

# Water



International Cooperation

**Proceedings from the Water JPI Workshop on  
Strengthening EU-Africa Cooperation in Water RDI: challenges and  
opportunities**

In collaboration with PRIMA and ASRT

**Hybrid event - virtual and in Cairo**

**26 October 2021**

<http://www.waterjpi.eu/international-cooperation/international-cooperation-workshops/strengthening-eu-africa-cooperation-in-water-rdi-workshop-2021>

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## Disclaimer

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## Acknowledgements

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## List of Abbreviations/Acronyms

AfriAlliance	Africa-EU Innovation Alliance for Water and Climate project
ANR	French National Research Agency
ASRT	Academy of Scientific Research and Technology, Egypt
AU	African Union
CSA	Coordination and Support Action
EC	European Commission
EU	European Union
FP7	EU Seventh Framework Programme
IPR	Intellectual Property Rights
IRD	French National Research Institute for Sustainable Development
JPI	Joint Programming Initiative
Nex-Labs	Nexus-driven open Labs for competitive and inclusive growth in the Mediterranean project
PHEMAC	Participatory hub for effective mapping, acceleration and capitalization of the Water Energy and Agri-Food Nexus best practices project
PRIMA	Partnership for Research and Innovation in the Mediterranean Area
RDI	Research, Development and Innovation
SDGs	Sustainable development Goals
SMEs	Small and Medium Enterprises
SRIA	Strategic Research and Innovation Agenda
UN	United Nations
URBWAT	Designing, implementing, monitoring and understanding a grey-water drainage and partial treatment system within an urban informal settlement project
Water JPI	Joint Programming Initiative on “Water Challenges for a Changing World”
WRC	Water Research Commission

## Executive Summary

The Water Joint Programming Initiative, Water JPI ([www.waterjpi.eu](http://www.waterjpi.eu)), entitled “Water Challenges for a Changing World”, is dedicated to tackling the ambitious grand challenge of achieving “sustainable water systems for a sustainable economy in Europe and abroad”. Under the umbrella of the Water JPI, the project **IC4WATER** aims to implement joint activities in a dedicated effort to reinforce International Cooperation in Research, Development and Innovation to address global water challenges.

In the framework of the development of a common strategy for International Cooperation in the field of water, through the project **IC4WATER**, Water JPI’s members are looking at opportunities to open up to countries and regions sharing the JPI’s vision and working towards the achievement of SDG 6.

The Water JPI Workshop on “**Strengthening EU-Africa Cooperation in Water RDI: challenges and opportunities**” was organised in collaboration with the Partnership for Research and Innovation in the Mediterranean Area (PRIMA) and the Egyptian Academy of Scientific Research and Technology (ASRT).

The workshop took place in October 2021, as a hybrid side event during the Cairo Water Week. The event was structured around two high-level panel discussions on alignment and social innovation. Its main aim was to explore opportunities for collaboration between Europe and Africa in water RDI on the basis of the past workshops organized within the Water JPI.

This event gathered representatives from ministries, research funding agencies, the European Commission, and operators dealing with water management and capacity development such as international organisations, private institutions and research operators. Over hundred people from 30 countries attended the workshop, both physically and virtually.

The main outcome of this workshop is the willingness of collaborating with African countries through tools and instruments that are co-created and concrete to bring solutions to water scarcity. The focus on capacity development for social innovation has been brought up as a strength in the near future. In the same line the co-creation of living labs appeared an asset as demonstrated by showcasing one in a township of Johannesburg in South Africa.

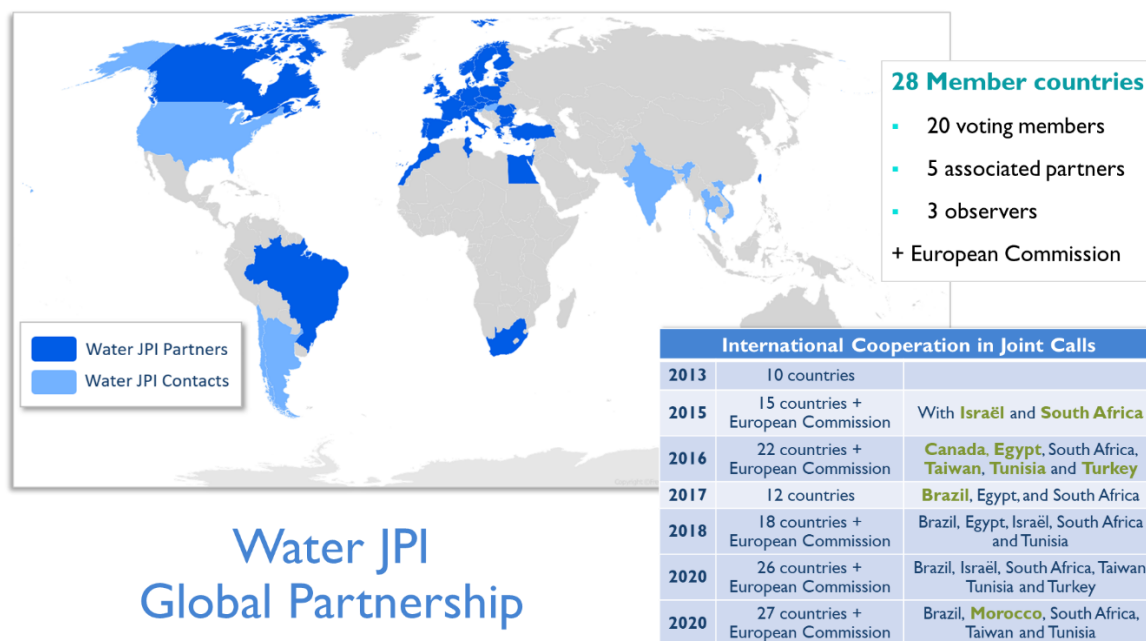
Results from this workshop will support the Water JPI and other water-related regional programmes for research development and innovation in the development of their international cooperation strategy in the near future.

