the common topics it has defined as its priorities: legislation, water, education and culture, river bank line, environmental flows, and water emergencies.

CONTINUOUS MONITORING FOLLOW-UP FOR INDICATOR 6.5.1.

- Conducting a structured process similar to the baseline process, extending timelines to further facilitate participation and work more in depth;
- Working on previous sub-national level responses via COHIFE (by suggesting it be done in their regional groups). This would allow having an intermediate level of score aggregations and justifications;
- Scaling up the follow-up of previous questionnaire responses;
- Holding a national workshop with COHIFE national referents and representatives (environment, tourism, finances, energy, urban planning, and agriculture), with basin, lake, and aquifer management organizations, non- governmental organizations, the private sector, academia, users associations, and other stakeholders;
- Preparing a systematic report for jurisdictions showing country questionnaire response and conclusions, so that jurisdictions may know the current status of integrated water resources management and so that they may implement any improvements they deem suitable for indicator value optimization;
- Disseminating indicator response among other stakeholders by preparing communicational material targeted to the various stakeholder groups;
- Considering performing this process every 2 to 3 years because indicator target value is very ambitious; and
- Setting up a new technical group to support the focal point, for indicator proactive follow-up.

ANNEX 1 AGENDA

INDICATOR SDG 6.5.1. ARGENTINA NATIONAL WORKSHOP

Palacio de las Aguas, Buenos Aires, October 19, 2017

TIME	ACTIVITY
9.00 to 9.20	OPENING Pablo Storani, Water Resources Evaluation Director (Focal Point) Leandro Díaz, President of Argentine Water Forum Pablo Bereciartúa, Undersecretariat of Water Resources of the Nation
9:20 to 9:40	PRESENTATION OF PARTICIPANTS Assistants
9:40 to 10:00	QUESTIONNAIRE BACKGROUND AND GENERAL DESCRIPTION Ana Mugetti
10.00 to 13.00	1° FACILITATED DISCUSSION
10.00 to 11.00	SECTION 1: 'ENABLING ENVIRONMENT' (7 questions) What is the status of policies, laws and plans to support Integrated Water Resources Management (IWRM) at the national level? At other levels?
11.00 to 11.20	COFFEE BREAK
11.20 to 13.00	SECTION 2: 'INSTITUTIONS AND PARTICIPATION' (12 questions) What is the status of institutions for IWRM implementation at the national level? At other levels?
13.00 to 14.00	LUNCH BREAK
14.00 to 17.00	2° FACILITATED DISCUSSION
14.00 to 15.40	SECTION 3: 'MANAGEMENT INSTRUMENTS' (9 questions) What is the status of management instruments to support IWRM implementation at the national level? At other levels?
15.40 to 16.00	COFFEE BREAK
16.00 to 17.00	SECTION 4: 'FINANCING' (5 questions) What is the status of financing for water resources development and management at the national level? At other levels?
17.00 to 18.00	CONCLUSIONS AND CLOSURE
	<ul style="list-style-type: none"> • Following up on any previous discussion loose ends • Accepting the next steps to follow up and monitor Indicator SDG 6.5.1 • Computing final questionnaire scores: Focal Point: Pablo Storani, Facilitator: Ana Mugetti, FADA Chair: Leandro Díaz • Farewell: Water Resources Evaluation Director: Pablo Storani and Leandro Díaz (President of Argentine Water Forum)

ANNEX 2

LIST OF PARTICIPANTS

	NAME	ORGANIZATION	POSITION
1	Amarilla, Mabel	Climate and Water Institute of Agriculture and Livestock Technology	National Water Program
2	Andino, Mónica Marcela	General Irrigation Directorate	Legal Affairs Director
3	Andrés, Fernando Oscar	Colorado River Inter-jurisdictional Commission	Technical Manager
4	Baldelló, Guillermo	Water Authority of the Province of Buenos Aires	Professional
5	Barbero, Viviana	Water Authority of the Province of Buenos Aires	Professional
6	Basan Nickisch, Mario	Water Institute of Agriculture and Livestock Technology. Reconquista Experimental Station	Regional advisor
7	Bollatti, Pablo	Agriculture and Livestock Technology	National Water Program Coordinator
8	Bondanza, María Esther	Argentine Council for Foreign Affairs. Committee of International Environmental Studies.	Committee member
9	Bulacios, Gerardo	Provincial Water Institute of the Province of Chubut	General Water Resources Administrator
10	Carsen, Andrés Esteban	Matanza Riachuelo River Basin Authority	Environmental Quality Coordinator
11	Casillo, Baldomero	Ministry of Foreign Affairs. Dirección General de Asuntos Ambientales	Professional
12	Cichitti, Maricel	Water Authority of the Province of Buenos Aires	Professional
13	Dalmatti, Rodolfo	Dams Safety Agency	President
14	Damiano, Francisco	Climate and Water Institute of Agriculture and Livestock Technology	Hydrology Coordinator of the National Water Program
14b	Díaz, Leandro Raúl	FAdA / LCH- National University of Tucumán	President / Director
15	Dopazo, Fernando	Argentine Institute of Water Resources	Professional
17	Dos Santos, Eduardo	Autonomous City of Bs.As. Undersecretariat of Public Works	Professional
18	Enriquez, Ignacio	Federal Water Council	Executive Secretary
19	Fioriti, María Josefa	Argentine Water Forum and Argentine Institute of Water Resources	Secretary
20	Foulquet	Provincial Water Administration of Chaco Province	

