

# AMBASSADORS' MEET - 2019

Dialogue with Ministry of Jal Shakti  
Government of India, New Delhi



Organized By



सत्यमेव जयते  
Government of India



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NMCG  
National Mission for Clean Ganga  
Ministry of Jal Shakti, Government of India

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August 22, 2019, New Delhi, INDIA

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NMCG  
National Mission for Clean Ganga  
Ministry of Jal Shakti, Government of India

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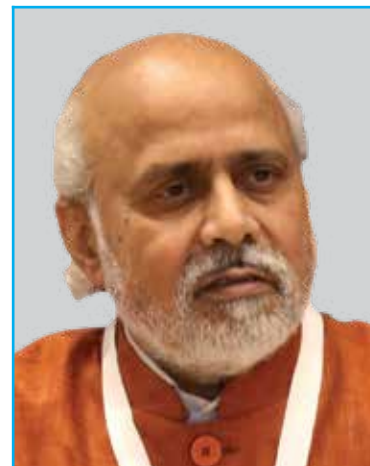
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# AMBASSADORS' MEET 2019

**Venue** : Friendship Lounge, 3rd Floor, The Ashok Hotel, Chanakyapuri, New Delhi

**Date** : Thursday, August 22, 2019

Attendees:			
S No.	Name	Designation	Country
1	Gajendra Singh Shekhawat	Minister, Jal Shakti	India
2	U P Singh	Secretary-WR, RG&GR, Ministry of Jal Shakti	India
3	Parameswaran Iyer	Secretary-DWS, Ministry of Jal Shakti	India
4	Rajiv Ranjan Mishra	DG, NMCG, Ministry of Jal Shakti	India
5	Vinod Tare	Head, cGanga	India
6	Sanmit Ahuja	Expert Member, cGanga	India
7	Daniel Chuburu	Ambassador, Embassy of Argentina, New Delhi	Argentina
8	Harinder Kaur Sidhu	HC, High Commission of Australia, New Delhi	Australia
9	Amanda Strohan	High Commission of Canada (Acting), New Delhi	Canada
10	Andre Aranha Correa do Lago	Ambassador, Embassy of Brazil, New Delhi	Brazil
11	Jainaba Jagne	Ambassador, Embassy of Gambia, New Delhi	Gambia
12	Ron Malka	Ambassador, Embassy of Israel, New Delhi	Israel
13	Jozef Drogenik	Ambassador, Embassy of Slovenia, New Delhi	Slovenia
14	Shin Bongkil	Ambassador, Embassy of South Korea, New Delhi	South Korea
15	José Ramón Barañano	Ambassador, Embassy of Spain, New Delhi	Spain
16	Alain Baetens	First Secretary, Embassy of Belgium, New Delhi	Belgium
17	Raimund Magis	Deputy Head, EU Delegation to India, New Delhi	EU
18	Arto Haapea	Minister Counselor, Embassy of Finland, New Delhi	Finland
19	Jasper Weick	Deputy Head of Mission, German Embassy, New Delhi	Germany
20	Daljeet Kaur	Climate and Environment Adviser   DFID India, British High Commission, New Delhi	UK
21	Robert Garverick	Minister Counselor, Embassy of the USA, New Delhi	USA
22	Françoise Moreau Lalanne	Counselor – Agriculture, Embassy of France, New Delhi	France
23			Italy
24	Maya Acharya	Senior Advisor Trade, Embassy of the Netherlands, New Delhi	Netherlands
25			Sweden
26	Lorenz Brunner		Austria
27	Olivia Benton-Guy	Policy Advisor, New Zealand High Commission, New Delhi	New Zealand
28	Kamilla Kristensen Rai	Counselor – Urban Development, Embassy of Denmark, New Delhi	Denmark
29	Kaia Bilton	Deputy Head of Mission, Norwegian Embassy, New Delhi	Norway



**Vinod Tare**

Professor and Founding Head, cGanga

## Preface



**Rajiv Ranjan Mishra**

Director General, NMCG

The Centre for Ganga River Basin Management and Studies (cGanga) was established at IIT Kanpur in March 2016 to act as a knowledge provider to the government and other agencies for critical issues related to efficient management of India's water assets as well as for continual scientific support in the implementation and dynamic evolution of the Ganga River Basin Management Plan. In pursuance of its responsibilities, cGanga along with NMCG (National Mission for Clean Ganga) jointly organized the Water Impact Initiative and Ambassadors' Dialogue with the Minister of Jal Shakti, Government of India, along with other experts and officials on 22nd of August 2019 in New Delhi. The program was focused on water security in India and the need for international cooperation for transformation in the water sector through collaboration, particularly in the area of accelerating technology transfer and knowledge sharing. This report is a record of the candid and exuberant exchange of ideas and discussions between the Minister of Jal Shakti and the Ambassadors of many countries as well as the experts and officials of cGanga and NMCG.

Two complementary aspects of this event need to be mentioned. On the one hand, dedicated members of NMCG and cGanga spared no effort to seek out and enthuse the Minister and Ambassadors about the Dialogue. On the other hand, the Hon'ble Minister of Jal Shakti and the many Ambassadors themselves took keen interest in sparing their time and sharing their views, thereby ensuring a very fruitful, multi-pronged dialogue. We are thankful to all of them for making the program a resounding success.

### VINOD TARE

Professor and Founding Head  
Centre for Ganga River Basin Management & Studies (cGanga),  
Indian Institute of Technology Kanpur

### RAJIV RANJAN MISHRA, IAS

Director General  
National Mission for Clean Ganga [NMCG]  
Ministry of Jal Shakti  
Government of India, New Delhi

# MEETING BRIEF



**Focused on water security in India and the need for international cooperation for transformation in water sector through collaboration, particularly in the area of accelerating technology transfer and knowledge sharing**

The Centre for Ganga River Basin Management and Studies (cGanga) and the National Mission for Clean Ganga (NMCG) organised a Dialogue of various Ambassadors and the Hon'ble Minister Shri Gajendra Singh Shekhawat, Ministry of Jal Shakti.

The program, organised on 22nd Aug 2019 in New Delhi, focused on water security in India and the need for international cooperation for transformation in water sector through collaboration, particularly in the area of accelerating technology transfer and knowledge sharing.

In addition to the Hon'ble Minister, both the Secretaries of the Ministry, Shri Parameswaran Iyer, Secretary, Drinking Water and Sanitation and Shri U P Singh, Secretary, Water Resources, River Development and Ganga Rejuvenation also participated in the dialogue. The discussions were steered by Shri Rajiv Ranjan Mishra, Director General, NMCG, and Dr Vinod Tare, Head, cGanga. They were supported by Shri Sanmit Ahuja, Expert Member, cGanga who moderated the addresses by the Ambassadors.

Ambassadors and diplomats, who attended in large numbers, shared their



experiences of how their countries strove to achieve water security and highlighted the current engagements of their respective countries in India. They were quite appreciative of the recent initiatives of the Indian Government and expressed their commitments for taking forward the engagements of their countries to a new level.

#### **India's Call to various nations to partner with it in water security**

- India announces the Jal Jeevan Mission which is to bring drinking water to every household by 2024 with an investment commitment of INR 3.5 lakh crores (USD 5bn).
- A number of impact projects have been launched. The first category of impact projects is to deal with major urban drains that are carriers of sewage and dirty water. These will be restored and conserved so that they become providers of clean water to the city. In the first phase, 5 such drains have been selected. These are:

Najafgarh (Delhi), Assi river (Varanasi), Sisamau drain (Kanpur), Jojri river (Jodhpur) and Kahn river (Indore)

- The second category of projects are related to ancillary areas and provision of eco-system services. These include resource recovery, zero waste, zero plastics, sustainable agriculture and sustainable hydropower.

- Significant emphasis shall be given on developing and implementing innovative financial instruments such as Water/Ganga bonds, Guarantees and credit enhancement instruments, water trading and marketplaces and water impact funds.

- The international cooperation between India and other nations must be streamlined. Efforts of all nations, that are currently partnered with India, must be catalogued and working groups established to improve coordination.

- India also aims to share its knowledge with other countries particularly those in Africa, South and South East Asia by establishing dedicated Water partnership forum. It has already initiated such a process with African nations by establishing the India Africa Water Forum.

**INDIA ANNOUNCES THE JAL JEEVAN MISSION WHICH IS TO BRING DRINKING WATER TO EVERY HOUSEHOLD BY 2024 WITH AN INVESTMENT COMMITMENT OF INR 3.5 LAKH CRORES (USD 5BN)**





## Speech by Hon'ble Minister Shri Gajendra Singh Shekhawat Jal Shakti

Excellencies, Secretary Iyer, Secretary Singh, DG NMCG Mr Mishra, Dr Tare, distinguished guests from various Embassies, Colleagues, Ladies and Gentlemen

It is my pleasure to welcome you all today and have a constructive dialogue on issues pertaining to water.

**1** Water scarcity is actually the reflection of our actions taken over the years in today's mirror. It is our collective responsibility to pass on this mirror to our

future generations in such a way that they can see a better and greener picture in it.

**2** With deepening climate crises the world needs change agents to preserve the precious resource that gives life. In particular we require a renewed thinking and changes in our attitude towards water. Myself and my friend, His Excellency from Israel, were sitting together right before this conference, and when we began the discussion I started my remarks with the words that, if a gentlemen from Israel is there and having



a discussion on water, then nobody else has an authority to speak.