## 1. Introduction

The Water Joint Programming Initiative, Water JPI ([www.waterjpi.eu](http://www.waterjpi.eu)), entitled “Water Challenges for a Changing World”, is dedicated to tackling the ambitious grand challenge of achieving “*sustainable water systems for a sustainable economy in Europe and abroad*”. Water challenges are global as recognised by UN Sustainable Development Goals (SDGs) or the World Economic Forum<sup>1</sup> (since 2015 - nearly 900 experts took part in the Global Risk Perception Survey) as the most important risk in terms of impacts to the economy and society in the upcoming years. Water crises, associated with the failure of climate change adaptation, are also perceived as more likely to occur. Global water requirements are projected to be pushed beyond sustainable water supplies by 40% by 2030<sup>2</sup>.

The outreach and opening of the Water JPI to third country partners is increasingly raising interest among the latter, with increasing activities of the beyond Europe countries in Joint Transnational Calls. Now the Water JPI, as part of its supporting Coordination and Support Action **IC4WATER**, is looking at opportunities to develop a common strategy for International Cooperation, in collaboration between the Water JPI members, European initiatives such as the Partnership for Research and Innovation in the Mediterranean Area (PRIMA), and International partners (such as the Belmont Forum, the Global Water Research Coalition, or targeted non-EU countries). **IC4WATER** therefore concentrates its activities on developing a strategy for International Cooperation development and on contacting the targeted countries, as identified during different workshops, to discuss possible cooperation models.

To date, the Water JPI has set up contacts and initiated joint actions, including Joint Transnational Calls to support water Research Development and Innovation (RDI), with several international partners, as outlined in **Figure 1**.



**Figure 1. Water JPI partnership and international cooperation in joint calls – October 2021.**

There have been several Water JPI activities on International Cooperation, including two mapping exercises of international water RDI activities in 2014 and in 2019.

In 2017, two Water JPI workshops to develop International Cooperation in Research, Development and Innovation (RDI) for tackling global water challenges were organised in the framework of the ERA-NET Cofund

<sup>1</sup> <http://reports.weforum.org/global-risks-2015/part-1-global-risks-2015/introduction/>

<sup>2</sup> 2030 Water Resources Group, 2009.

**WaterWorks2015** to discuss regional specificities and cooperation opportunities. One workshop was dedicated to Africa and the Mediterranean area, and the other one was dedicated to America. More recently, the Water JPI organised different workshops targeting various audiences in the context of joint actions developed by European initiatives. Further details and proceedings of these workshops are available from the Water JPI website in a dedicated section on international cooperation<sup>3</sup>.

In addition, the Water JPI held three workshops to discuss how to improve the take-up of research findings by the economic sector at the international scale, and define joint recommendations on models to facilitate take-up of innovative solutions for the water related SDGs. The outcomes were summarized into a policy brief 4 entitled “Conclusions on business models for addressing SDGs and reducing the Death Valley of projects to create a Water-Smart Society beyond Europe” and that has been released in October 2021 for the Cairo Water Week.

As part of the 2021 Cairo Water Week that addressed the main theme “Water, Population and Global Change: Challenges and Opportunities”, the Water JPI gave two oral presentations. Véronique Briquet-Laugier, Water JPI Coordinator, presented “The Water JPI: towards a sustainable instrument to tackle Global Challenges & the UN Sustainable Development Goals”, and Esther Diez Cebollero, Water JPI Secretariat, gave a talk on “Water governance: addressing research and innovation gaps in the future. The Water JPI perspective”. Both presentations allowed communicating to a great audience on latest developments in the fields of international cooperation and water governance whilst highlighting opportunities and barriers for enhanced collaboration amongst partners, as well as the potential contribution of the Water JPI in the achievement of SDGs.

In this context, the Water JPI organised during the 2021 Cairo Water Week a side event on “Strengthening EU-Africa Cooperation in Water RDI: challenges and opportunities”, in collaboration with PRIMA ([www.prima-med.org](http://www.prima-med.org)) and the Egyptian Academy of Scientific Research and Technology, ASRT ([www.asrt.sci.eg](http://www.asrt.sci.eg)). The three-hour hybrid workshop was held online and onsite on Tuesday 26 October 2021.

The aim of this Water JPI workshop was to explore opportunities for collaboration between Europe and Africa in water RDI on the basis of the past workshops organized within the Water JPI. The workshop targeted funders (research funding agencies and ministries, development banks), operators dealing with water management and capacity development (international organisations, private institutions and research operators). The event was structured around two high-level panel discussions on alignment and social innovation.

Results from this workshop will support the Water JPI and other water RDI regional programmes such as PRIMA in the development of their international cooperation strategy in the near future, the exchange of ideas and practices on alignment, and the identification of collaborative opportunities with partner initiatives.

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<sup>3</sup> <http://www.waterjpi.eu/international-cooperation/international-cooperation-workshops>

<sup>4</sup> Policy brief - Conclusions on business models for addressing SDGs and reducing the *Death Valley* of projects to create a Water-Smart Society beyond Europe, Water JPI, 2021  
[http://www.waterjpi.eu/resources/document-library/ic4water-policy-brief\\_business-models-for-sdgs.pdf](http://www.waterjpi.eu/resources/document-library/ic4water-policy-brief_business-models-for-sdgs.pdf)

## 2. Methodology

### 2.1. Workshop Objectives

The overall purpose of this workshop was to explore opportunities for collaboration between Europe and Africa in water RDI. By exchanging with international initiatives dealing with water management and capacity development, governmental institutions, research operators carrying out and/or funding RDI joint activities with the African countries, the workshop has four specific aims:

- Further developing the Water JPI & PRIMA networks in this region,
- Collecting views from panellist members as regards key RDI needs and cooperation opportunities with the Water JPI,
- Proposing models for further cooperation and possible types of actions,
- Supporting the Water JPI and other regional programmes in the development of their international cooperation strategy in the near future.

### 2.2. Workshop Audience

The workshop was mainly targeted at research funding agencies, regional funding agencies, governmental institutions, policy-makers, EU delegation, development banks and international organisations dealing with water management and capacity development, as well as research performing operators.