	NAME	ORGANIZATION	POSITION
21	Gallego, Antonio	Water and Environment Ministry of Santiago del Estero Province	Professional
22	Gáspari, Fernanda	Argentine Water Forum and School of Agricultural and Forestry Sciences of La Plata National University	Basin Management Professor
23	Giraut, Miguel	Regional Commission of the Bermejo River	President (appointment in progress)
24	Guevara, Daniel	Matanza Riachuelo River Basin Authority	President
25	Koutoudjian, Juan Marín	Undersecretariat of Water Resources of the Nation. National Water and Sanitation Directorate	National Director
26	Laboranti, Claudio	Monitoring Unit and Data Center of the Pilcomayo River Basin	Executive Directorate
27	Lacunza, Carlos	Undersecretariat of Water Resources of the Nation. National Directorate for Conservation and Preservation of Water Resources	National Director
28	Liber, Martin	Ministry of Environment and Sustainable Development	Technical Advisor
29	Lozeco, Cristóbal	Arg Cap Net and School of Engineering, National University of the Litoral	Secretary of University Extension
30	Macluj, Jorge	Water Authority of the Province of Buenos Aires	Professional
31	Madariaga, Adriana	Madariaga Foundation	Member
32	Magnani, César	Undersecretariat of Water Resources of the Nation. National Directorate for Conservation and Preservation of Water Resources	Legal Advisor
33	Mazzanti Fabián	Water Authority of the Province of Buenos Aires	Directory Member
34	Meber, Juan	Ministry of Environment and Sustainable Development	Advisor
35	Mogliatti, Sergio	Ministry of Energy. EBISA. Strategic Communication and Social Management	Manager
36	Mosciano, María Laura	Secretariat of Planning of the Ministry of Interior	Advisor
37	Mugetti, Ana Cristina	Argentine Institute of Water Resources	Vice-President and Facilitator
38	Nagy, María Inés	Water and Sanitation of Argentina Co.	Professional
39	Neme, Javier	Ministry of Environment and Sustainable Development	Advisor
40	Ocaranza, María Susana	Water Authority of the Province of Buenos Aires	Professional

	NAME	ORGANIZATION	POSITION
41	Pacho, Carlos Alejandro	Undersecretariat of International Financial Relations. National Directorate of International Credit Agency Projects	National Director
42	Paoli, Carlos	Regional Litoral Center of the National Water Institute	Director
43	Papini, Virginia	National Institute of Statistics and Censuses	Professional
44	Parera, María Delia	Undersecretariat of Water Resources of the Nation. National Directorate for Conservation and Protection of Water Resources of the Nation	Plans and Projects Director
45	Pertierra, Aylin	Engineering Department of the Dams Safety Agency	Professional
46	Piaggio, Corina	GWP South America	Communications Officer
47	Preti, Débora	Resource Evaluation Co.	Professional
48	Quaini, Karina	Ministry of Environment and Sustainable Development	Technical Advisor
49	Rafaelli, Silvia	Argentine Institute of Water Resources	Professional
50	Rodríguez, Aixa	Ministry of Environment and Sustainable Development	Technical Advisor
51	Rodríguez, Use Jerónimo	National Institute of Statistics and Censuses	Professional
52	Sánchez, Sergio	Provincial Public Utilities Body of Tucumán Province	President
53	Santoro, Vivian	Ministry of Energy. Ebisa	Leader of the Sustainable Development Area
54	Storani, Pablo	Undersecretariat of Water Resources of the Nation. Evaluation Directorate	Director and Focal Point ODS 6.5.1
55	Torchia, Noelia	General Irrigation Directorate	Technical Advisor
56	Viana, Alejandro	Infrastructure General Directorate, Autonomous City of Buenos Aires	Professional
57	Wisznienski, Pablo	Institute of Environmental Studies and Research, University of Social and Business Sciences	Director
58	Yanoti, Santiago	Provincial Public Utilities Body of Tucumán Province	Director
59	Zavaleta Echevarría, Abdon Santiago	Undersecretariat of International Financial Relations. National Directorate of International Credit Agency Projects	Professional
60	Zisuela Francisco	Provincial Water Administration of Chaco Province	President
61	Zivano, Graciela L	COMIREC	Consultant
62	Zucarelli, Graciela	Secretariat of Water Resources of Santa Fe Province	Professional

ANNEX 3 PHOTOS



Opening

Leandro Díaz (FADA President), Pablo Bereciartúa (National Undersecretary of Water Resources) and Pablo Storani (Focal Point ODS 6.5.1)



Inicial Presentation

Ana Mugetti



Participants at the beginning of the workshop



Work during the workshop



Participants during the workshop



Participation of FADA President



One of the few votes to define response score



Computing scores
Pablo Storani (Focal Point ODS 6.5.1)



Final words



End of workshop

ANNEX 4

SCORE SUMMARY OF ARGENTINE RESPONSES

SECTION	ITEM	SUBITEM		AVERAGE SCORE	
1 ENABLING ENVIRONMENT	1.1 What is the status of policies, laws and plans to support Integrated Water Resources Management (IWRM) at the national level?	1.1.a. National water resources policy, or similar	50	36.7	
		1.1.b. National water resources law(s)	20		
		1.1.c. National integrated water resources management (IWRM) plans, or similar	40		
	1.2. What is the status of policies, laws and plans to support IWRM at other levels?	1.2.a. Sub-national water resources policies or similar	30	40.0	38.6
		1.2.b. Basin/aquifer management plans or similar, based on IWRM	20		
		1.2.c. Arrangements for transboundary water management in most important basins / aquifers	60		
		1.2.d. FEDERAL COUNTRIES ONLY: Provincial/state water resources laws.	50		
	2 INSTITUTIONS AND PARTICIPATION	2.1. What is the status of institutions for IWRM implementation at the national level?	2.1.a.- National government authorities' capacity for leading implementation of national IWRM plans or similar	60	52.0
2.1.b.- Coordination between national government authorities representing different sectors on water resources, policy, planning and management			60		
2.1.c.- Public participation in water resources, policy, planning and management at national level			40		
2.1.d. Business participation in water resources development, management and use at national level.			60		
2.1.e.- Gender-specific objectives for water resources management at national level			n/a		
2.1.f.- Developing IWRM capacity at the national level			40		
2.2 What is the status of institutions for IWRM implementation at other levels?		2.2.a.- Basin/aquifer level organizations for leading implementation of IWRM plans or similar	40	42.5	
		2.2.b.- Public participation in water resources, policy, planning and management at the local level	40		
		2.2.c. Gender-specific objectives at sub-national levels	n/a		
		2.2.d. Gender-specific objectives and plans at transboundary level	n/a		
		2.2.e.- Organizational framework for transboundary water management for most important basins / aquifers	50		
		2.2.f. FEDERAL COUNTRIES ONLY: Provincial / State authorities responsible for water resources management	40		