**3** In the Independence Day speech, our PM Hon'ble Shri Narendra Modi ji, made references to an old scholar who had predicted that water will be sold in stores. His prediction has already come true, and now it is increasing water poverty as well as contributing to the plastics menace. It is an irony that in this modern age, when almost all human beings have access to mobile phones, people don't have access to clean water, which is a basic necessity of life. And this is a picture around the globe.

**4** In Indian culture, a river is not just a source of water; it is our mother. I do remember that, when I was young and I used to study in college, I asked my grandmother that in our culture we use to pray to rivers as goddesses and to water as a god. We start all our prayers and pooja by spraying the water of the holy rivers Ganga, Yamuna, Saraswati, Narmada, and Kaveri and reciting many mantras. There are so many mantras and hymns on water in Rig-Veda and our other scriptures and documents! Then why has water become so insignificant now. She said that earlier, from the ages of our

ancestors, we used to go to water for our needs but now water is coming to our homes, and as it comes to our home it has lost its value.

**5** India has decided to do something about the looming dangers of water scarcity, and we would like each of the nations represented here to be a part of this movement. Because this movement is not only for India or the country you represent, but about this planet we call our home.

**6** With the same vision in mind, the Government of India has launched the Jal Jeevan mission. Our Honourable Prime Minister has launched this mission from Red Fort with the vision of access to piped water to each and every household of the country. It's a big mission because as on date 18% of our rural households are not having access to piped water. Though 89% of the population have access through stand posts or hand pumps or any other source available, they are in the village but not in their homes. Therefore our PM has taken a call to provide drinking water to every house which aims to invest nearly USD 5 billion (or Rs. 3.5 lakh crore) over the next five years. Though the date set by the UN under

**It is an irony that in this modern age, when almost all human beings have access to mobile phones, people don't have access to clean water, which is a basic necessity of life. And this is a picture around the globe**

SDGs for piped water or safe drinking water to each and every house is 2030, but we have taken a commitment for our nation to get it done before 2024.

The PM has said that whatever efforts have been done in the last 70 years are not enough, we need to quadruple them in all forms, because the problems have compounded to large proportions over the years. To solve the water challenges staring in our faces right now, a long journey has to be made; but we are not afraid of that and have started to move with rapid pace towards the goal of providing water to all. But we must not make the same mistakes of the past, and also learn from our friends from around the world. Or we can take inspiration from success stories around the world and also from people sitting here as I mentioned.

With increase in water supply to households, the amount of wastewater coming out from the households will also increase. So we will have to take a holistic view in the Jal Jeevan Mission in which I have mentioned that our PM has taken a threefold approach. The first step is the sustainability of source, the second is the supply of water, and the third is the treatment of grey water which is generated. So to use the potential wealth of the water discharged from our household is also planned in this mission.

Our vision is to convert each drain, each pond, each lake, each reservoir, and the ground water aquifers into active water resources rather than passive ones. In India we have less than 10% storage capacity above the ground. Water around 4000 BCM is received every year through rainfall and snowfall, and the total harvestable water is somewhere around 3000 BCM. But our present capacity of retaining the water above ground is only 250 BCM.

For underground water aquifers are the largest source of water that we have. Our

dependability for water requirements in all fields is almost 65% on ground water alone, and India is the country that is depending the most on underground water sources. Our underground water resources are depleting so rapidly that, among 6800 plus blocks where we measure groundwater, almost 20% are either over exploited or are critically exploited; so we have to take care of them. Our government, under the leadership of our PM, have taken up a mission i.e. Jal Shakti Abhiyan – the Water Power Mission. We have identified the blocks which I have mentioned – 1500 blocks in 256 districts. We have made teams of very senior officials working in the government, hydrologists and geologists working in the government and engineers working here in the government, and sent those teams with the responsibility of water conservation, water reuse, and rejuvenation of traditional water bodies – identifying them and then rejuvenating them. It's like a mission and creating awareness among the people is essential because we can't make our country water secure unless and until it becomes a people's movement. Once it becomes a people's movement and everybody is aware, then only we can attain water security.

So both Jal Jeevan Mission and Jal Shakti Abhiyan have been started. We are working in the field of cleaning of river Ganges and infrastructures are being built for treatment of wastewater along the river. But, apart from this, we will have to ensure industrial alliance and technological alliance because until and unless technology is being connected with water, we can't make ourselves water secure. And we need to start to invest in data also because still we do not know how our aquifers are. How deep are our aquifers? How big are the aquifers? So we have adopted a program for this also –to identify aquifers, and on priority basis we have taken it up for the 256 districts where the

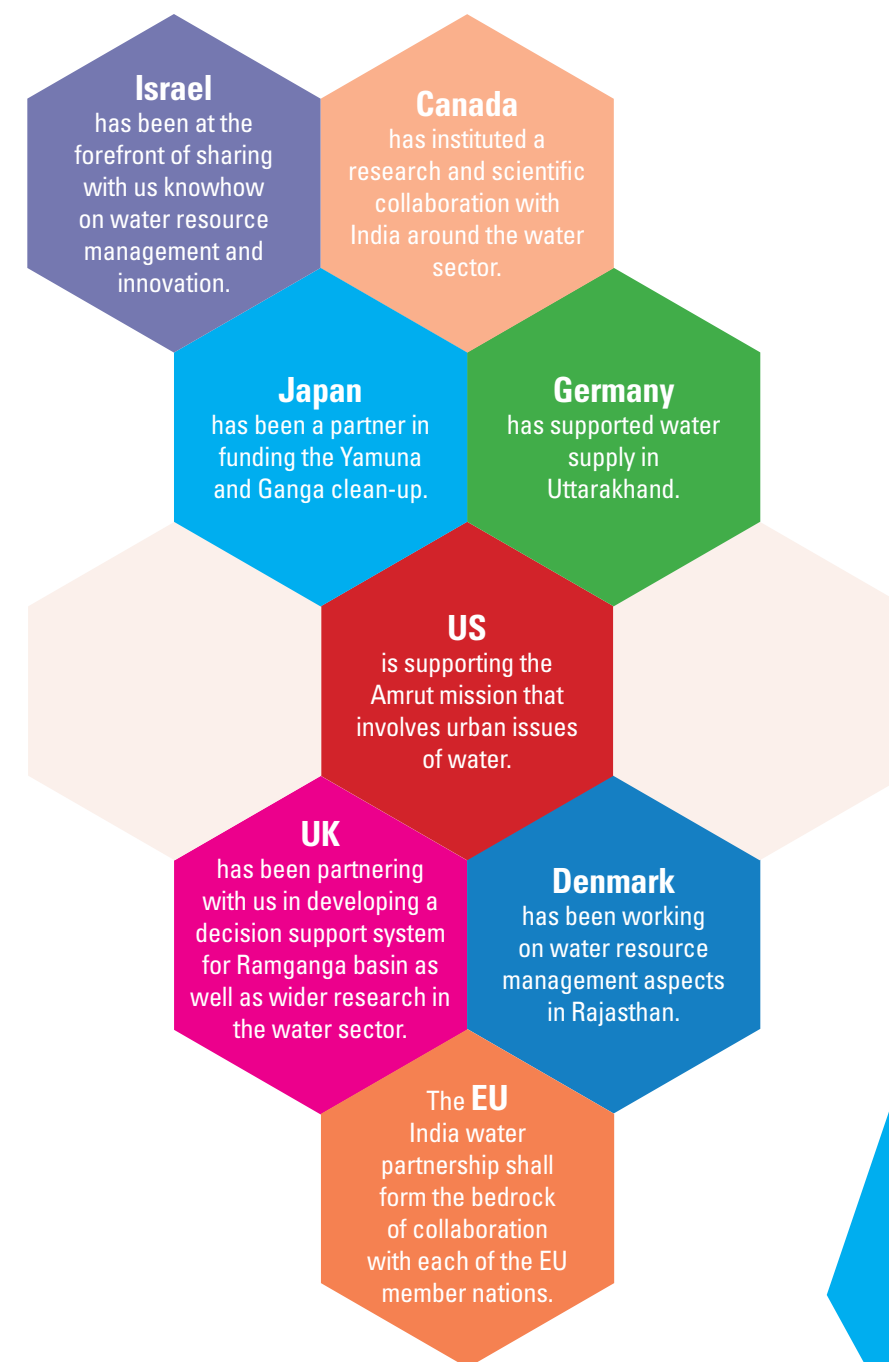
critical blocks are lying. And institutions like cGanga are also providing us data on water resources.

Our river rejuvenation and conservation require implementation strategies that achieve the right balance for both Clean Water and Continuous flow in water bodies. We are concentrating on River Cleaning, Restoration, Conservation, Resource Recovery, Zero Plastic and Zero Waste, Sustainable Agriculture, and Run-of-the-River Hydropower. All these aspects are necessary and important for the rejuvenation programme. We invite all our partner nations to participate in these projects through technical and knowledge collaborations. The projects will aim to be delivered in a PPP format so that the capital investment comes in from the private sector or the project is self-funding. So we request all partner countries to come along with the technology as well as the funding. I have already talked about industry alliance. The investments shall deliver high impact and sufficient returns to investors. Our teams are working on developing some innovative financial instruments and structures such as:

- Water bonds
- Water credit enhancement instruments
- Water credits, trading and marketplace
- Dedicated Water impact funds

Finally, this programme cannot be successful if we do not engage people and communities. We are embarking on a number of special outreach initiatives that will bring knowledge about water to all communities. The programmes shall be delivered through community owned and managed projects. You will appreciate and welcome that this initiative will provide a platform for global partnerships. The platform is taking an action-oriented approach to deliver impacts. This is where we can strategically partner with many countries.