Over hundred people from 30 countries attended the workshop, both physically and virtually. This hybrid event gathered 103 registered online attendees (including additional online connections) and 43 on-site attendees in Cairo. **Annex 1** provides a list of registered online attendees and on-site attendees.

### 2.3. Workshop Programme

The workshop programme is detailed in **Annex 2**.

The Programme counted on the participation of Daan du Toit, Deputy Director-General of International Cooperation and Resources at the Department of Science and Innovation (DSI) of the Republic of South Africa, for the Keynote speech.

The workshop was structured around two high-level panel discussions, moderated by Salma Essawi (ASRT, EG) and Adrian Healy (Cardiff University, UK) on:

- Alignment of RDI programmes between Africa and EU,
- Social innovation: the social debate on competing use of water in some regions of Africa, and how to increase capacity development and stakeholders and private sector participation for water RDI.

The Programme gathered as panellists:

- Jean Albergel, Senior Scientist in hydrology at the French National Research Institute for Sustainable Development (IRD)
- Majid AlSadek, representative from the PHEMAC<sup>5</sup> project - *Participatory hub for effective mapping, acceleration and capitalization of the Water Energy and Agri-Food Nexus best practices*
- Nienke Buisman, European Commission, DG RTD.F.2 Head of Unit for Global Approach and International Cooperation in R&I Africa
- Maurice Héral, French National Research Agency (ANR) and former Water JPI Chair

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<sup>5</sup> <https://www.phemac.eu/>



- Gustavo Perez, representative from the NEX-LABS<sup>6</sup> project - *Nexus-driven open Labs for competitive and inclusive growth in the Mediterranean*
- Amr Radwan, Head of Research & Innovation Management at the ASRT (*excused the day of the workshop*)
- Mamohloding Tlhagale, South African Water Research Commission (WRC)
- Octavi Quintana, PRIMA Director
- Craig Sheridan, principal investigator of the URBWAT<sup>7</sup> project - *Designing, implementing, monitoring and understanding a grey-water drainage and partial treatment system within an urban informal settlement*
- Uta Wehn, Associate Professor of Water Innovation Studies, IHE Delft Institute for Water Education and Adlerbert visiting Professor of Marine Citizen Science for Sustainable Development, University of Gothenburg.

### 3. Proceedings

The Master presentation is to be considered as part of these proceedings.

#### 3.1. Welcome and Introduction

The **Water JPI coordinator, Véronique Briquet-Laugier**, opened the workshop by welcoming the participants. She presented the aims of the workshop, and highlighted the expectations for identifying actions for developing internationalisation in close cooperation with the Water JPI members and identified networks such as PRIMA and institutions.

**Mohamed El-Shinawi, Co-Chair of the PRIMA Foundation**, opened the workshop in Cairo. Water scarcity is a global challenge facing not only the African region, and multiple driving forces, like increased population, food demands and climate change, are pushing the challenge to its boundaries and this is expected to growth in time. This is forcing more countries into more expensive water source, and costs for its dissemination will augment with the limited fresh water supplies. This will lead to a heavy economic, environmental and social burden. Water scarcity within Egypt, hosting country of this event, is a key challenge for the growing population. Ensuring sustainable water resource management is a matter of high priority. The Egypt's 2030 Vision is stating that the environment is integrated in all economic sectors, to preserve natural resources and support the efficient use and investment while ensuring next generation rights to a clean, safe and healthy environment, leading to a diversified production of resources and economic activities, supporting competitiveness, providing new jobs, and eliminating poverty and achieving social justice. Integrated resource plans and management are the key to overcome the water challenge in our region. This challenge is being compounding by its multiple nexuses, with various development sectors. Therefore, it is crucial to address the various linkages of the water sector with other sectors like energy, food, health and economic development as a whole. He called for actions beyond the boundaries of each sector.

In line with this Vision, an activity supported by ASRT, called “water crisis: towards more crop per drop” was highlighted. This internal call for projects within ASRT is awarding grants in different areas for the development and utilisation of water conservation and smart irrigation technologies, development and utilisation of precision and smart agriculture, utilisation of satellite observations to ensure monitoring and real-time processing solutions, strategies for balancing water security, strategic and foresight studies, or establishing online Africa Science Dialogue. The granted projects are RDI projects, studies and data collection projects, or

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<sup>6</sup> <https://www.enicbcmed.eu/projects/nex-labs>

<sup>7</sup> <https://liu.se/en/article/the-urbwat-project>

projects for science communication, to foster the participation in water international conferences or publication.

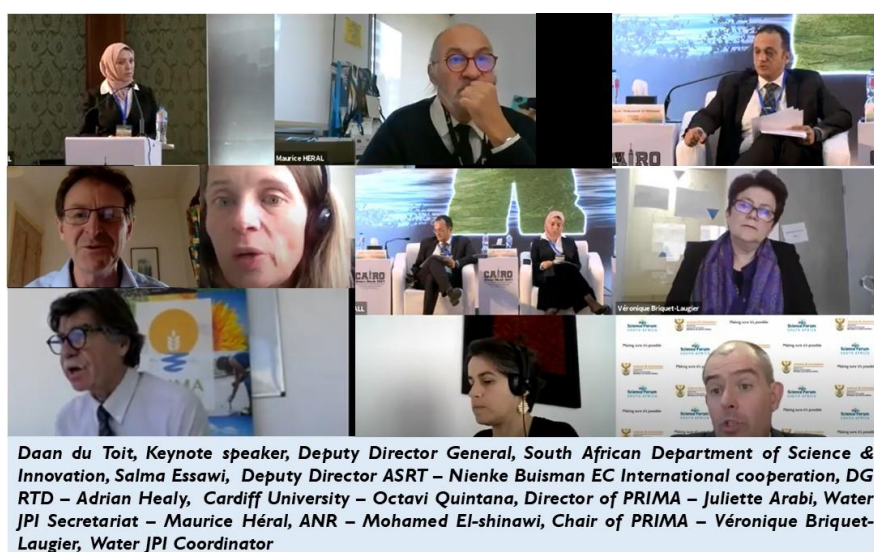
The blue economy paradigm is a huge next step in the overall concept of generation and realisation of sustainable human development. What PRIMA, the Water JPI, and local funding are doing can be seen as a unique opportunity for stakeholders, at all levels, public and private, to share ideas and opportunities, and to create new innovative partnerships and work together towards turning the concepts and discussions into tangible actions.