SECCIÓN	ITEM	SUBITEM		PROMEDIO SECCIÓN
3 MANAGEMENT INSTRUMENTS	3.1. What is the status of management instruments to support IWRM implementation at the national level?	3.1.a.- National monitoring of water availability (includes surface and/or groundwater, as relevant to the country).	40	34.0
		3.1.b.- Sustainable and efficient water use management from the national level, (includes surface and/or groundwater, as relevant to the country).	40	
		3.1.c.- Pollution control from the national level	30	
		3.1.d.- Management of water-related ecosystems from the national level	20	
		3.1.e.- Management instruments to reduce impacts of water-related disasters from the national level	40	
	3.2. What is the status of management instruments to support IWRM implementation at other levels?	3.2.a.- Basin management instruments	40	35.0
		3.2.b.- Aquifer management instruments.	30	
		3.2.c.- Data and information sharing within countries at all levels	40	
		3.2.d.- Transboundary data and information sharing between countries	30	
4 FINANCING	4.1. What is the status of financing for water resources development and management at the national level?	4.1.a. National budget for investment including water resources infrastructure.	30	30.0
		4.1.b. National budget for the recurrent costs of the IWRM elements	30	
	4.2. What is the status of financing for water resources development and management at other levels?	4.2.a. Sub-national or basin budgets for investment including water resources infrastructure.	30	33.3
		4.2.b. Revenues raised from dedicated levies on water users at basin, aquifer or sub-national levels.	40	
		4.2.c. Financing for transboundary cooperation	30	

SDG.Indicator 6.5.1. Degree Of Iwrm Implementation. ARGENTINE SCORE: 38.2

INDICADOR 6.5.1. DEGREE OF INTEGRATED WATER RESOURCES MANAGEMENT IMPLEMENTATION

ARGENTINA RESPONSES

The questionnaire was developed by the UNEP-DHI Partnership and can be found at <http://iwrmdataportal.unepdhi.org/iwrmmmonitoring.html>, where you will also find information on the process for the development of the baseline of Indicator 6.5.1. and the results that will be consolidated during 2018.

1 ENABLING ENVIRONMENT

1.1 WHAT IS THE STATUS OF POLICIES, LAWS AND PLANS TO SUPPORT INTEGRATED WATER RESOURCES MANAGEMENT (IWRM) AT THE NATIONAL LEVEL?

1.1.a. National water resources policy or similar

Justification/evidence

Score: 50

1.- Guiding Principles of Water Policy: led by the National Undersecretariat of Water Resources and formulated between 2000 and 2003 with the participation of 3,000 stakeholders in the Provinces and the Nation. Its goal was creating a State Policy on water, specifying that water management must be integrated (<http://www.cohife.org/s60/principios-rectores-de-politica-hidrica>).

2.- National Water Plan (2016): it defines the water policy axes until 2019 following the United Nations sustainable development goals, under the IWRM premises (although the workshop has pointed out that groundwater has not been taken into account).

The National Government has taken water as its action pillar, so that on the basis of its use and management, it may contribute to eradicating poverty. The National Plan is in the process of being implemented (https://www.argentina.gob.ar/sites/default/files/plan_Nacional_agua_.pdf).

3.- In the workshop, there was no major spread in score allocation. A range between 40 and 60 was given in view of the fact that the policy is not being applied by most authorities.

1.1.b. National water resources law

Justification/evidence

Score: 20

1.- The relevance of the application was largely discussed because Argentina is a federal country and provinces have domain over their natural resources, i.e., water. Therefore, there is a constitutional limitation to passing nation-wide laws on the subject matter. In spite of the above, there are some national laws that do not follow the IWRM approach.

Law 23.879 (1990) on assessing the environmental consequences of dams planned or built by the National State. Law 25.688 on minimum assumptions, Environmental Water Management Scheme (2003): no execution implementation to date, and objected on Constitutional grounds by some provinces (<http://ambiente.gob.ar/wp-content/uploads/Law-25688.pdf>).

2.- Law 26.438 (2009): ratifies the Bylaws of the Federal

Water Council (COHIFE) and its Charter, whereby COHIFE is empowered to participate in the making and strategic follow-up of the National Water Policy, as per the Guiding Principles of Water Policy and for the sake of integrated water resources management (<http://www.cohife.org/s58/documentos-fundacionales>).

3.- The score was given because the Guiding Principles have not been legally formalized despite all efforts. However, some ownership has been taken over the use and application of these principles, which may be taken as “Soft Law”.

1.1.c. National integrated water management plans (IWRM) or similar

Justification/evidence

Score: 40

1.- The National Water Plan (<http://www.mininterior.gov.ar/plan/licitaciones-plan.php>) is based on four water policy axes (drinking water and sanitation; adaptation to climate extremes; agricultural water, and multipurpose and biomass utilization); each axis is intersected by converging crosswise axes (water resource preservation, capacity strengthening, innovation and participation). Each one of the axes has specific programs, some with National and others with Regional scope. Many of them are only in the planning and/or initial implementation stage.

2.- There was a convergence of views among participants regarding the score.

1.2 What is the status of policies, laws and plans to support IWRM at other levels?

1.2.a. Sub-national water resource policies or similar

Justification/evidence

Score: 30

1.- In accordance with the action powers not delegated to the Nation, sub-national policies are within provincial control. Each jurisdiction in the country has its own water law or code and its own policy; therefore, it was difficult to estimate the general state of affairs.

2.- The general policy containing principles and instruments enabling IWRM in provincial jurisdictions was described and agreed to in the Guiding Principles of Water Policy process, and the policy is supported by COHIFE (<http://www.cohife.org/s77/documentos-oficiales>) although the degree of provincial application is highly heterogeneous.

3.- Political actions carried by each Province in

connection with water management may be seen in the Water Digest of the Republic of Argentina (<http://www.digestohidrico.org.ar/juridicciones.php?resetjur=1>).

4.- Some provinces, i.e. Mendoza, show great progress, in particular in regard to regulatory and institutional aspects. The Province of Santa Fe, in its draft Water Law, proposes the IWRM and the development of Water Resources Plans for some water regions in the province (<http://www.ellitoral.com/index.php/diarios/2017/04/05/politica/POLI-11.html>). The Province of Buenos Aires is starting some integrated management processes.

5.- In conclusion, scoring responds to the consensus with which most authorities are beginning to apply the IWRM criteria, even in view of the provincial dissimilarities above.

1.2.b. Basin / aquifer management plans or similar, based on IWRM

Justification/evidence

Score: 20

1.- There is quite a bit spread in the degree of progress of basin plans formation and implementation, and very little has been developed for aquifers. Consequently, the workshop analyzed the most relevant cases in order to identify the applicable threshold.