## WE HAVE BEEN AND ARE WORKING STRATEGICALLY WITH A NUMBER OF COUNTRIES:



**At NMCG and cGanga we initiated setting up of working groups with each of the nations' embassies active in the water sector in India. That has helped in coordination but we would like that these efforts are doubled in the coming 12 months**

And many other nations are involved in a strategic manner with us. But we need to do a lot more, particularly in a coordinated manner. Therefore, through this particular call for action, we invite the nations to focus their efforts and resources in the Ganga River Basin.

At NMCG and cGanga we initiated setting up of working groups with each of the nations' embassies active in the water sector in India. That has helped in coordination but we would like that these efforts are doubled in the coming 12 months.

India has taken a global stewardship role of late in many areas of sustainability, e.g. as a world-leader in adopting solar energy, and has championed the International Solar Alliance. It has one of the largest footprints in Energy

Efficiency, having set up the Energy Efficiency Services Ltd which has the largest portfolio in the world. It is also embarking on a major electric vehicle initiative.

Through the Water Impact Initiative, we would like to form a new alliance that will take knowledge to other parts of the world, or leverage each other's resources to solve water crises in the most difficult regions.

We have already sown the seeds to partner with our African partners. A few months ago, we hosted the Minister of Water from Ghana and would like our research institutions and private sector to take their collective knowledge to African nations. We would like to initiate a formal partnership with African nations for collaboration in the water sector.



Finally, we would like to invite you to our flagship India Water Week from 24th to 28th September 2019 and India Water Impact Summit scheduled for 5th to 7th December 2019 at the same very venue. I request nations present here and those that aren't to lead delegations from your respective countries to participate in these events.

I hope that what I just mentioned excites you and shall encourage each of you to extend your hands of cooperation with India. In the end I would like to say, we Indians believe in "VASUDHAIV KUTUMBAKAM", which means "the whole world is our family", and our family today is struggling for clean water. As a family it's our responsibility to hold each other's hands and provide each other with the best of what each has. If you have technology, innovative ideas or surplus resources, share them with your global family.

Thank You.







## AMBASSADOR OF ARGENTINA



Ours is a country where we have focused on water as a strategic and crucial resource since we think of it as the most strategic natural resource of the century. As a consequence the government has designed the national water plan that in place since 2016. The main objective is positioning water resources as a key factor for sustainable development in line with the 2030 Agenda. This was also mentioned by the minister. I am promoting PPP to

generate an efficient use of aid from the environmental, social and economic point of view. That's a little bit of summing up of what we've been doing on the national plan for water I believe that there are two or three things that are worth mentioning. And one of them refers to what the minister said that we consider all the water resources as a strategic good and a human right. And its management must be, designed and executed as a collective practice.



And I believe that this goes to the question that you have to get all people on board for the practice of not wasting water. It's a collective effort that has to be done by the country itself to help create these opportunities. Other important issues are the hydrological basins. And in this regard we share the same view that you have in India concerning the main basins of the rivers. In this regard we have a long story because we are a downstream country in our region. So we have shared rivers with Brazil and some other neighboring countries. The creations of international agencies help in managing the different rivers. So that has been a practice that has been very good for us in terms of international cooperation in the field of use of water.

I will stress what I was saying earlier, that international cooperation for us is basic, and we think that the U.N. General Assembly Resolution 1803 concerning permanent sovereignty of the countries regarding its own natural resources has to be the basis on how you administer these international basins.

And finally I would say that in the case of India we think that we have a big

## INTERNATIONAL COOPERATION FOR US IS BASIC, AND WE THINK THAT THE U.N. GENERAL ASSEMBLY RESOLUTION 1803 CONCERNING PERMANENT SOVEREIGNTY OF THE COUNTRIES REGARDING ITS OWN NATURAL RESOURCES HAS TO BE THE BASIS ON HOW YOU ADMINISTER THESE INTERNATIONAL BASINS

opportunity of working together in very different fields like research on availability of our ground water resources, generation of technical bodies trained in implementing tools to adapt to climate change, boosting investments in public irrigation works, development of renewable energy for agro industry production, development and implementation of more efficient technical irrigation systems in water use and soil care, and implementation of precision agriculture systems that allow less consumption of water resources. So these are a few examples of areas in which we believe that there is great possibility of cooperation between our countries. Thank you so much.



## AUSTRALIAN HIGH COMMISSIONER



very little water. We do this because of the conservation of water and in the careful use and husbandry and management of environmental water for agriculture and also in urban water supply. We are a country that has paid a huge amount of attention in recent years to careful conservation of water and distribution of water through the use of expertise that we have developed over the years, and through the careful application of technology on urban water. For example we've made very large achievements but also very simple ones. Possibly one of the best known urban water saving device known to most of you, particularly in the developed world, is the dual flush toilet. And very few people know, but that was something that was invented in Australia. We may have a difference of scale with India and it's very significant. You know Indians are very quick to point out the relative sizes of our populations, but we share with India many of the same challenges in water management. For example Australia, like India, is a federal system of government. We have to constantly balance cross-jurisdictional legal issues, responsibilities between state governments and federal governments. This is particularly so where we have river systems and one of our most prominent river systems is the Murray-Darling Basin system. So we have great expertise in river basin management. It's worth noting for Indians that the length of the Murray-Darling River is exactly the same as the length of the Ganga and it runs across three states just as the Ganga goes through many states. We have had to pour in a lot of effort over many years, and have come up with a world leading system for managing the water flow from the Murray-Darling Basin. And let me tell you that the Murray-Darling Basin supplies 70 percent of Australia's irrigated agriculture: a single river basin and we are able to manage the environmental supply of that to manage the

I represent a country that is the driest continent on earth. I also represent the country which is one of the world's largest agricultural producers. Our agricultural production – at about 60 billion dollars a year – represents a very large contribution, and even in agricultural products Australia is a world leader and a leading exporter. For every Australian that an Australian farmer feeds that farmer will also feed another four. We manage to do this with

health of the river so that it sustains over time the rights of the farmers to access that water. This was not something that came out of the sky. It came in through many years of work, many years of trying and expertise and focus and, to be honest, with quite a lot of pain in the process.

So what is Australia bringing to India in all of this? We have been working with India over quite some years now through our sustainable development investment programme and through various projects under that. To improve and administer them I was very interested to hear your interest in data. So to improve India's data collection systems we are now very well advanced in supply. We are now very well advanced in supplying design planning for national water Informatics Centre in India. Similarly we've been working on the management of water, energy and food security in three main Himalayan river basins, the Indus, the Ganges and the Brahmaputra river basins. And what we've been doing in that process has been harnessing Australian expertise and technology to ensure food, water and climate security in those areas. Now those basins of course have great cross jurisdictional issues and what we are very happy to bring to the story is our learning and our expertise. What we hope is to share that with India. So India can learn

and leapfrog in a sense, don't make the same mistakes we make. Learn from them and be more successful when you apply those lessons to the work that you do. The Australian Water Partnership is currently supporting workshops to develop a river basin planning guide in India. As well as that, we have a number of smaller scale projects – working with farmers across India, for example, through the Australian Centre for International Agricultural Research, which is working on the concept of conservation agriculture using no-till, with results that don't require, for example, burning off stubbles that preserve the environment but also improve the health of the agriculture with the use of less water through the agricultural process.

I could go on because, of course, it's my favorite subject, but I thought that I would draw to your attention Australia's very deep commitment to working with India. Our ongoing commitment to working with India are very warm, and we welcome the initiatives of your minister and that of the prime minister from the Jal Jeevan Mission to the Jal Shakti Abhiyan and through all of those areas where Australia can work and is very happy to work with the Indian government. So once again I thank you for the opportunity given to me to speak today, and I look forward to a long partnership. Thank you.

**The Australian Centre for International Agricultural Research, which is working on the concept of conservation agriculture using no-till, with results that don't require, for example, burning off stubbles that preserve the environment but also improve the health of the agriculture with the use of less water through the agricultural process**





## AMBASSADOR OF BRAZIL

First of all I would like to thank you for inviting us and sharing ideas here. I think it's a very good formula and I really appreciate that we have this opportunity. I will try to be very brief, first highlighting some of the natural resources in our country, then the importance of water for us because of hydroelectric power, and also the challenges of wastewater and sanitation pollution that we have.

First of all we are I think luckier than Australia by her description because we have a very high annual rainfall average. We have 12 different river basins. We have a very large territory as you know, which is two and a half times that of India. Then we have two of the largest aquifers in the world – one shared with Argentina. And we have the largest tropical wetland area.

But what we also have very much in common with India is the fact that we are a developing country with enormous challenges. But we have already this special circumstance that Brazil is already 87 percent urban, which is a very big difference from that of India.

But we have very uneven availability of water in the territory. So, for instance, the northeast of Brazil has 25 percent of the population and less than 3 percent of the available water. So we have some experience also that we are very glad to be able to share with you. And I would like to mention very quickly one that has a lot to do with Jodhpur because it's our assistance program. We built more than a million systems in Brazil and they are extraordinarily similar to the ones that Jodhpur has developed and it's a very brilliant project.

And, also, we have a very important river



interlinking project which is something also that India has been developing in a very sustained way.