The aim and objective of this workshop are to explore opportunities for cooperation between Europe and Africa in order to support the development of international cooperation strategies of water RDI initiatives through the collection of relevant information on modalities and barriers for cooperation, and to exchange ideas and best practices on alignment and social innovation.

### **Véronique Briquet-Laugier, Water JPI Coordinator**

The Water JPI objectives, key achievements and activities, and the landscape of international cooperation were presented. As of June 2021, the Water JPI membership includes a total of 20 voting member-countries, 5 associated partners and 3 observer countries (Figure 1), which collectively represent 88% of European public RDI investment in water resources. The joint activities include, among others, the implementation of seven Joints Calls with the funding of more than hundred RDI transnational projects, two international Knowledge Hubs, and one Thematic Annual Programming action in an effort to reinforce International Cooperation in RDI to address global water challenges. The next step under Horizon Europe is the launch of the Co-funded European Partnership Water4All - Water Security for the Planet.

PRIMA and some of actions in R&I on water management were also presented. PRIMA is an Article 185 Initiative, a partnership between 19 Participating States (with 22 funding agencies involved) and the EU. PRIMA is addressing four thematic pillars: water management, farming systems, agri-food systems and the WEF nexus. PRIMA's objectives are to promote the alignment of national research and innovation programmes and the strengthening of RDI capacities across the participating countries, and is aiming to tackle societal and environmental challenges through research and innovation. So far, 31 International research and innovation cooperation projects on water management have been funded by PRIMA actions for a budget over 41 M€.



**Figure 2. Online screenshots of workshop attendees**

### 3.2. Keynote Address: Daan du Toit, South African Department of Science & Innovation

**Daan du Toit, Deputy Director-General International Cooperation and Resources at the South African Department of Science and Innovation**, set the scene to this important workshop composed of two interesting panel discussions with high level panellists, taking a step back, and looking at what are the opportunities and the challenges.

#### **The opportunities.**

Why collaboration of EU and Africa in water is key for science diplomacy? This is when there is shared expertise with international cooperation that science and innovation progress.

Why we should invest in R&I in water is so obvious: water and secure and safe access to water are high on the agenda of many African countries, and all around the globe.

The recent response to Covid-19 has shown how it is important to be international, global and coordinated to tackle a pandemic. And in that regard, the European commission's reaction was exemplary.

There is no need in reinventing the wheel, EU and Africa know what worked and did not worked in the past decade. This workshop is very timely as it is coming at a moment of African Union (AU) and EU have established the basis to cooperate: [Africa-EU Partnership | International Partnerships \(europa.eu\)](#). Hence, the opportunity is the high political relevance and the high strategic topic of water.

#### **The challenges.**

It is easy to announce, but it is more complicated to translate these announcements into actions. Moreover, it is important to have coordination to avoid duplication as human and financial resources are limited.

The research agendas of AU and EU are not aligned, as the EU and AU are different, their mandates differ. Consequently, to build a true joint partnership is absolutely essential to achieve the goals that will be set by AU and EU.

#### **Some recommendations.**

It is important to find the linkages between the two research and innovation agendas of EU and AU, to be ambitious and to focus on impact, and in this regard not to be scared to fail. Let's experiment together, let's design new cooperation programs and tools. Let's go beyond the bureaucracy talk and get into open science, a science opened to society and truly inclusive.

The EU Framework Programmes (FP7, H2020, Horizon Europe) was constructed on four pillars: cooperation, ideas, people and capacity. Horizon 2020 was slightly restructured according to the key lessons from FP7 and previous Framework Programmes. That shows that we do not need to reinvent the wheels: we have to have concrete actions and to focus on excellence. If FP7 created a great network, we need to strengthen it on these four pillars and widen the partnership between AU and EU.

**To conclude**, what we are talking about today, is to put science diplomacy in practice, it is making it real and happen. We need science diplomacy to shape and design cooperation tools.

### 3.3. Panel Discussions

#### 3.3.1. Panel on Alignment of RDI programmes between Africa and Europe

**Moderator:** Salma Essawi (ASRT)

**Panel composition:** Nienke Buisman (EC International cooperation, DG RTD), Majid AlSadek (Phemac), Maurice Heral (ANR), Gustavo Perez (Nex-Labs), Amr Radwan (ASRT), and Mamohlodging Tlhagale (WRC)