2.- Basin management plans to be prepared during stage one of the National Water Plan include: Strategic Water Resources Plan for the Salí Dulce River Basin, Medrano Stream Basin Master Plan, Master Plan for River Basin ordering of the Municipality of Quilmes, La Picasa Basin Master Plan, Water Plan for the North Eastern Region of the Pampas Plains, Desaguadero River Basin Master Plan; Program for Ordering and Using Water Resources of the basins of the Limay, Neuquén and Negro rivers; General Plans for Water Resources Use in Argentina-Chile shared basins (https://www.argentina.gob.ar/sites/default/files/plan_National_agua_.pdf).

3.- The Colorado River basin was the first basin to have a Single Program for River Flows Distribution, agreed to in 1976. Added later was a water quality monitoring program for pollution prevention. The River Negro basin and tributaries is one of the most developed basins. Websites <http://www.coirco.gov.ar/> and <http://www.coirco.gov.ar/> evidence how much progress has been made. There was agreement to score it with 80 points.

4.- The Argentine Basin of the Pilcomayo River does not have its own management plan. The basin is managed within the framework of the Pilcomayo Binational and

Trinational Commissions but plan implementation has not made significant progress there. (http://www.infojus.gob.ar/legislacion/Law-salta-7570-acuerdo_interjurisdiccional_ministro.htm 3Bjsessionid=bdnl5btjsgkz8tu5rachndui?o&bsrc=ci). It was agreed that it deserved a score of 20.

5.- In workshop discussions, there was agreement that basin management plans must be expanded and strengthened, because, in most cases, IWRM-based plans are only being prepared, and aquifer development is poor.

1.2.c. Arrangements for trans-boundary water management in the most important basins /aquifers

Justification/evidence

Score: 60

1.-The La Plata River Basin agreement is among the world's oldest (1969), but implementation has progressed slowly. There are other treaties in the basin: Paraná River Mixed Argentine-Paraguayan Commission (1971); the La Plata River and its Maritime Front Treaty (1973); Uruguay River Statute (1975); Binational Administrative Commission of the Lower Pilcomayo River Basin (1994); Binational Commission for the Development of the Basin of the Higher Bermejo River and the Grande de Tarija River (1995); Trinational Commission for the Development of the Pilcomayo River Basin (1995). See: <http://cicplata.org/es/etapa-i-elaboracion-adt-pae-2010-1016/>; <http://www.comisionriodelaplata.org/>; <http://www.caru.org.uy/web/>; <http://www.pilcomayo.net/planificacion>.

2.- Additional Specific Protocol on Water Resources shared with Chile (1991). There has been an ad hoc workgroup ever since.

3.- Draft Statement on Basic Principles and Action Lines

for the Guaraní Aquifer System (2004), whose treaty is about to be signed. Worthy of notice is the Concordia-Salto Trans-boundary Commission which has an agreement to manage groundwater between both cities.

4.- A rich history of neighboring country agreements resulted in more akin positions when defining the score. Scoring shows that most IWRM plans are being implemented by the applicable authorities.

1.2.d. FEDERAL COUNTRIES ONLY: Water Resources Provincial/State Laws

Justification/evidence

Score: 50

1.- Of the 24 jurisdictions, other than the province of Santa Fe (where the legal process is well advanced), all other provinces have Water Laws or Codes (<http://www.digestohidrico.org.ar/juridicciones.php?resetjur=1>), but there is a gap between legal framework and practical application thereof. Other than in specific cases, the regulatory progress has not been coupled with an effective regulation, and with the implementation of the management instruments needed for allocating financial, human, and logistic resources (Diagnostic Trans-boundary Analysis of the La Plata River Basin, CIC, 2016).

2.- Provincial jurisdictions acknowledge the Guiding Principles of Water Policy as Soft Law (<http://www.cohife.org/s77/documentos-oficiales>).

3.-Scoring met with consensus because IWRM-based laws are starting to be applied moderately, i.e. somewhat more than in a minority of provinces.

Average 'Enabling Environment' score:

38.6

2 INSTITUTIONS AND PARTICIPATION

2.1 What is the status of institutions for IWRM implementation at the national level?

2.1. a. National government authorities capacity for leading implementation of national IWRM plans or similar

Justification/evidence

Score: 60

1.- The Undersecretariat of Water Resources (SSRH)

formulated the National Water Plan and is implementing it.
2.- It was deemed that the Undersecretariat institutional status should be raised for the sake of having decision making power on budget allocation.

3.- Participants agreed that the authorities have the capacity to effectively lead IWRM Plan formulation.

2.1.b. Coordination between national government authorities representing different sectors on water resources, policies, planning and management

Justification/evidence

Score: 60

1.- Some examples were submitted: National Risk Management System (<http://www.minseg.gob.ar/reducir-el-riesgo-de-desastre-por-inundaciones>); there is permanent consultation between the Ministry of Foreign Affairs and the Undersecretariat of Water Resources; of the Water and Sanitation Sector with the Ministry of Science and Technology, and discussions are beginning with the Ministry of Environment and Sustainable Development.

2.- There was agreement as to existing opportunities for different sectors to participate in management processes, although some have not been formally set up.

2.1.c. Public participation in water resources, policies, planning and management at the national level

Justification/evidence

Score: 40

1.- In view of the fact that provinces have control over water, the Nation may not directly engage in participative processes. However, second-level degree of participation exists, as evidenced in the Guiding Principles of Water Policy formulation, where the Nation encourages provinces to organize workshops with their own stakeholders.

2.- Currently, participation is channeled through the Federal Water Council (<http://www.cohife.org/s77/documentos-oficiales>).

3.- At the workshop, participants agreed that national authorities may occasionally (and not regularly) seek information and experience from stakeholders.

2.1.d. Business participation in water resources development, management and use at the national level

Justification/evidence

Score: 60

In general, there are opportunities for business participation in various sectors. For example:

1.- Hydro energy Sector: 31 national energy generation dams under concession (<http://www.orsep.gob.ar/presas.php>)

2.- The Undersecretariat of Water Resources is implementing public-private participation for building and operation irrigation (http://www.agroindustria.gob.ar/sitio/areas/riego/plan_riego/), as well as drinking water

and sanitation (https://www.argentina.gob.ar/sites/default/files/interior_agua_plan_agua_saneamiento.pdf), totaling 39 projects put forward for market consideration.

3.- Since 1997, in the Colorado River Basin, oil companies have funded water quality controls (http://sedici.unlp.edu.ar/bitstream/handle/10915/43500/Documento_completo.pdf?sequence=1)

4.- The Province of Buenos Aires interacts largely with the agri-business sector by means of panel discussions.