A word about hydropower: As you know we were not lucky because we didn't have coal and we didn't have oil. Today we think it's not unlucky, but at the time it was considered unlucky. And so until now Brazil had to develop hydropower in a very intense way and it still represents three quarters of our electricity. And we have developed those very interesting technologies in

small and large hydropower plants but also in the new kind of hydropower in the more delicate environmental contexts which we call run-of-the-river dams which have the smallest possible reservoir with maximum efficiency in the production of electricity.

Now, very quickly, I'll mention the challenges taking into consideration our population, which is very modest obviously compared to India. We only have 200 million people. But we obviously have challenges that I see here in India and that fortunately in some cities in some areas have been very successful in Brazil. And we have a national water agency that is responsible for studying, identifying and checking what is being done in different regions and in different contexts. Which I believe has very great similarities with India. We have very large cities like you and with very frustrating projects like you. We have projects of depollution in São Paulo and depollution in Rio. And they've been lasting for 20 years and this is highly frustrating. So in matters of frustration we can share a lot talk to about.

**I WANT TO MENTION ALSO SOMETHING THAT YOU SAID AND FOR ME IS ABSOLUTELY THE KEY, WHICH IS THE PRINCIPLE THAT IF YOU DON'T HAVE THE PEOPLE WITH YOU IT IS NEVER GOING TO WORK. AND, SO, WE HAVE TO THINK OF SDG 12, OF THE UNSUSTAINABLE PATTERNS OF PRODUCTION AND CONSUMPTION**

But the good news is that we are advancing also in that and São Paulo now has the Secretary of Water, who used to be the president of the World Water Forum, Mr. Benedito Braga. And he is now developing a new business solution or proposal for the rivers in São Paulo which is very ambitious and very interesting and we want to also share this with you also.

Finally I want to mention, as my Argentina colleague did, the context of the UN's the SDGs (Sustainable Development Goals). Obviously there are many SDGs related to water, but there was one of specific interest, which is SDG 6. And we've been working a lot with that – Brazil,

India and the U.N. But I want to mention also something that you said and for me is absolutely the key, which is the principle that if you don't have the people with you It is never going to work. And, so, we have to think of SDG 12, of the unsustainable patterns of production and consumption. And we have to work on that together and we would be absolutely delighted to do that.

I would like to thank you also for the invitation for the water innovation summit and the water week. And I will try to get the best minds possible to come from Brazil and develop some new ideas that we can work together with.

Thank you.





**HIGH COMMISSIONER OF THE GAMBIA**



Thank you very much. Honorable Minister, Secretaries, Excellencies, Ladies and Gentlemen. I am from the Gambia. And you know, for most people who haven't heard about it, it's one of the smallest countries in the world. And, you know, despite the modest figure of the population that Brazil has set for itself of 200 million, we are really just 2 million. However, water does play a major role in our country because the country is cut in half entirely by the River Gambia. So, on behalf of Gambia and my African colleagues, especially

the Ghana High Commissioner who unfortunately could not be here today, I am very delighted to be part of this important roundtable.

The Honorable Minister has highlighted to everybody about the water crisis that the world is facing. And you know everyday people are going without clean water. As in Gambia people dying each year of contaminated water. And women and children are walking several miles every day, sometimes twice a day, to collect



water. And this negatively impacts on their school education and on their jobs, which has a subsequent consequence on their national productivity. So Gambia is very keen to learn about the Prime Minister's program on Jal Jeevan Mission which aims to bring water to every household in India.

So we'd obviously be very keen to see this succeeding and hopefully emulating that the world over. And we're also delighted to hear about the progress that has been made in the Ganga cleaning program which I heard a lot about during the program that the Secretary hosted last year. And you know we were very keen to share about this program and others from India, and particularly around the policies that have been developed around the water rights and water pricing – how to regulate water usage in the various sectors including industry, how to better manage water in agricultural sector, and how to develop more efficient run-of-the-river hydro programs and much more. Like India, African nations also have to develop indigenous capacity in these sectors in government and in the private sector. So we'd be looking at emulating the best practices as well from India and to catapult and empower our nations around this area.

Now, a few months ago in collaboration with cGanga's Vinod Tare and Water Impact Summit, quite a few of us African ambassadors had participated in the roundtable with a touch of the India Africa water forum. Now it's extremely pleasing to hear that India would want to continue sharing ideas, as the honorable minister has said, as part of a world family.

And we hope that the India Africa Water Forum will play a great role in the sharing of these experiences as the Honorable Minister had said. So, to keep it very brief, in conclusion we do request through your Honorable Minister that we strengthen this India Africa Water Forum and give it impetus, and we'll also – as the Brazilian ambassador has said – ensure that we have quite a few relevant stakeholders and technicians come to attend the Water Impact Summit and the other events that you mentioned which would be happening in a few months time. And we also invite people from the ministry and cGanga as well to come and visit our countries as well to share some of your knowledge and technology transfer and project investments and so on and so forth.

Thank you very much.

**We do request through you Honorable Minister that we strengthen this India Africa Water Forum and give it impetus, and we'll also – as the Brazilian ambassador has said – ensure that we have quite a few relevant stakeholders and technicians come to attend the Water Impact Summit and the other events that you mentioned which would be happening in a few months time**



## AMBASSADOR OF ISRAEL



Thank you so much for inviting me.

I shall try to keep it short but I would like to open with a very optimistic remark. Yes, indeed. I agree that water is one of the biggest risks that the world is facing now. And what we can say about water is something that we can control. In Israel, most of the area is desert and the rest is semi-arid area, which is a very low starting point – less than 100 millimeters annual

rainfall in a year. Since our independence was established seventy three years ago the rainfall now is less than half of what it used to be. The population grew fifteen times since then. And now there is still abundance of water. We export water to our neighbors. So, the technology is there. The methods are there. We are keen to share them. And it's a comprehensive approach. We just need to make the distinction between the sources and the users. How we increase the sources of available clean water for different users. And this is where a world leader is.

Israel now desalinates 70% of our drinking water; and recycles more than 90% of the water that we use. This is an underside of the sources. And, of course, we harvest water very efficiently but then decide the aggradation in the uses with remarkable progress. So now we use many-many efficient ways and methods just to save water and to use it very efficiently. I mentioned only some. So we have techniques that help us to minimize the loss of water. We lose less than 3% of the water that we get. Of course we are metering every water that we use. We use a very sensitive structure of incentives in order to give the sense of the value of water to citizens. And, yes, I agree that we need to harness the population to that, so we see ourselves as a water-respectful culture. And you have this policy for water independent of weather. So now if we get more rainfall it's only a bonus. But we gain full control what our uses of water are. And we are, as I said, keen to share all these experiences, these know how's, these techniques with our friends here in India using the many techniques that are mentioned here for drip irrigation and other techniques that we use now use of precision agriculture. We use drones and satellites in order to be very efficient so you can monitor the fields and calculate the



exact amount of water and fertilizers that each part of the field needs of a particular user, using water in a very efficient manner.

Here in India now we have many projects all over India. I will start towards the center of excellence that to implement advanced techniques of using water efficiently drip irrigation as said is one of them. And many other techniques using the right crop, right seeds that are drought resistant, etc. can be elaborated later.

We have many projects of master plans, desalinating plans, recycling plans that you use all over India. I can mention Rajasthan, Punjab, Himachal Pradesh, Uttarakhand, and Uttar Pradesh for a flagship project for a comprehensive approach that we use. As I said about demand and supply of the sources and the users a comprehensive approach was the right structure to mitigate this challenge, and of course we are willing to share all this experience and technology with our friends here in India.

Thank you.



**OF COURSE WE ARE METERING EVERY WATER THAT WE USE. WE USE A VERY SENSITIVE STRUCTURE OF INCENTIVES IN ORDER TO GIVE THE SENSE OF THE VALUE OF WATER TO CITIZENS. AND, YES, I AGREE THAT WE NEED TO HARNESS THE POPULATION TO THAT, SO WE SEE OURSELVES AS A WATER-RESPECTFUL CULTURE. AND YOU HAVE THIS POLICY FOR WATER INDEPENDENT OF WEATHER**



**REPRESENTATIVES OF EMBASSY OF UNITED STATES OF AMERICA**

Mr. Minister thank you very much for inviting us today and for your comments on the water situation and your plans for India. I think any of us who have been here for any time at all have recognized the significance of the water issue in India. And it was most noticeable to me this summer, when the Prime Minister just after his inauguration for the second term chose his first radio address to the nation on the weekend following his inauguration to talk about water issues and the importance for India.

So I want to assure you that the United States stands ready to support efforts in India to both advance clean water solutions for health reasons and other social aspects. And that we're also interested in working in irrigation and farming. And then, of course, on the clean river projects and other types of areas. I'll just mention a few things that we're doing right now and then I also have a few other areas where I think we can work forward to develop more programs because I think it's one thing just to say we're doing some things, but we also want to try to take the next step and look beyond that.

So our national oceanic and atmospheric association is working with the Ministry of Earth Sciences. They have an agreement to study the monsoon and the patterns of rainfall across India. On science basis this is a very good project going forward. The U.S. Agency for International Development USAID is working with the Ministry of Housing and Urban Affairs on safe drinking water for the population in India. USAID also works with the Ministry of Environment on rivers and watershed management, and most of these are taking place not with



the Ganga but on rural areas or smaller rivers. And our foreign agricultural service is working with the Ministry of Agriculture to study irrigation and farming and to try to make things more efficient in that spectrum in terms of withdrawing groundwater.