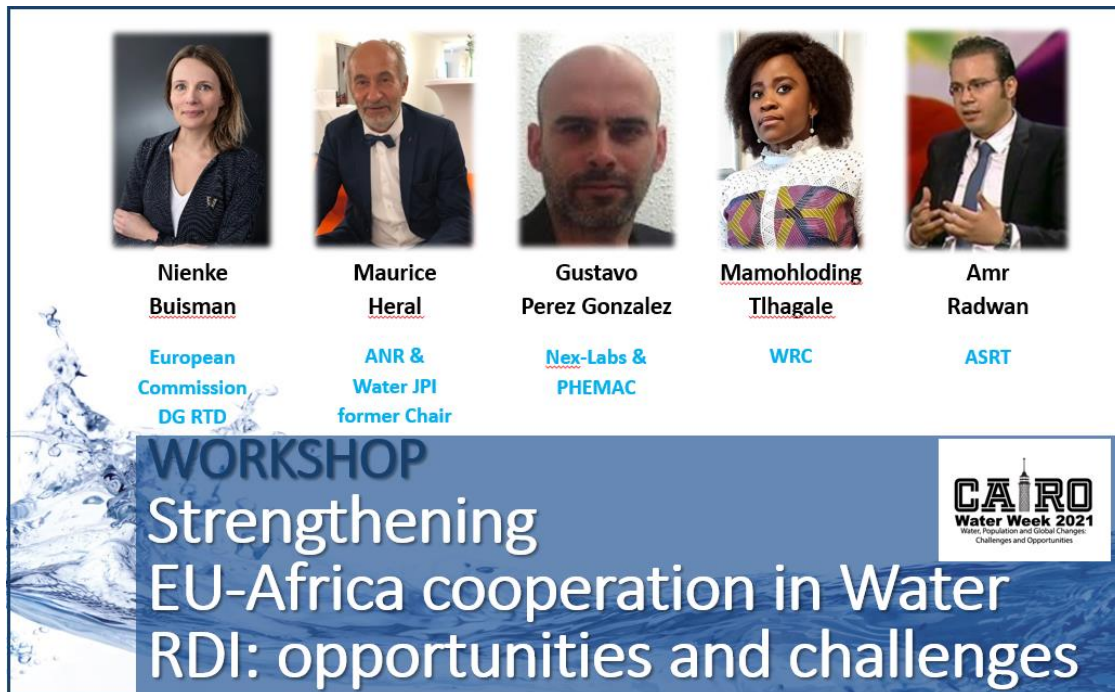


Figure 3. Panel on Alignment of RDI programmes between Africa and Europe.

The outcomes of the panel discussion can be put in the three following objectives.

**To explore opportunities:**

- The living labs are cooperation tools to accelerate inclusive innovation as they use co-creation between businesses, civil society and research laboratories and offer technical training opportunities;
- To build upon previous partnerships such as Water JPI;
- To align to other existing initiatives.

**To support the development of international cooperation strategies:**

- To focus on very precise water challenges such as emerging contaminants in water;
- To keep hands-on work to transfer the results of research to society;
- It is the right time to be focused in cooperation between EU and Africa, and capitalize on the existing;
- It is important to have political support such as the AU-EU Summit.

**To exchange ideas and best practices:**

- Technical recommendations;
- NGOs' inclusion;
- To find what kind of support is the most appropriate, such as capacity development.

**3.3.2. Panel on Social Innovation**

**Moderator:** Adrian Healy (Cardiff University)

**Panel composition:** Jean Albergel (IRD), Octavi Quintana (PRIMA), Craig Sheridan (URBWAT), Uta Wehn (IHE Delft and university of Gothenburg)





Figure 4. Panel on Social Innovation.

**The definitions of social innovation by each panellist:**

Starting with Uta Wehn, former coordinator of the AfriAlliance project, for which Social Innovation was at the core of their entire exercise. On one hand it is important to consider the outcomes one would expect from social innovation, i.e. the societal challenges in Africa arising from climate change. On the other hand, social innovation is the result of a process that includes technological solutions, governance structures, capacity development and the inclusion of the private sector, as illustrated in the figure 5 below.

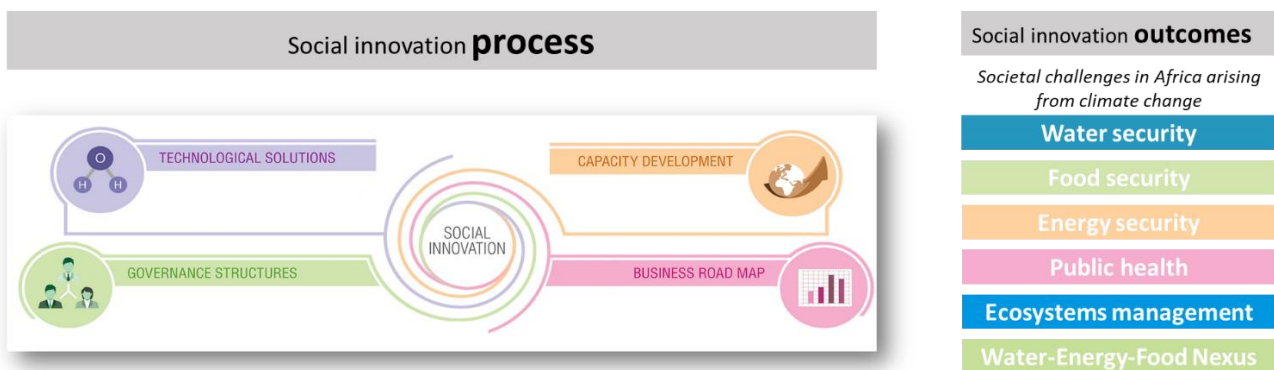


Figure 5. Social innovation as per AfriAlliance.

For Jean Albergel, hydrologist at the French IRD, social innovation is the new solution that generates positive impact for society and the environment regardless its primary purpose. It develops new response for citizens in all sectors supported by diverse actors and stakeholders. Social innovation brings effective solutions to complex issues.

For Craig Sheridan, who works on a daily basis in South African township, the definition of social innovation is more about these interplays around the different systems and trying to maintain a set of values in which one discipline does not take dominance on another.

For Octavi Quintana, the director of PRIMA, social innovation was well defined by the panellists. And to underline today's topic, when dealing with water scarcity, there are competing demands. Hence, we need a social debate to set priorities and put a hierarchy. We need to engage in these discussions with many end users as possible and also the different suppliers' offers that exist both conventional and non-conventional.

The outcomes of the panel discussion can be put in the three following objectives.

**To explore opportunities:**

- To cooperate for capacity development, governance and technological solutions;
- The challenge for capacity development is with whom do we work?
- To develop cooperation with the private sector and establish a business roadmap and invest in real life test to co-create (living labs);
- Data sharing: the open science/open data is key to cooperation between Africa and EU;
- To explore opportunities in a holistic way to have transferable solutions;
- International cooperation is a mean to bring solutions in the field of fresh water: being involved in this cooperation and do not be afraid to fail, as it will also bring positive outcomes to any engaged action/activity.

**To support the development of international cooperation strategies:**

- To focus on areas of water governance to tackle the water scarcity with technology and governance at the same time. Who uses this technology? And how?
- Social innovation mitigates the debate;
- What international cooperation is for? Technological solutions; governance management
- To engage without fearing failure. Projects can fail and lessons will be learned.