5.- After discussing evidences and viewpoints, it was agreed at the workshop that although there is a current trend for business involvement, the opportunities for private sector participation at the national level are still limited.

2.1.e. Gender-specific objectives for water resources management at the national level

Justification/evidence

Score: n/a

After a challenging discussion regarding the sense of the question, it was agreed that it does not apply because it was deemed that the lack of an explicit approach is due to the fact that there is gender equity at the meetings, and that for 17 years projects and water works were headed by a woman national director. (http://www.programainfoagua.com/Noticia.aspx?id=462942&sec=Pol_C3_ADTicas_20&idsec=36).

2.1.f. Developing IWRM capacity at a national level

Justification/evidence

Score: 40

1.- Between 2000 and 2010, the Argentine Water Resources Institute (IARH) and the University of Buenos Aires (UBA) offered a course on IWRM (introducing the topic in Argentina). The Argentine Network for Strengthening and Training in Integrated Water Resources Management (Arg Cap Net) has been delivering courses or carrying out other training activities in different locations of the country, covering sundry IWRM aspects (for example, between 2009 and 2011, a course on Managerial Tools for Water Management).

2.- The University of Buenos Aires offers a Master's on Water Management, the National University of La Plata offers Masters' Degrees on Eco-Hydrology and Integral Management of Water Basins, and the National University of La Pampa offers a Master's in Water Resources.

3.- The National Universities of the Litoral, of Córdoba, and of Cuyo offer a Master's on Integrated Water Resources Management within the framework of Arg Cap Net (<http://www.argcapnet.org.ar/mIWRM/>).

Participants have noted that there is an offer but that there is no demand for this Master's, likely as a result of high professional demand in the job market of the sector.

4.- Public institutions remark that there is a lack of institutional strengthening.

5.- The Federal Water Council has a project to grant scholarships for training provincial technical specialists but it does not have funding as of yet.

6.- The evidence provided allowed, and issues related thereto were the basis for, agreeing that some initiatives are being implemented to develop long term capacity, although with limited coverage both geographically and by interested parties.

2.2 What is the status of institutions for IWRM implementation at other levels?

2.2.a. Basin / aquifer level organizations for leading implementation of IWRM or similar

Justification/evidence **Score: 40**

1.- There is disparity. There are 20 inter-jurisdictional basin commissions; some have formulated their plans and are implementing them (COIRCO, ACUMAR), but the majority are on the way to formulating their plans (https://www.argentina.gob.ar/sites/default/files/plan_National_agua_.pdf).

2.- At the provincial level, there is also quite a lot of spread. Santa Fe has master plans for most basins and Buenos Aires has plans for the basins of the Salado River (being updated: <http://www.mosp.gba.gov.ar/sitios/hidraulica/informacion/planmaestro.php>) and the Luján River, and it is bidding for the Reconquista River Basin integral management plan (http://www.ec.gba.gov.ar/areas/finanzas/docs/bid3256/convocatoria_22_agosto_2016.php).

3.- Aquifers have not been included because there are no institutions at this level.

4.- The score agreed to at the workshop (medium-low) is due to a consensus that authorities have clear mandate to lead water resources management as well as the capacity to lead IWRM Plan formulation, but they do not have full capacity yet to effectively lead periodic monitoring and evaluation.

2.2.b. Public participation in water resources, policy, planning and management at the local level

Justification/evidence **Score: 40**

1.- The situation depends on the jurisdiction involved. For example, in Mendoza, Buenos Aires, Santa Fe, Chubut, Salta, Córdoba, Río Negro and Tucumán there are user consortiums.

2.- In the Province of Buenos Aires, consultations almost regularly request information, exchange experiences and opinions. The Reconquista River Basin Commission boasts that its participation has been formalized by law and that it is actively pursued.

3.-At the workshop, participants agreed that local authorities also occasionally (but not regularly) ask for the information and experience of stakeholders.

2.2.c. Gender-specific objectives at sub-national levels

Justification/evidence **Score: n/a**

There was full agreement that this is not applicable, on the same grounds as for question 2.1.e.

2.2.d. Gender-specific objectives and plans at the trans-boundary level

Justification/evidence **Score: n/a**

There was full agreement that this is not applicable, on the same grounds as for question 2.1.e.

2.2.e. Organizational framework for trans-boundary water management for the most important basins / aquifers

Justification/evidence **Score: 50**

1.- Organizational frameworks result from the international agreements detailed under 1.2.c, and they comprise most of the water resources shared with neighboring countries, including the most important aquifers.

2.- The stipulated mandate is currently being fulfilled at different levels according to the institution. For example, the Pilcomayo is working on yearly operational plans (<http://www.pilcomayo.net/planificacion>) and there are still open challenges pending fulfillment of the Organizational Charter mandate; the La Plata River CIC has a Strategic Action Program (<https://proyectoscic.org/>) which has been

approved by the countries, and implementation funds are in the process of being obtained; the Bermejo River has its Integrated Management Program ([http://www.oas.org/dsd/waterresources/projects/bermejo/publications/programa_20de_20gestion_20integral_20de_20la_20cuencia_20biNational_20del_20rio_20bermejo_20\(prober\).pdf.pdf](http://www.oas.org/dsd/waterresources/projects/bermejo/publications/programa_20de_20gestion_20integral_20de_20la_20cuencia_20biNational_20del_20rio_20bermejo_20(prober).pdf.pdf)); and the Guaraní Aquifer has had its Strategic Action Plan since 2006 (http://siteresources.worldbank.org/INTWRD/Resources/GWMATE_Spanish_CP09.pdf) but it still does not have a legalized organizational framework in all of the countries involved, and this has been an impediment for execution.

3.- After listening to the views, participants coincided that the established organizational framework mandates have been partly fulfilled although efforts are being made to expand fulfillment.

2.2.f. FEDERAL COUNTRIES ONLY: Provincial / state authorities responsible for water resources management

Justification/evidence

Score: 40

1.- Participants agreed that provincial authorities have a clear mandate to lead water management. However, there was some discrepancy among representatives of the attending provinces because there are some authorities who do sector management (like Tucumán) and others, like Buenos Aires (<http://www.ada.gba.gov.ar/>) and Santa Fe, which consider that they do integrated management and that they have sufficient capacity.

2.- They also pointed out that there is a need to improve the legal status of government organizations responsible for water resources management because, in most of the provinces, with the exception of Buenos Aires and Santa Fe, they only have Provincial Directorate status.