Agriculture obviously is a huge issue here. It's a very important to India's economy – maybe 50 percent of the workforce and the bulk of the water that's used is servicing that part of the economy. So our U.S. Department of



Agriculture is interested in working with India on development of drought resistant crops which has been a very successful program in the American West, for example, where the rainfall is least. And then also our NASA (Space Agency) is working with ISRO (Indian Space Agency) on an Earth-Monitoring and Satellite project. This will be very good for the meteorologists and others who are looking at forecasting or looking at trends in farming and things like this through satellite imagery. We had a visit recently from our U.S. Army Corps of Engineers. If you're familiar with this group they are responsible in many ways for the flow of the Mississippi River through the middle part of the United States of America— including the dikes and levees, the flood control systems, and the infrastructure support, and they stand ready to work with India on similar types of infrastructure projects here in this country. And our Commerce Department is working with the business community to try to do a trade mission to the United States. This would be in February of next year. It's on water and wastewater. The wastewater component, for example, is a very important part of the equation so that there are adequate treatment facilities rather than say dumping them into rivers and lakes.

And, finally, I just wanted to mention also from our business community that we have a number of business groups here including the American Chamber of Commerce, the U.S.-India Business Council and also the U.S. India Strategic Partnership Fund. The Strategic Partnership Fund has launched a CEO Water Alliance asking companies that are working here in India whether they are involved directly in resource management or in energy or I.T. or any other industry to get involved in this – perhaps through their

corporate social responsibility work and other factors – to try to figure out ways whether it's in farming or it's in health care or it's in clean river management. So we are putting together a program on that front too.

So we have a lot of things going on currently. We also have a number of things that we would like to launch. We look forward to working with you, Mr. Minister, and your team and we will carry on from here.

Thank you for the opportunity to speak.

**UNITED STATES STANDS READY TO SUPPORT EFFORTS IN INDIA TO BOTH ADVANCE CLEAN WATER SOLUTIONS FOR HEALTH REASONS AND OTHER SOCIAL ASPECTS. AND THAT WE'RE ALSO INTERESTED IN WORKING IN IRRIGATION AND FARMING. AND THEN, OF COURSE, ON THE CLEAN RIVER PROJECTS AND OTHER TYPES OF AREAS**





**AMBASSADOR OF SLOVENIA**



My country is also of the size as my neighbor here at the Gambia table said. Somewhat the same size of population, let's say. But my country Slovenia is also among the fortunate ones. It is rich in water resources. However, that doesn't mean that water has been neglected by our government and in development policies. On the contrary water has always been an important priority in Slovenia both in the economic development context and

the environmental context. Maybe as a kind of curiosity, two years ago we changed the constitution and put water as a right of all citizens to access that water. By including water issues among our priorities we have along the way developed many good practices in water management, learned the importance and acquired knowledge of cross-border water cooperation. As our country is small and shares water with neighbors, it's not so much about sharing water but



sometimes it's about security to manage the weather calamities which, of course, can come with water. Our institutions and companies have developed many innovative technologies for sustainable management and uses of water. During my 4-year tenure here in India I have realized that water has been climbing up on the government's priorities here in India.

The call of PM Modi during his recent Independence Day speech on water preservation and more efficient and sustainable use of water have been well noted. What can we do regarding the water partnership between Slovenia and India? Slovenia is ready to share its lessons learnt and best practices with India in that regard. This is first.

The first step has already been done by our private sector. Two Slovenian companies, one for satellite gathering of water data and one for flood management, have successfully completed the evaluation process to become part of the Clean Ganga Water Pilot Project. Two more have possibilities to become part of the Clean Ganga efforts in the near future.

We are ready and happy to further enhance our partnership with India. The works that we are considering are:

Twining projects between our water expert participants in certain projects and Indian counterparts in order to solve water challenges. For example: How does Slovenia manage to clean the lake Bled? We had a fantastic lake which 35 years ago was almost dead; now it is one of the tourist diamonds in the world. Then technical and scientific cooperation to include water projects into bilateral program of Science and Technology, which we hope will be signed in a month's period when the President of India will visit Slovenia. Then we have also the possibility of technology exchange, but technology exchanges are also in the projects I have already mentioned. I would like to say that I come from Slovenia which was a former territory of Yugoslavia in the so called the non alignment movement very near to India. I would like to say my own personal comment on that we should take Technology as a business and if it's worthy just buy that.

Thank you.

**Two Slovenian companies, one for satellite gathering of water data and one for flood management, have successfully completed the evaluation process to become part of the Clean Ganga Water Pilot Project**



**AMBASSADOR OF SOUTH KOREA**



Thank you very much for inviting us to this important gathering. I think it is a very good opportunity to know about the situation of India's water problem, and we think we can get detailed information and the vision of India. Using this occasion I would like to share briefly about Korea's experience in water development. After the Korean War in the 1950s Korea faced the same challenge in water resources

management as many developing countries are facing now. We had no management for our wastewater collection neither any treatment facilities. However in the early 1960s the Korean Government decided to integrate the water sector into the overall economic development policy, linking the water sector to issues like hygiene, education, housing development and industrial transformation. The legal and

regulatory framework and adequate financing were introduced together. The Korean government made a 20-year National Water Resource Plan in 1965, and it has been modified and updated periodically till today.

Now I'll briefly mention about the Han River Project. The Han River is a big river and it's almost 1 km wide which flows through the central downtown



city of Seoul. It's almost like Yamuna River in Delhi city, and it went through urbanization and increase in population to almost more than 10 million like New Delhi. The HanRiver at first was severely polluted, but I can say that now it's one of the cleanest rivers in big cities of the world and is well managed. The government launched the Multi use Han River Department Policy, which it was quite a painful process and needed patience to implement. Now the river water has purified and the water quantity is managed efficiently, and it has become citizen-friendly and also a tourist attraction in Seoul. Citizens are served universal access to clean water, and enjoy their lives with the beautiful

Han River. Whenever I see the Yamuna think about Han River. It's well developed with patience and Yamuna can also become a river like Han. Yamuna is also may be 1 Km wide like the Han River. It's a very big river and the river flow is always at the same level; it's very beautiful and the river sides are developed as sports facilities and many different things which people can enjoy. That is what I want to say to Minister, Secretaries and Head of cGanga. We are prepared to share with Indian government Korea's experience and knowledge in transformation and hope to further co-operate in the water sector.

Thank you very much.

**Whenever I see the Yamuna think about Han River. It's well developed with patience and Yamuna can also become a river like Han. Yamuna is also may be 1 Km wide like the Han River. It's a very big river and the river flow is always at the same level; it's very beautiful and the river sides are developed as sports facilities and many different things which people can enjoy**





## AMBASSADOR OF SPAIN

Thank you thank you very much, Honorable Minister, Secretary U P Singh, colleagues distinguished guests, ladies and gentleman. I'd like to start by thanking the minister for organising this round table that gives us the opportunity to talk about water with the ministry. It is extremely important that all stakeholders and the fraternity meet and discuss at the regional level or state level because then we can also talk bilateral about issues more precisely. Thank you very much for it. And I would like also to congratulate your government for the creation of a Ministry of Water that shows the interest of the Government and the importance that this government is giving to water and problems that may be caused by the lack of water. In fact water is the critical issue in the coming future. The World Economic Forum publishes an annual report on global risk and classifies them in terms of probability and impact. Among the three global issues in terms of the impact, the highest ones are extreme weather events, natural disasters, and failure to mitigate climate change and water crisis. These three are basically all related to water. Infact 70% of the deaths from these events are caused by water, either due to an excess of water or its scarcity which is needs to be managed. Managing water is very productive. Every though lenders in the bottom has a returns between 3 and 34 dollar depending on the area and the technology. Water also give employment – 42% of all jobs are water-related, while another 36% are partially related to water like tourism and construction. What it means is that a city without water is a city without jobs.

I have been working for last year specially in relation to the Yamuna river. We have been working with University of Virginia

and we have done a five year study about the situation of the Yamuna and potential solutions. We have even proposed for EU funds to tackle some of the issues in a holistic and integrated way. This is because you cannot manage water without river management, they are all together when we talking about cities. And then we propose even to tackle the problem of Najafgarh drain which contributes about 60% of the pollution of the Yamuna River. We were able to advance different issues,talking 12 times with the Secretary Mr. UP Singh and also



talking to the minister Mr Hardeep Singh Puri, and Niti Aayog. And, well, everybody was interested, but we have not been able to move forward.