**To exchange ideas and best practices:**

- There are lessons to learn from Europe and from Africa: how do we go for social innovation?
- To use the wealth of the fact sheets that AfriAlliance developed throughout its existence.

## 4. Conclusions of the meeting and next steps

Véronique Briquet-Laugier thanked Daan du Toit, for his inspiring keynote speech, as well as Salma Essawi and Adrian Healy for the moderation of the panels, the entire panels for the insightful exchanges, and the ASRT and PRIMA for their support in the preparation the event and contribution to its success.

Strengthening EU - Africa cooperation in the water field for research and innovation is very much needed. To achieve that, we have to build upon existing partnerships, such as PRIMA, Water JPI, AfriAlliance that have a lot experience in this domain. Respect the African context, and be flexible to be able to benefit from each other is crucial. Understanding where the values lie, and combine the African - EU values to reach out solutions for the water-related research and innovation. Daan du Toit told us to not be afraid of failing and that to try is already great.

We have to explore some tools and opportunities that can be used between EU and Africa. We have to try to develop some tools like regional Living Labs, knowledge hubs, and to tackle in those tools some precise topics. As stressed by Maurice Héral, this is a time now to be focused because we have huge challenges in water scarcity. It is time to capitalize on projects results from both continents, Africa and EU, and to have hands-on to tackle those specific topics. Capacity development for social innovation is a huge tool to use. EU needs to learn from Africa about this, to technically train people, to capacity development for this entire Water and RI field. Like Craig Sheridan said it is not expensive.

To exchange ideas and best practices, we have to rely on policy briefs, and Nienke Buisman reminded on the importance of the political support (two summits happening in 2022 in the Mediterranean area and with the African Union) and funding support from the European Commission. We have to align and build on existing partnerships. AfriAlliance, PRIMA and the Water JPI have experience with Africa. To benefit from Africa creativity, we have to not be afraid to move on cooperation with different countries in Africa.

To support the development of international cooperation strategies, lessons learned from Europe that has a broad experience with multilateral consortia should be taken on board. We have to work together about that to include NGOs and enterprises. Uta Wehn showed us how much it is important to bring the private sector to bring solutions to the base of pyramids. To increase awareness, civil society and stakeholders have to be wrapped-up in our adventure. We also to be open to open science (citizen science, open data...), everything should be thoughtful and thought to be in an open and shared way.

Everything takes time. We have to be patient, like Octavi Quintana said. We have to work together with patience and respect for enhancing this cooperation between Europe and Africa, we also have to appreciate our cultural differences. The key for us is to be transparent and multicultural.

Concluding remarks were made by Mohamed El-Shinawi, Co-Chair of the PRIMA Foundation. Science is important, reciprocity is extremely important. We have to put the SDGs in front of our eyes. We have a lot of challenges, especially, putting concrete actions with plans. We need to have more coordination and avoid duplication. We have to build real co-ownership and resources for funding. We have to leverage synergies and reconcile ambitions to adapt the open science concept. We have to align the programme between Africa and EU. Of course, we need to speak together and exchange ideas, but it is also very important to agree and use the tools we have to implement our actions. Water is becoming rare, and demands increasing the challenges. There is a gap of research. We have to work on the national level to diffuse innovation and make science available. It depends on the cluster of projects and it shows how important projects are when we engage many stakeholders in innovative ways, without forgetting policy makers and capitalizing on other projects. Creativity is very important, we need to work together and talk together, to use available tools and not to forget about the NGOs. The challenge is to put our ideas into long-term sustainable actions. We have to have a positive impact on our society. It is not only about technologies, it's more complex how we interact together. We use different systems and sets of values. How to protect our resources is very important, we need to gather ideas and data, and we to invest more in data. A lot of lessons that can be learned from experience in Europe, and we have to discuss with African countries how this could be implemented in their countries, with flexibility and practicality, knowing what is happening in the ground. There are still gaps and capacity needs for all countries.

Transparency, trust, flexibility, integration are the keys. We have to be more innovative in all our techniques, to develop new degrees and ways to settle our problems.

Results from this workshop will support the Water JPI and PRIMA in the development of their international cooperation strategy in the near future. As for the Water JPI, the international cooperation strategy will be presented to the Governing Board for endorsement in May 2022. This strategy will feed the launch of activities to foster international cooperation under the Co-funded European partnership Water4All.

## Annex 1: List of attendees

### List of on-site attendees

First name	Last name	Organisation	City	Country
Mahmoud sayed	Mohammed	Faculty of science, Cairo University	Cairo	Egypt
	Ashraf	Cic	Giza	Egypt
Abdelazim		FECU	Cairo	Egypt
Mohamed	El-shinawi	PRIMA	Cairo	Egypt
	Kovacs	Ministry of Interior	Budapest	Hungary
Adb el-naby	Qotb	Mechanical & Electrical Department	Cairo	Egypt
Mohamed	Zitoon	Egyptian Public Authority for Drainage Projects	Cairo	Egypt
Ahmed elgamil	Goher	Alexandria sanitary drainage company	Alexandria	Egypt
Ahmed	Salem	Mechanical & Electrical Department	Cairo	Egypt
El-said	Hamed	Ministry of Water Resources and Irrigation	Cairo	Egypt
Ahmed	Gazaly	Regional Training Sector	Giza	Egypt
Mohamed	Aboutaleb	National Research Centre	Cairo	Egypt
Boriek	Alnasharty	Aqua Stone for Natural drinking water	Koum Hamada	Egypt
Mostafa	Hussin	National Water Research Center	Cairo	Egypt
	Abo elazm	National Water Research Center	Cairo	Egypt
Abd el-hamid	Bedeir	Mechanical & Electrical Department	Cairo	Egypt
Abd el-hady	Zaki	Ministry of Water Resources and Irrigation	Cairo	Egypt
Fayz	Boctor	General Authority for the High Dam	Aswan	Egypt
Faruk	Mohmed	Mechanical & Electrical Department	Cairo	Egypt
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Fathy	Abd-aziz	Ministry of Water Resources and Irrigation	Cairo	Egypt
Atef	Abdel-hakeem	Minia University - Faculty of engineering	Minia	Egypt
Abdelfattah	Ahmed zeid	Global for Industrialization	Menofia	Egypt
Ismail	El-zonfoly	Ministry of Water Resources and Irrigation	Giza	Egypt
Abdelhamid	Hussein	Bibliotheca Alexandrina	Alexandria	Egypt
Salah	Abdel moatee	National Water Research Center	Cairo	Egypt
Mohamed	Alu	National Water Research Center	Cairo	Egypt
Alaa	Ahmed	Helwan University	Cairo	Egypt
Hesham	Ahmed	Faculty of agriculture	Giza	Egypt
Zakaria	Ibrahim	Heliopolis university	Qalyoubia	Egypt
George	Nassief	Ministry of water Resources and Irrigation	Cairo	Egypt
Mahmoud	Abdulmuin	CIC	Cairo	Egypt