3.- Consequently, the score assigned was 40.

Average 'Institutions and Participation' score

47.8

3 MANAGEMENT INSTRUMENTS

3.1 What is the status of management instruments to support IWRM implementation at the national level?

3.1.a. National monitoring of water availability (includes surface and /or groundwater)

Justification/evidence

Score: 40

1.- The Basic National Hydrometeorology Network, which has been operated by the Undersecretariat of Water Resources (SSRH) of the Nation for 20 years, is a follow-up of the former Waterworks and Electric Power network (Agua y Energía Eléctrica). Their information is public and it is overseen by the SSRH of Argentina.

2.- For now, the Undersecretariat of Water Resources (SSRH) and the Federal Water Council common database (<http://bdhi.hidricosargentina.gov.ar/>) contains data from the provinces of Corrientes, Chaco, Río Negro and Entre Ríos, as well as data coming from other national institutions such as the National Water Institute (INA), the National Institute for Agriculture and Livestock Technology (INTA), and data from the province of Mendoza surveyed by the National Scientific and Technical Research Council (CONICET).

3.- The Undersecretariat of Water Resources (SSRH) and the Federal Water Council operate the Groundwater Information System (<http://datar.noip.me/dataset/pozos-sifas>). Also, the SSRH is now in charge of the Guaraní Aquifer Project mapping service.

4.- There was agreement regarding the fact that national monitoring is for the long term but that its coverage and density must be improved. This includes the addition of groundwater monitoring, now limited to certain provinces which have their own networks –such as San Juan and Mendoza.

3.1.b. Sustainable and efficient water use management from the national level

Justification/evidence

Score: 40

1.- There are management instruments at sector level. For example, the hydro energy sector has long term programs. In general, sector plans formulation is currently underway.

2.- Companies providing drinking water services are implementing plans to improve water use efficiency

(http://www.aysa.com.ar/Media/archivos/1419/A-Plan_Estrategico_AySA_2011-2020_Resumen_Ejecutivo_2.pdf) http://www.aysa.com.ar/index.php?id_seccion=1179).

3.- The legal options for the Nation to implement management instruments are limited (because it is a federal country). Within the scope allowed in the Constitution and the laws, the Nation collaborates with the provinces. This enabled participant convergence in giving a medium-low score: some management instruments are implemented on a more long-term basis, with limited user and country coverage.

3.1.c. Pollution control from the national level

Justification/evidence

Score: 30

1.- Pollution control lies with the provinces and, therefore, it is difficult to provide a National scenario. In general terms, it is not easy to find aggregate information at the national level (which might be considered a duty of national institutions). In certain sectors, such as agriculture and mining, as well as in the urban sector, pollution control is deficient. The Nation has shared policing powers with the jurisdictions of the Matanza Riachuelo River Basin (<http://www.acumar.gov.ar/pagina/1218/control-y-monitoreo>).

2.- The Undersecretariat of Water Resources has a study on water quality guide levels, a project on water arsenic levels, and it is expanding its basic network to include monitoring of certain water quality parameters.

3.- The Ministry of Environment and Sustainable Development has the baseline for 10 inter-jurisdictional basins; it has restarted monitoring in the La Plata River coastal front (<http://ambiente.gob.ar/noticias/ambiente-vuelve-a-realizar-el-monitoreo-del-rio-de-la-plata>), and it is integrating environmental water quality information by means of an online GISweb system (<http://ambiente.gob.ar/calidad-de-agua/calidad-de-agua/>).

4.- The score agreed to during the discussion responds to the consensus that pollution controls implementation is low but shows a tendency towards expanding coverage and towards allowing longer time frames.

3.1.d. Management of water-related ecosystems from the National level

Justification/evidence

Score: 20

1.- Natural resources belong to the provinces; at the national level, only monitoring is done.

2.- There are some initiatives by the Ministry of Environment and Sustainable Development for glaciers and wetlands (<http://ambiente.gob.ar/humedales/>).

3.- In connection with water ecosystems, there are networks for permanent monitoring of ecosystem elements (chemical quality, water flora and fauna) and plans for protecting areas and species - mainly in connection with hydroelectric infrastructures such as Yacyretá and Salto Grande, as well as in National and Provincial Parks.

4.- In connection with the score given, consensus implies that the use of water ecosystems management instruments at the provincial level is low, limited, and applied to short-term or special projects.

3.1.e. Management instruments to reduce impacts of water-related disasters from the national level

Justification/evidence

Score: 40

1.- Argentina has a high water risk in a major part of the country (floods and droughts). For some time now, the country has been working on flood risk management with prevention infrastructure to mitigate the threat and to achieve post-event management; there have been implementation deficiencies in the participative-mitigation and contingency plans. At present, the Argentine Water Forum is starting a drought risk management pilot project in the province of Tucumán.

2.- Since 1985, the National Water Institute (INA) has developed and operated a water early-warning service for the La Plata River Basin (<https://www.ina.gov.ar/alerta/index.php>), providing information on river highs and lows to the provinces. Some provinces, like Entre Ríos and Santa Fe, have their own warning systems.

3.- Since 1999, the Dam Safety Regulator Body (ORSEP) has tended to the control and prevention of potential dam-associated events (<http://www.orsep.gob.ar/>). In Particular, for Emergency Management, it has participated in preparing, and currently supervises, the implementation of Emergency Action Plans (PADE) in all dams under its jurisdiction (Comahue, Norte, Cuyo and Patagonia).

4.- The National Integrated Risk Management and Civil Protection System (SINAGIR) was created in 2016 (Law 27.287); it serves the purpose of integrating actions and articulating the operation of government and non-government organizations at all levels in order to strengthen and optimize actions to ensure risk reduction, crisis management and recovery; its implementation is underway. (<http://www.minseg.gob.ar/nueva-gesti> C3 B3n-in-

tegral-del-riesgo). It has as an immediate background the Federal Emergency System (SIFEM).

5.- The National Meteorological Radar System (SINARAME) was created in 2011 for identifying, analyzing, monitoring, and evaluating hydro-meteorological phenomena within the national territory (<http://www.sinarame.gob.ar/>).

6.- The above contributions to the workshop enable scoring consensus, in view of the fact that basin level management instruments are implemented on a more long-term basis, but with limited geographic and stakeholder coverage.