One of the main issues that I have seen in its stopping is the problem of governance and in the relation of state, city, and central government, and the fundamental reason is the lack of clarity in Administrative structure with regard to the management of water resources at state or city level. For example, In Yamuna more than 25 Agencies are involved in Yamuna River. However; the active management and restoration of the river and its catchment is not a priority and mandate of any agency. Just to give an example, Delhi has 900 water bodies, but only one water body has been restored in the last five years. Now there are tender of 200 water bodies. The case is not that they do not have technology, and money is not the problem. The problem is this complicated administrative structure of three layers of government. So one of the suggestions that we are even tell different Ministries

**IN YAMUNA MORE THAN 25 AGENCIES ARE INVOLVED IN YAMUNA RIVER. HOWEVER; THE ACTIVE MANAGEMENT AND RESTORATION OF THE RIVER AND ITS CATCHMENT IS NOT A PRIORITY AND MANDATE OF ANY AGENCY. JUST TO GIVE AN EXAMPLE, DELHI HAS 900 WATER BODIES, BUT ONLY ONE WATER BODY HAS BEEN RESTORED IN THE LAST FIVE YEARS. NOW THERE ARE TENDER OF 200 WATER BODIES. THE CASE IS NOT THAT THEY DO NOT HAVE TECHNOLOGY, AND MONEY IS NOT THE PROBLEM. THE PROBLEM IS THIS COMPLICATED ADMINISTRATIVE STRUCTURE OF THREE LAYERS OF GOVERNMENT**

about is the possibility of creation of a water resource authority at City level. I think that it was done with the Metro project in Delhi that could solve a lot of issues, and for Delhi with 25 million people it's something that has to be tackled, because the problem of Delhi can be solved. Solution is there and we are ready to give technology to do it and even financing with the support of the European Union. Infact I am working closely with the European Investment Bank because with European Union a huge amount of its financing goes to climate change related issues, water

being one of them. So we are very interested in working on water. Spain has a lot of things to offer as well. We have a few companies working in India. We are doing now the hydrological map of the country,we are working in Rajasthan, we are working in Maharashtra, in Punjab, and I am trying to work in Delhi and the Yamuna River. No I don't want to keep you longer, but I repeat that we are ready to co-operate in India on all those matters that we can support in view of our expertise and knowledge.

Thank you very much.





## CANADIAN HIGH COMMISSION



Thank you. The Issue of water transformation is one that is close to our heart in Canada. We recognize that water is a precious resource, and that it deserves to be protected and taken care for stewardship. Canada is firmly committed to managing its responsibility. As I am sure everyone in the room knows Canada looks at water from a different perspective. We are a large country with abundant freshwater resources and a relatively small population. You may not know that 80% of the Canadian population lives within hundred kilometers of our southern

waters, and so we have concentrations of large population. There are Canadian companies that have developed expertise and technologies related to managing the stresses of water on earth in populated areas, and we look forward to deepening the collaboration with India and with the Ministry of Jal Shakti on the management of freshwater resources.

I'd like to make a few comments about Canadian technology and how Canada is already engaging with India on water issues. Canadian water and wastewater



firms have a global reputation for excellence, supported by a robust innovation ecosystem. The groundbreaking technologies that have been developed in Canada address water challenges around the world. From conveyance and distribution to treatment and reuse, Canadian solutions are dramatically changing the way the world manages water and wastewater. Canadian companies are already directly engaged in contributing to India's water and wastewater market in partnership with Indian companies particularly with respect to water purification and wastewater. To give you an example, a Canadian company by the name of Ovivo utilizes state of the art technology to treat and purify water and wastewater in India. In addition Ovivo has centres of excellence in Surat and Pune. Another Canadian company called Trojan technologies is active in India and has more than 10000 UV installations around the world treating billions of gallons of water per day. There are other prominent Canadian companies such as Premier Tech Aqua, Ecotech and Realtech. They are also doing business in India contributing



to complex water treatment solutions, measurements and analyses. Planning is also underway to bring a delegation from Canada in October to focus on water, wastewater and solid waste management, and to explore opportunities to pilot Canadian water related technologies in industrial settings. On water rejuvenation one very close partnership we have with India is IC-IMPACTS. It is a bilateral research centre of excellence dedicated to serving challenges related to infrastructure, health and water. In 2018 IC-IMPACTS and Indian Department of Biotechnology Science and Technology signed a joint work plan for the rejuvenation of the river Ganga. IC-IMPACTS strategy aims to clean water and control pollution as close as possible to the source of pollution and before it makes it drains into the main river System. This, of course, with prior solutions that are cost effective and space efficient. By establishing a cluster of International and co-developed clean technologies IC-IMPACTS will not only effectively build the knowledge to clean large water system in the next 2 years, but it will also trend the next generation of expert in both countries.

Canada continues to invest in clean technologies to help protect the environment from climate change and create economic opportunities. With over 2.3 billion dollars budget since 2017 Canada is delivering on its two billion dollar climate finance pledge to developing countries and is already announced 1.3 billion dollars in projects. Canada is working specifically with India to contribute to global function programs, such as 220 million dollar contributions for the Climate Fund. India is also eligible to access Canada's 150 million dollar contribution to the second phase of the Canadian private sector fund to the Asian Development Bank. I'd like to conclude by reiterating that Canada remains keen to further explore opportunities to enhance water related collaboration at multiple levels, and India's leadership on this issue provide us with opportunities for continued engagement on potential avenues of collaboration such as the upcoming events about water conference and IIFA India trade show in October. I'd like to thank you again.

**Canada remains keen to further explore opportunities to enhance water related collaboration at multiple levels, and India's leadership on this issue provide us with opportunities for continued engagement on potential avenues of collaboration**



## GERMAN DEPUTY AMBASSADOR



Thank you. Let me first of all join the ambassador of Spain commending the Indian government for the creation of Jal Shakti Ministry bringing all water-related executive responsibilities under one single roof. I think this reflects the holistic and comprehensive approach which is needed to tackle such a complex issue has water. In the case of water all challenges are interrelated – harvesting, storage, supply, waste-water treatment, cleaning of rivers, ground water. Therefore, also the solution

has to be a comprehensive one and you have to bring all the relevant actors on board with regard to programs likely to be setup. As you know, the Honorable Minister and we had the opportunity to talk about how Germany is very heavily involved in the Namami Gange Mission of the Indian Government, building on our successful experience in cleaning the Rhine River and the Danube River. In case of Rhine River it took 30 years and so, building on this experience, now we support and partner with our Indian friends in terms of

financial assistance with loans amounting to 150 million Euros allowing the upgrade and the construction of sewage treatment plants, sewage systems and pumping stations and at the same time, in the framework of our cooperation on the Namami Gange project, we provide technical assistance very much in the spirit of Holistic approach.

In Germany we have saying that the best way to clean the river is not polluting it. There fore in cleaning the river you have to reach out to all the polluters; enterprises, farmers, municipalities, and individual households – which is the most cumbersome task. For individual houses in Germany, each household pays for the waste water it gives to the sewage system, which is very difficult to sell to normal people, since they have to pay not only for clean water but also for waste water as for birthday gifts. And in this period of heuristic approach, you also have to connect with other regulatory executive bodies of the government in Delhi together with governments in the various states and municipalities and Institutions and Agencies. But, most importantly, what is needed is behavioral change, and I think the Honorable Minister said very eloquently that when you talk about people's movement, you have to have people's movement living in the basin of Ganga River. This, for example, is a common mission, and both of us have cooperated on the annual Ganga Quest and the award ceremony on the occasion of the World Environment Day in June, and Germany has the GIZ, our implementing organization, who has very well contributed to this Ganga Quest as well as to the so-called Ganga Box which we have set up for schools. The Ganga Box is an interactive information tool for schools so that you start from scratch from the very early days in school in raising awareness.

Now Germany is ready to upgrade its contribution within the Namami Gange project. For the time being we will



concentrate on Uttarakhand for the upper Ganga. We are ready to extend our cooperation to Uttar Pradesh, but also beyond the Namami Gange mission we are ready to contribute to broader water management cycles. For example rainwater harvesting, storage of flood water, recycling of water, etc. In fact India can capitalize on the monsoon rains, and it should capitalize. One and a half years ago I visited Meghalaya where they have a long period of monsoon every year but then also have dry season, and if you would have check dams in the mountains you could harvest the water in order to make it available when you need it in winter time. And if you have check dams you can also avoid the floods going down without any control to the valley during the monsoon time. So we're ready to step in. There is huge potential all over the country for this rainwater harvesting and storage of flood water. Let me also remind you that we will have Indo-German Intergovernmental Consultations later this year with Chancellor Merkel coming to Delhi and this would be a good opportunity. We're already in the run up to these consultations to flag your specific interest and go through

the procedures, so that we could also put this on the table for these consultations. Let me also flag that we are proud to contribute to the EU programs of the India EU Water Partnership. So in a word we are very happy to partner with India on water related issues, in particular the Namami Ganga Mission. And we are ready to enhance this cooperation in the future.

Thank you very much.

**GERMANY IS READY TO UPGRADE ITS CONTRIBUTION WITHIN THE NAMAMI GANGE PROJECT. FOR THE TIME BEING WE WILL CONCENTRATE ON UTTARAKHAND FOR THE UPPER GANGA. WE ARE READY TO EXTEND OUR COOPERATION TO UTTAR PRADESH, BUT ALSO BEYOND THE NAMAMI GANGE MISSION WE ARE READY TO CONTRIBUTE TO BROADER WATER MANAGEMENT CYCLES**



## EU DELEGATION TO INDIA

Thank you very much. Let me join everyone in thanking you for calling for this opportunity to explain what we're doing and also how we intend to collaborate with India on this very important issue of water. As you rightly said water is the essence of life, the essence of humanity. It's also the basis of any modern economy. And I believe your government has actually for a longtime realized the importance of that issue. Already for the past two summits –EU-India summits water was a very key central theme. And they were very important commitments made by our leadership and by Prime Minister Modi to work together on the issue of water in all its forms and all its dimensions – as source for drinking, rivers means for transportation, in the field of agriculture, and energy generation. So it's a very complex multifaceted topic. I believe the importance that our leadership gave to the topic of water is also built on decades of collaboration in the field of water. The EU has been working together with India on many aspects like agriculture and river basin management for decades. In fact one of the key initiatives that has been launched that my colleagues have already mentioned, that you have also mentioned as well, is the India-EU Water Partnership. This is really a key flagship topic and I really would like to underline the importance of that, and also the very special approach that we have in there. It is of course very important that government to government relations look at this topic, but I think it is so complex that actually you need to involve all levels of society and all levels of government in that important topic. We have in EU - India partnership state levels, we have communities, we have business communities there, and that is also what makes this partnership



so special. The EU brings a wealth of knowledge of technologies and also financial means you, and I believe the fact that about half of the foreign partners and dignitaries that they are here represented are actually from EU member countries shows how important the role of the European Union is, and of EU with all its member countries is. And what we can bring to the table.