Ahmed	Azzam	Ministry of water resources and irrigation	Tanta	Egypt
Hassan	Elsaid	Regional Training Sector	Giza	Egypt
Mohamed	Refaat	Regional Training Sector	Giza	Egypt
	Marei	National Water Research Center	Cairo	Egypt
Abdel	Fattah amer	National Water Research Center	Cairo	Egypt
	Salah	Ministry of Water Resources and Irrigation	Giza	Egypt
	Gramlich	AUC - Devilag	Cairo	Egypt
Mamdouh	Kameil	Ministry of water resources and irrigation	Octoper	Egypt
Alaa	El dein	CIC	Cairo	Egypt
Georges	Abdelmassih	DANMISSION	Beirut	Lebanon
Hussein	Saeed	Ministry of Water Resources and Irrigation	Helwan	Egypt

#### List of registered online attendees

First name	Last name	Organisation	Country
Jonathan	Abra	KTN - Knowledge Transfer Network	United Kingdom
Ahmed	Ahmed	South Valley University	Egypt
Jadesola	Aileru	LASEPA	Nigeria
Ryma	Aissat	BRGM - French geological survey	France
Jean	Albergel	IRD - Institute of Research for Development	France
Moses	Alfred	ACEWATER Redeemer's University	Nigeria
Ouaziz	Ali	Université Mohamed V de Rabat / école supérieure de technologie de salé	Morocco
Majid	AlSadek	PHEMAC project, National Scientific and Technical Information Network	Egypt
Juliette	Arabi	Water JPI	France
Jesus	Argente	University of Murcia	Spain
Islam	Atef	Heliopolis University	Egypt
Claire	Bajou	2PE	France
Abou El Hassaen	Benyamina	Oran1 university	Algeria
Valérie	Beysat	City of Science and Industry at La Villette	France
Véronique	Briquet-Laugier	Water JPI	France
Nienke	Buisman	European Commission	Belgium
Gaetano	Casale	IHE Delft Institute for Water Education	Netherlands
Alessandra	Casali	ISPRA - National Institute for Environmental Protection and Research	Italy
Tiyani	Chauke	Water Research Commission	South Africa
Serge	Chiron	University of Montpellier	France
Juan	Climent Blasco	AEI - State Research Agency	Spain
Rasaki	Dauda	Redeemer's University	Nigeria
Alienor	de Moucheron	PRIMA	Spain

Francesca	De Pascàlis	DANUBIUS-RI and CNR	Italy
Marie-Christine	Dictor	BRGM - French geological survey	France
Sofia	Dimitropoulou	GSRI - General Secretariat of Research and Innovation	Greece
Daan	du Toit	Department of Science and Innovation	South Africa
Mona	Eftekhardakhah	NIVA - Norwegian Institute for Water Research	Norway
Ismail	El Faramawi	Italian Agency for Development Cooperation	Italy
Azza	Elbendary	Cairo University, College of agriculture	Egypt
Nabeel	Elhady	Cairo University	Egypt
Sara	Elmaghraby	PRIMA	Spain
Alaaeldin	Elozeiri	WUR - Wageningen University & Research	Netherlands
Paul	Engelke	Kleine Solutions GmbH	Germany
Giorgio Valentino	Federici	Università di Firenze	Italy
Abd-Alla	Gad	National Authority for Remote Sensing and Space Sciences (NARSS),	Egypt
Jan	Gaebler	Fraunhofer Institute for Solar Energy Systems ISE	Germany
Juan	Garcia	Universidad Complutense de Madrid	Spain
Nawras	Ghanem	Helmholtz Centre for Environmental Research - UFZ	Germany
Virginie	Gillet	FAO - Food and Agriculture Organisation	Italy
Avelino	Gonzalez Gonzalez	European Commission - DG RTD	Belgium
Josue	Gonzalez-Camejo	Università Politecnica delle Marche	Italy
Anissa	Grieb	DVGW Research Centre TUHH	Germany
Adrian	Healy	Cardiff University	United Kingdom
Maurice	Héral	ANR - National Research Agency	France
Jan	Hofman	University of Bath	United Kingdom
Mohamed	Kefi	Research center and water technologies	Tunisia
Adeyemi	Lewis	Lagos State Environmental Protection Agency (LASEPA)	Nigeria
Antonio	Lo Porto	Water Research Institute (IRSA-CNR)	Italy
Elve	Lode	Tallinn University	Estonia
Miguel	Madrid	University of Waterloo	Canada
Andrea	Martelli	Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria (CREA)	Italy
Kevin	McGuigan	RCSI - Royal College of Surgeons in Ireland	Ireland
Raoul	Mille	INRAE - National Research Institute for Agriculture, Food and Environment	France
Giuseppina	Monacelli	Water JPI	Italy
Marc	Neumann	Basque Centre for Climate Change - BC3	Spain
Joël	Ngounde	Bioconcept International	Cameroon
Hristo	Nikolov	SRTI-BAS - Space Research and Technology Institute	Bulgaria
Mandri	Ntshani	Department of Science and Innovation	South Africa