3.2 What is the status of management instruments to support IWRM implementation at other levels?

3.2.a. Basin management instruments

Justification/evidence

Score: 40

1.- COIRCO, the Colorado River Inter-jurisdictional Commission, was created to guarantee the fulfillment of the Single Program for River Flows Distribution (<http://www.coirco.gov.ar/>). Progressively, it kept broadening its powers and came to establishing IWRM programs and actions (water medium quality; ichthyo-fauna and irrigation-area monitoring; assessment of trophic status in reservoirs; dissemination of oil and mining pollution prevention, water risk prevention, etc.).

2.- AIC, the Inter-Jurisdictional Authority of the Basins of the Limay, Neuquén and Negro Rivers deals with the administration, control, use, and preservation of each river basin jurisdiction. Therefore, it coordinates water resource management, controls water quality, provides studies and weather forecasts and warnings, it surveys and processes hydro-meteorological information and reservoir information, it executes river and coastal-defense systematization, and it oversees the Standards for: Water Management, Environmental Protection, and Dam Safety (<http://www.aic.gov.ar/sitio/laaic.aspx>).

3.- The Matanza-Riachuelo River Basin Authority (ACUMAR) has faced the challenge of implementing integrated management since it was created; its main action axes are: controlling and monitoring water and air quality, institutional strengthening, waste control, infrastructure works, territorial ordering and health (<http://www.acumar.gob.ar/>).

4.- The Salí Dulce River Basin Commission agreed to a Management Plan for the purpose of reducing pollution,

preserving wetlands, and mitigating erosion effects; it created a Unit in order to execute the plan. During the first stage, it installed hydro-meteorological and gauging stations, and it promoted that hydro studies and hydro projects be performed; at a later stage, it expanded its objective by adding environmental problem-solving activities related to clean production (<http://www.cohife.org/s64/comites-de-cuenca-sali-dulce>).

5.- The Bermejo River Regional Commission (COREBE) is a regional development body which has made numerous studies, it has carried out a Strategic Action Plan, and it has installed a real-time monitoring network (www.corebe.org.ar).

6.- There are provinces that do not work at the basin level, like Santa Fe, and others like Buenos Aires, where all the basin commissions have been created and are implementing quality monitoring, gauging, and drainage network programs as well as the ADA GIS system. Management progress is being made in coordination with other participating organizations of the province

7.- The Reconquista River Basin Commission, taken as a provincial example, is starting to implement different instruments for planning, executing, and controlling its administration, as well as coordinating actions for integrated water resource management.

8.- Those basins which have specific management organizations have implemented management instruments. In Argentina, such organizations have partial coverage and most basin commissions are inter-jurisdictional (because they do not have individual policing powers). So, after cases and reasons were submitted to participants, the participants agreed on a score; they stated that only some basin management instruments have been implemented on a more long-term basis and that they have limited geographic and/or stakeholders coverage.

3.2.b. Aquifer management instruments

Justification/evidence

Score: 30

1.-Aquifer management is much less developed than surface water management, and its management clusters at the provincial level. Knowledge is quite limited and management is restricted to specific, isolated experiences.

2.- The provinces which have the most development are Buenos Aires (permits for use, management of aquifer preservation and remediation, as well as implementation of different projects for furthering knowledge), Mendoza and San Juan (ground water consortiums, water

balances, and drilling permits), Córdoba (monitoring use in irrigation systems), Chubut (with a 120,000 km² central-plateau aquifer commission), Salta, San Luis.

3.- There are provinces, like Santa Fe, where there is no information.

4.- Regionally, the Guaraní Aquifer Project has allowed fragmented provincial knowledge to become articulated, and progress has been made with the implementation of some management actions (such as a well drilling handbook).

5.- There was agreement that there is a low/medium-low level of aquifer management instruments, which implies that application is limited.

3.2.c. Data and information sharing within the country at all levels

Justification/evidence

Score: 40

1.- There is data and information sharing (it does not include all the variables or cover the whole country) as data exchange is being implemented among various national and provincial organizations.

2.- National Meteorology Service data is public.

3.- The Ministry of Environment and Sustainable Development is implementing the Environmental Monitoring Federal Network on the basis of the National Environmental Information System, which makes available the data obtained by other national and provincial organizations (<https://redfema.ambiente.gob.ar/>).

As of 2015, platforms for standardized information publication are being implemented by IDERA, (Spatial Data Infrastructure of Argentina) but IDERA has not completed its development yet (www.idera.gob.ar). The Ministry of Environment and Sustainable Development has IDE Ambiental (Environmental IDE A) (<http://mapas.ambiente.gob.ar/?idarticulo=12533>).

4.- The Federal Water Council and the Undersecretariat of Water Resources of the Nation has a water database containing data coming from the Undersecretariat itself, from other national organizations, some provinces, research institutes, dams, and from academia, all of which is publicly available in internet (<http://bdhi.hidricosar.gob.ar/>). Implementation is underway but it still needs to be completed. They also operate the Groundwater Federal System database.

5.- Basin organizations and some provinces publish information in their websites. For example, the Colorado River Inter-jurisdictional Commission publishes reports on various topics, such as water quality reports or studies, as well as historic climate data, snow and hydrometric level data (www.coirco.gov.ar); the Inter-Jurisdictional Authority of the Basins of the Limay, Neuquén and Negro Rivers publishes climate and hydrometeorology data daily (historical data may be requested in the web); and the Matanza-Riachuelo River Basin Authority publishes monitoring georeferenced data, indicators, and other information.

6.- Guaraní Aquifer maps are made available to the public by the Undersecretariat of Water Resources of the Nation.

7.- Based on all of the above, the attendees agreed that data and information arrangements exist in the country, for sharing on a more long-term basis between the major data providers and users.

3.2.d. Trans-boundary data and information sharing between countries

Justification/evidence

Score: 30

1.- The Pilcomayo River Basin Trinational Commission shares and publishes in its website all the data it collects but it does not have any information on surface water uses and groundwater (www.pilcomayo.net).

2.- The La Plata River Basin has an incipient decision support system, where each country has a node and shares information (<http://sstd.cicplata.org/sstd/>). Argentina is in the process of uploading its information (<http://sstd.cicplata.org/sstd/>).

3.- Part of the information from Brazil to feed the Early Warning System of the La Plata River Basin is provided informally, and, up to now, attempts to enter into an agreement have failed.