I already mentioned the wealth of things that we can bring and also the collaboration that we already have. It



starts with space orbiting technologies. We are putting free of charge scientific data at the disposition of India through our Galileo satellite system. We are looking at collaboration in river basin management. We have in the European Union a number of international river basins, and therefore we have some quite considerable experience, and I believe the collaboration that we have from your top of River Basin Committee. This is something very important. I had the distinguished pleasure to be in one of those workshops and I really appreciated the discussion, the high-quality discussion and collaboration that took place in that setting. Of course the Ganga River is something special – it is a river basin which is very close to all our hearts. It's something very special, of high symbolic importance, economic importance, and very important spiritual dimension to it. And very soon – next month in fact – there will be an important mission coming from Europe which will be working together with your officials in the collecting or management of data for strategic decision making. I think this will be very crucial to support policy decision

making. I already mentioned business as a very important factor to supply technologies and knowhow. Also, to bring in investments in this sector, Governments are very important, but they should not be doing everything by themselves. Business should be coming and investing in this sector, and very soon as well we will see a number of business missions coming to India from the European Union to look at fostering our business cooperation in policy dialogues.

Lastly let me mention water research and innovation initiative. We are about to fund 7 projects in this particular sector with 40 million Euros, and this will be realised in the coming years. In short I think we have really a very broad spectrum of things that we have to offer. We are very keen to work with you, to work with state governments, and to work with the Indian business community on this important and cross cutting sector. And I'm very, very much looking forward and also excited to further collaboration with you.

Thank you



**Business as a very important factor to supply technologies and knowhow. Also, to bring in investments in this sector, Governments are very important, but they should not be doing everything by themselves. Business should be coming and investing in this sector, and very soon as well we will see a number of business missions coming to India from the European Union to look at fostering our business cooperation in policy dialogues**



## EMBASSY OF NORWAY

Thank you for having us around this table today. At the outset I think it is right to salute the government for the high priority you put on water related issues. Accessibility of clean and safe drinking water, prevention of pollution, the rejuvenation of rivers and healthy oceans have all been very high on the Government's agenda for a long time. The National Mission on Clean Ganga, institutions like cGanga, and the very recent announcement of Jal Jeevan Mission are testimony to this. I am proud to say today that Norway has a little share in this very immense task. We have since the last Summit been a part of your efforts through our company Cambi signing a MoU with cGanga. Dr Tare knows very well the work of this company. Bringing high level international know how in designing wastewater plants and their projects in the Ganga basin has proven very successful.

Norway has been working with India in four particular areas that we are very happy to say are growing and of greater and greater importance for our bilateral cooperation. One is wastewater treatment. One is the prevention of marine pollution. Another is solid waste management. And the last and not least one, started new this year, is our work together on Integrated Ocean Management, which we believe is a reply to the call for the minister on a holistic approach to land water and sea water inevitably being closely linked. The land based waste if not managed will reach the seas and ruin the ecosystems. We have therefore recently started marine pollution collaboration with India. When our two prime ministers met in January this year they signed a MoU on an important political ocean dialogue and a task force on the blue economy and as a part of this visit. Also we signed a 10 million dollar contract on marine pollution management



which we are very proud of. You might not be aware that little Norway and big India have approximately the same sea area under our national jurisdictions, and we believe that in this field in particular will be able to share with India some of our experiences and bring forward some of the important technologies that look into waste, energy, climate, sea, and, not least, drinking water for India, like we have managed some of this in Norway.

And next week or the week after there is an important delegation from Niti Aayog going to Norway to study Integrated Ocean Management where we look at the use and production and food transport and energy issues of the oceans in one holistic manner. Besides water and rivers, we are also working with India on waste management on solid waste, which has become very interesting. One of our projects is using hazardous industrial waste to fire cement



**While we are contributing on working on water, land and sea, we are contributing to the sustainable development goals that we have all pledged to try to reach. And without India the world will not reach the SDGs. So we are proud to stand here today all hand in hand with India in these efforts**

kilns so that you can at the same time reduce fossil fuels and reduce the waste using it as an energy source. And for water, as for other areas of environmental improvements, we believe that this idea of a circularity of our resources and our energies are the most important.

If waste is managed well it will obviously contribute greatly to how we manage our water pollution and it will help the health of rivers and water bodies and ultimately also the sea. So, ladies and gentlemen, in conclusion Norway's cooperation with India is growing and we are on both sides reaching out for very interesting opportunities both in industrial and commercial collaboration in technology

development and not least in a very large programme of research collaboration. This work obviously also has great environmental consequences and I would like to say as my final point today that while we are contributing on working on water, land and sea, we are contributing to the sustainable development goals that we have all pledged to try to reach. And without India the world will not reach the SDGs. So we are proud to stand here today all hand in hand with India in these efforts. Minister, you asked if we were willing to be part of your Water Mission. And the answer is that, yes, we will, and Norway also.

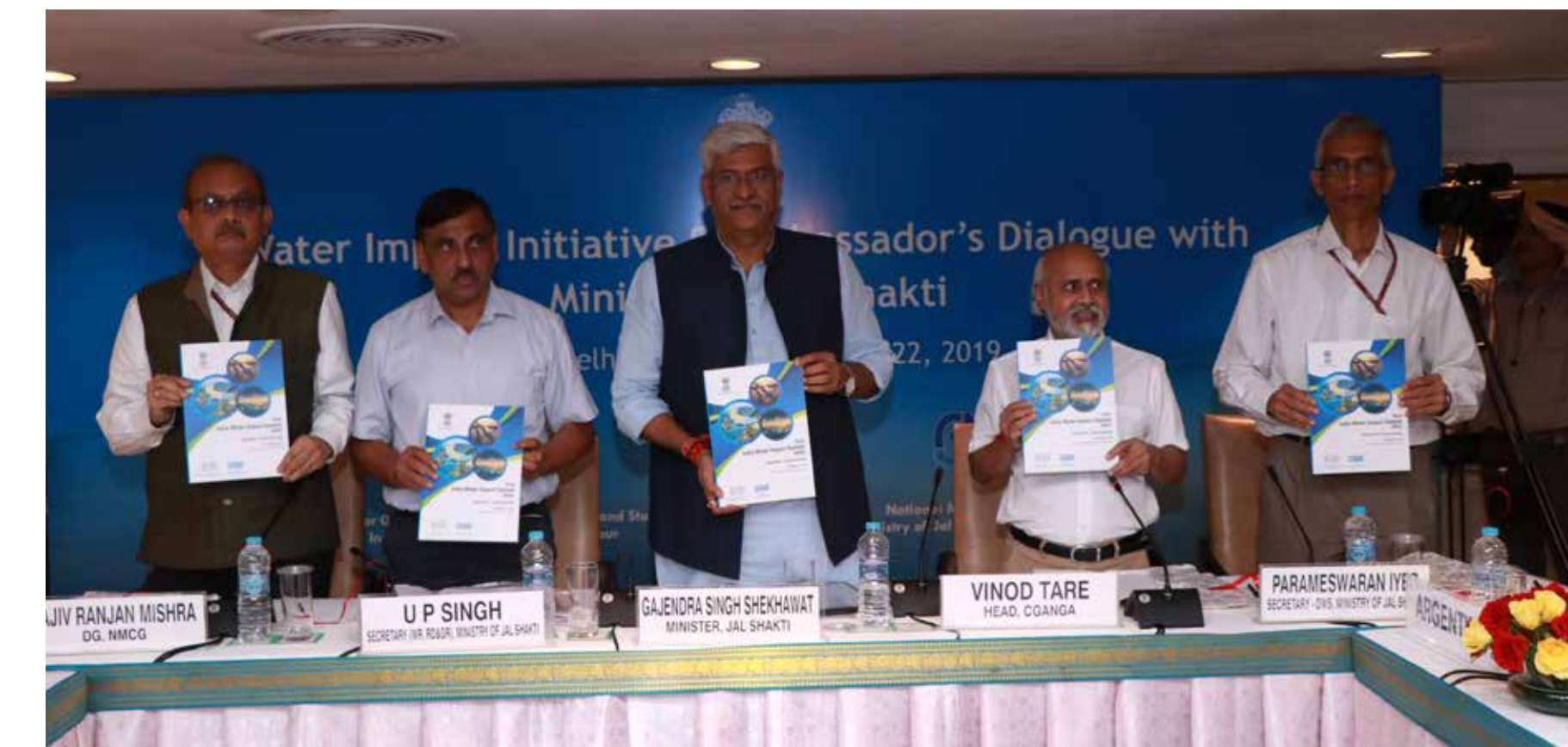
Thank you.