Olumide	Olukanni	Redeemer's University	Nigeria
Marco	Orlando	PRIMA	Spain
Maroua	Oueslati	SEMIDE - Système Euro-Méditerranéen d'Information dans le Domaine de l'Eau	France
Giulio	Pattanaro	European Commission - European Research Executive Agency (REA)	Belgium
Jowita	Pawlak	National Centre for Research and Development	Poland
Gustavo	Perez	NEX-LABS project, Autonomous University of Barcelona	Spain
Giovanni	Pino	Italian Hydrogen Forum	Italy
Octavi	Quintana	PRIMA	Spain
Saida	Rafrafi Farhat	MHESR - Ministry of Higher Education and Scientific Research	Tunisia
Erwan	Rauwel	Estonian University of Life Science	Estonia
Stephanie	Reiss	-	France
Vicente José	Richart Díaz	Junta Central de Usuarios del Vinalopó, L'Alacantí y Consorcio de Aguas de la Marina Baja	Spain
Monica	Riva	Polytechnic University of Milan	Italy
Karl	Rudolph	IEEM gGmbH	Germany
Daniela	Sani	art-er	Italy
Ricardo	Santos	Tecnico Lisboa, Lisbon University	Portugal
Francesca	Sapio	genegis.net	Italy
Sebahattin	Sari	TurkStat	Turkey
Bianca	Schmid-Paech	IGB - Leibniz-Institute of Freshwater Ecology and Inland Fisheries	Germany
Richard	Sempere	Ocean Sciences Institute, Aix Marseille University	France
Maryam	Shapouri	RCN - the Research Council of Norway	Norway
Craig	Sheridan	URBWAT project, University of the Witwatersrand	South Africa
Joana	Simões	Bluefocus	Portugal
Bretislav	Skácel	CREA Hydro&Energy	Czech Republic
Mohamed	Tahiri	Hassan II University of Casablanca	Morocco
Angela Celesete	Taramasso	University of Genoa	Italy
Norbert	Tchouaffe	University of Dschang	Cameroon
Valentin	Tembe Mwela	Association Kwiloise de l'eau	Democratic Republic of the Congo
Victoria	Timpe	Heliopolis University	Egypt
Mamohloding	Tlhagale	Water Research Commission	South Africa
Claire	Treignier	ANR - National Research Agency	France
Chidinma	Ugwuja	Redeemer's University, Ede	Nigeria
Emmanuel	Unuabonah	Redeemer's University, Ede	Nigeria
Olcay	Unver	Water Policy Group	Italy
Katrien	van Hooydonk	VITO - Flemish research organisation	Belgium
Teppo	Vehanen	EIFAAC - European Inland Fisheries and Aquaculture Advisory Commission	Finland

Piero	Venturi	Delegation of the European Union to the African Union	Ethiopia
Pompilio	Vergine	Water Research Institute (IRSA-CNR)	Italy
Lea	von Rüden	Fraunhofer Institute for Solar Energy Systems ISE	Germany
Uta	Wehn	IHE Delft Institute for Water Education	Netherlands
Agnes	Wilke	Fraunhofer Institute for Solar Energy Systems ISE	Germany
Sara	Zanini	PhD Student	Italy
Olga	Zlatkin	Ministry of Energy	Israel
Inoussa	Zongo	Fonds National de la Recherche et de l'Innovation pour le Développement (FONRID)	Burkina Faso

## Annex 2: Workshop programme



**Water JPI  
WORKSHOP**

**Strengthening  
EU-Africa cooperation  
in Water RDI:  
opportunities and  
challenges**



**PRIMA**  
Partnership and Research and Innovation  
IN THE MEDITERRANEAN AREA



**10 YEARS**  
**Water JPI**  
2011  
2021



أكاديمية البحث  
العلمي والتكنولوجيا  
Academy of Scientific  
Research & Technology

### SIDE EVENT OF THE 2021 CAIRO WATER WEEK

TUESDAY 26 OCTOBER 2021

12.00 TO 16.30 CEST - BRUSSELS & CAIRO TIME

virtual and onsite event - duration: 3h + 1h break

## PROGRAMME

<b>12.00 - Plenary session</b>		
5'	Welcome and opening of the meeting	Véronique Briquet-Laugier (Water JPI) Mohamed El-Shinawi (PRIMA) Mahmoud Sakr (ASRT)
<b>Introduction and keynote speaker</b>		
10'	<b>Exploring opportunities for enabling international networking</b> Examples of Water JPI / PRIMA actions	Véronique Briquet-Laugier (Water JPI)
15'	<b>Keynote address</b>	Daan du Toit (Deputy Director-General, South African Department of Science and Innovation)
<b>12.30-13.30 - Panel discussion 1</b>		
1h	<b>Alignment of RDI programmes between Africa and EU</b> Valorisation of results	<u>Moderators:</u> Salma Essawi (ASRT) <u>Panel composition:</u> Nienke Buisman (EC International cooperation, DG RTD) Majed Elsadek (Phemac project) Maurice Heral (ANR) Gustavo Perez (Nex-Labs) Amr Radwan (ASRT) Mamohlong Tlhagale (WRC)

<b>Coffee break 13h30-14h30</b>		
<b>14.30-15.30 - Panel discussion 2</b>		
1h	<b>Social innovation</b> Social debate on competing use of water in the region Capacity development Stakeholders and private sector participation	<u>Moderator:</u> Adrian Healy (Cardiff University) <u>Panel composition:</u> Jean Albergel (IRD) Octavi Quintana (PRIMA) Craig Sheridan (URBWAT) Uta Wehn (IHE Delft & University of Gothenburg)
<b>15.30 - Plenary session</b>		
20'	<b>Open to the Floor for Questions &amp; Answers</b>	<u>Moderator:</u> Salma Essawi (ASRT) & Adrian Healy (Cardiff University)
5'	Wrap-up of the Water JPI side event	Véronique Briquet-Laugier (Water JPI)
5'	Closing remarks	Mohamed El-Shinawi (PRIMA)