4.- Projects devoted to other basin or aquifer management aspects with trans-boundary water resources have been opportunities to share information. For example, the Guaraní Aquifer System, the La Plata River Basin, the Pilcomayo River Basin, the Bermejo River Basin, the river basins shared with Chile, FREPLATA-Environmental Protection of the La Plata River and its Maritime Front: Pollution Prevention and Control and Habitat Restoration).

5.- Argentina and Uruguay do joint monitoring of the middle and lower reaches of the Uruguay River, and therefore, they share all data. They also monitor jointly the wells in the Guaraní Aquifer.

6.- Binational organizations cross over information but for specific purposes only. Also, at congresses or sector organizations.

7.- Debate consensus was that there is information and data sharing, particularly in some of the basin organi-

zations, which shows a tendency to become formal; but this sharing is limited because it does not include all the data required for water management.

Average 'Management Instruments' score

34.4

4 FINANCING

4.1 What is the status of financing for water resources development and management at the national level?

4.1.a. National budget for investment including water resources infrastructure

Justification/evidence

Score: 30

1.- In 2001, Executive Order 1381 created a water fund to execute flood control works. In 2006, under Law 26.181, the fund expanded its scope to cover water infrastructure projects, works, maintenance and services; recuperation of productive lands, flood control and mitigation, and road and railroad infrastructure protection (www.ucofin.gob.ar/documentos/MARCOLEGALHIDRICO_web.pdf). This fund has made it possible to perform some 400 water works in the last 15 years.

2.- The National Water Plan is an ambitious plan to invest in infrastructure and non-infrastructure measures but the funding sources have not been clearly identified. The plan foresees public-private participation for irrigation construction and operation (http://www.agroindustria.gob.ar/sitio/areas/riego/plan_riego/), as well as for drinking water and sanitation, (https://www.argentina.gob.ar/sites/default/files/interior_agua_plan_agua_saneamiento.pdf) totaling 39 projects which have been put forward for market consideration.

3.- Some irrigation works are funded by UCAR/PROSAP, the Unit for Rural Change and Provincial Agri-services Program of the Ministry of Agriculture and Industry of the Nation (www.ucar.gob.ar).

4.- Although budget allocations have been made, they do not always cover the numerous requests, and there was consensus to give a score of low to very low budget allocation.

4.1.b. National budget for the recurring costs of the IWRM elements

Justification/evidence

Score: 30

1.- The National government finances through the Undersecretariat of Water Resources of the Nation. The Undersecretariat allocates funds to the National Hydro-meteorological Network for the operation of certain basin organizations and for the Federal Water Council (COHIFE). It also funds the Dam Safety Regulator Body, the National Water Institute, and the National Sanitation Waterworks Body.

2.- The Undersecretariat of Water Resources of the Nation contributes money for the organization of congresses and courses on the subject.

3.- A score of 30 was given in view of the fact that budget allocations do not cover half of the elements and are insufficient for the rest.

4.2 What is the status of financing for water resources development and management at other levels?

4.2.a. Sub-national or basin budgets for investment including water resources infrastructure

Justification/evidence

Score: 30

1.- The situation is very dissimilar. For example: In the province of Buenos Aires, allocated funds are disbursed although they are insufficient to execute all of the programs and activities which might potentially be developed. The province of Santa Fe, very much exposed to floods, requires that funds earmarked for implementing planned actions be transferred to carry out emergency work. In the province of Mendoza, the General Directorate for Irrigation has its own funds to carry out works although same are insufficient to cover all needs.

2.- Many sub-national budgets are insufficient, and nation-

al and international funding is necessary in most cases. The provinces are endorsed by the Nation in order to request funding for water infrastructure investment projects.

3.- In the province of Buenos Aires, the Reconquista River Basin has been given a US\$ 250 million dollar loan which is being used, and a Climate Change Adaptation Green Fund loan has just been approved for the Lujan River Basin.

4.- In conclusion, 30 points were given because there is much diversity in the provinces and basin commissions: in some cases, the allocated budget covers part of the planned investment and in others, the allocated budget is sufficient but the planned investment is not disbursed or insufficient funds are given.

4.2.b. Revenues raised from dedicated levies on water users at the basin, aquifer, or sub-national levels

Justification/evidence

Score: 40

1.- There are few provincial organizations which have clearly established charges for water use.

2.- There are many examples of levies raised at different levels, but the situation is heterogeneous:
In the province of Entre Ríos, the Salto Grande Adminis-
trating Commission earmarks funds for waterworks.
In the province of Buenos Aires, there is a process a
process for managing the collection of bills but payment
is overdue. Revenues raised are earmarked for the pro-
vincial Treasury single account, and then, budget funds
are allocated to the Water Authority, which are used for
IWRM. CORFO is an exception because it collects a
water charge and uses it within budget.
The General Directorate of Irrigation of Mendoza cashes
resources from irrigation users in order to perform its
duties, and it administrates its own budget.
The AIC receives funds from hydroelectric power station
concessions in the Basins of the Limay, Neuquén and
Negro Rivers, which it applies to works and to imple-
menting some IWRM instruments.

3.- Hydroelectric power stations pay royalties to the provinces,
which are appropriated in order to fund general revenues.

4.- Consequently, it was agreed that revenues raised
from users are limited to special cases and they are not
usually used for IWRM activities.

4.2.c. Financing for trans-boundary cooperation

Justification/evidence

Score: 30

1.- The situation is diverse. The National State defrays
out of its own budget the fee to be paid for trans-bound-
ary cooperation organizations; it contributes staff and,
in certain cases, it makes in-kind contributions, making
efforts to obtain funding from international donors.

2.- In the Pilcomayo River Basin, funding is channeled
via the Argentine Ministry of Foreign Affairs, but this is
not compliant with the Agreement (Art. 4 of the Char-
tering Treaty). Funds contributed by the countries are
disbursed entirely by the Director's Office, which only
allows 50% implementation of planned activities.

3.- In the La Plata River CIC, countries contribute a fixed
share which is used only for funding payroll and head-
quarters. In the last few years, CIC has received funding
from GEF in order to meet planning.

4.- FONPLATA is the financial fund for the development
of the La Plata River Basin; it was created to aid in fund-
ing La Plata River CIC actions. At present, countries han-
dle contributions on a one-to-one basis with the Fund.

5.- In the Uruguay River, countries finance joint moni-
toring and contribute their own technical staff.

6.- Scoring was given considering that arrangements
have been set up among the countries sharing water
resources; said arrangements establish how basin man-
agement is financed but funding is below 50% of that
expected from contributions and by regulation.

Average 'Financing' score

32.0