# Additional Remarks

## Mr Sanmit Ahuja, Expert Member, cGanga

Just before I pass the ceremony's baton back to the top table, I'll make just a couple of announcements and some insights. We've launched a portfolio of impact projects which cover not only water resource management. The minister alluded to that to provide water to every household. We need to create enough capacity in our water supply, so integrated water resource management will feature very heavily in the coming months. And we'll share the list of these projects. Just to name a few. Assi River in Varanasi, Najafgarh drain and Hindon River in Delhi, Jhojri River in Rajasthan and a few others have been put on the planning map. In addition to resource management, we are also looking at a number of ancillary areas: sustainable agriculture, waste management, removing plastics from water bodies, creation of water markets, and water trading platforms. You will see a lot of emphasis from us on data, financial instruments, and, most importantly, community engagement programs. So we'll share the presentation with you on all of these topics and projects, but we invite every single one of you to come in and contribute and participate in these initiatives. So much work is going on between India and a number of countries and it's difficult to keep track of it. Last year from NMCG we initiated a formal working group between embassy and the ministry so that we can start cataloguing the work that has been going on between the country and India. We request you to



pass this message back to your colleagues and partners in the embassy that, can we please try and meet more often? We'll formally circulate to you the set up catalogue exercise which I think is already completed. And let's keep that current and fresh at all possible times. Finally don't just rush off. There's a group photograph planned at the end of this particular event in the room across the corridor. So those are the announcements from me. I know there are others who couldn't get to speak. But please accept our apologies. We will take your inputs. They are very important

and necessary, but due to paucity of time we just have to draw the session to its conclusion. But, before that, Dr Tare can I pass the microphone back to you?

**Dr Tare:** So last time in December we had the India Water Impact Summit. So I would like to request the minister to formally release the report.

**IWIS 2018 Post Proceedings Released**  
I would now like to request Mr U P Singh, secretary to give his impressions and how do we go from here.



**Last year from NMCG we initiated a formal working group between embassy and the ministry so that we can start cataloguing the work that has been going on between the country and India. We request you to pass this message back to your colleagues and partners in the embassy that, can we please try and meet more often?**

# Concluding Remarks

Shri U P Singh, Secretary



Honorable Minister, Excellencies, my colleagues, Professor Tare, and friends. First of all a big thank you to the Excellencies for coming in such a large number, I had an opportunity to engage with quite a few of you on one to one basis with this, but then perhaps this is one of the first times that you had a meeting at the group. Almost all the countries who were present here had some engagement or other in the water sector in India, and I'm sure that today's deliberations will take those engagements to a bigger height. Already it has been said that how India has put water on its top agenda. Many of you already mentioned about the creation of a Jal Shakti Ministry for integrating all the functions relating to water. Excellency from USA also mentioned that the Honorable Prime Ministers engages from time to time with the people through

what is called "*Mann Ki Baat*" through a radio talk actually, because in India even today perhaps radio has the kind of reach which no other means of communication has. And in the very first talk after this new government was formed, he devoted more than 10 minutes on water and water conservation. Not only in that one, in July in his *Mann Ki Baat* again he mentioned about water. And then again, as someone rightly pointed out, in this year's Independence Day speech. Perhaps he spoke the word water 22 times. Perhaps only one less than what he said about human or something "*manaviya*". And then, as the Honorable Minister said, let us make Jal Andolan a Jan Andolan, make it a mass movement. A movement for water should be a mass movement. And my senior colleague is here who has been heading a program

**WATER PLANNING AS YOU ALL KNOW HAS TO BE BASED ON A BASIN BASIS, HYDROLOGICAL BOUNDARIES ARE MORE IMPORTANT THAN THE ADMINISTRATIVE BOUNDARIES ACTUALLY. SO WE ARE BRINGING A RIVER BASIN MANAGEMENT ACT ACTUALLY, SO THAT WE WOULD BE SETTING UP A RIVER BASIN MANAGEMENT AUTHORITY**

on Swachh Bharat Mission. It became such a success because it became a mass movement actually. So water conservation and water is now in our own top agenda, and we all are working basically to make it a mass movement. Since you have shared some of the best practices, given a chance I would ever so like to share some of the best practices. But for paucity of time I would not get into details of it. I would just like to make a mention of four or five points, very briefly.

One is that we are bringing up structural changes also in water governance. See, we are not talking right now of change in the constitution or something and moving water from our state subject to our central list and all. No, I'm not talking of that, but what I'm talking of is within the constitutional parameters themselves. For example; I had been to Spain sometime back. Spain was a country which had a River Basin Management Authority way back in the 1930s actually. And water planning as you all know has to be based on a basin basis, hydrological boundaries are more important

than the administrative boundaries actually. So we are bringing a River Basin Management Act actually, so that we would be setting up a River Basin Management Authority. We are also working with the states on quite a few other things. For example; Maharashtra today had a fairly successful what is called a Water Regulatory Authority. We had one round of discussions with other states also to have a certain kind of water resource regulatory authority. So quite a few structural changes we are planning, that's one.

The other is that, we had been talking earlier of all water resource development. Many of you may be aware that India has the third largest number of large dams. Only US and China have more number of large dams than India has actually. But then, in water resources development now our focus is more on water resource management. And that on sustainable water resource management. We may not be able to create much of storage, but whatever the water is stored, how do we utilize that more gainfully, more efficiently, and more





## EARLIER OUR MANDATE WAS ONLY GANGA BUT NOW, WITH JAL SHAKTI, ALL RIVERS OF INDIA COME UNDER OUR MANDATE

meaningfully? It's something we are emphasizing actually. On that I would like to say that our interventions earlier have been more on what is called supply side interventions and those in terms of our large dams. But no large dams because there are many reasons. The first reason is that most of the best sites already have been taken for construction and to address all other problems like resettlement, rehabilitation, land acquisition, environment clearance, forest clearance and quite a few issues actually. So we are also saying that the smaller structures are no less important. Someone rightly mentioned that maybe Delhi had 900 water bodies, but most of the water bodies over a period of time have gone into disuse actually. We have millions of such structures all over the India, traditional water bodies. As our Minister keeps saying, in India we always have been kind of worshipping water. We have a very large number of tanks, wells, and other traditional water bodies which has gone into disuse. So we are working

basically on that. While I'm not saying that no dam should come, maybe wherever feasible it will come. But our emphasis should be on the smaller structures.

Then the other very important thing is demand side management. Unfortunately we haven't worked so much on this, and there are both policy changes and, as our Honorable Minister has said, certain kind of behavioural changes also required. Some of the policy changes may not be very easy to implement but we will try to work them. All of you are aware that water in India is a state subject. Many of the states provide what is called free electricity or highly subsidized electricity for pumping. Everybody knows the story of Punjab today where groundwater situation has become so bad, and the state which was not growing paddy today grows a lot of paddy, and the reason is basically free electricity. Similar is the case with the procurement in India. Not many countries have this concept of procurement, where government procures a lot of food grains, stores and distributes them through public distribution system. Now today this public distribution system and this procurement works mainly for crops like paddy, wheat and sugarcane, and all of these are fairly or highly water consuming crops actually. So how do we bring in certain policies with which we get to grow more of less water-consuming crops? One is of course the crop, the other is the agronomic practices. Many agronomic practices need change – somebody was mentioning direct seeding or something in the state in place of transplantation, so we are working on that.

Another aspect, of course, everybody knows about is climate change and its impact. Perhaps this year Baroda had 600 mm rainfall in 24 hours. Our honorable minister comes from an arid area as you know – he comes from Rajasthan (Jodhpur), and those areas are known for having 200 or 300 mm rainfall in a year. Nobody would have thought of a flood in an area like Western Rajasthan. Today it's a reality that in



times to come the extreme events will increase both in frequency as well as in intensity. So how do we manage those extreme events to beat droughts and beat floods? Regarding floods, also we are working on a lot of things, but then not all states, like all countries, have these kinds of problems. Structural measures are one part. But how do we bring in data and technology to have non structural measures? For example, we have partnered sometimes back with Google because Google has what is called the Digital Elevation Model which we didn't have. So how do we increase the prediction time? How do we have the inundation map of all those places? So there are a lot of things which we need to do on managing these kinds of extreme events.

And lastly I would make a very brief mention about River Rejuvenation because everybody talked about the Ganga. Earlier our mandate was only Ganga but now, with Jal Shakti, all rivers of India come under our mandate actually. We have done certain things, for example, as many of you are aware, which is on pollution abatement side. Very briefly, I will talk of what everybody talks over in India that we construct sewage treatment plants or sewage infrastructure but they do not function well. We say that we pay for construction, we don't pay for performance. Now from our culture of paying for construction we are shifting towards the culture of paying for performance in the sense that we have something of a hybrid annuity mode. We have taken up projects – one of the projects has already been commissioned under this hybrid annuity mode where we pay just 40% to the developer till he commissions, balance 60% he will get along with interest along with Operation and Maintenance provided he runs the plant satisfactorily, that is for whatever design parameters that he meets. Basically this we have brought in to ensure a long term sustainable performance. We have gone one step ahead in another way. In one city in India you will find there are three or four or five people who

are managing sewage treatment plants. So we have gone one step ahead and we have come to a concept of "One City One Operator", so that for the entire city for the greenfield projects as well as for brown field projects they all get integrated and basically we have one operator managing all those sewage treatment plants.

But now our focus is not only on treatment of our sewage or industrial effluents. Someone rightly mentioned made about the Yamuna in Delhi. Yamuna in Delhi is perhaps the most polluted stretch of the river in India. In fact, Professor Tare about two years back when he was speaking somewhere, he said that a river is that which flows. So by that definition for seven eight months the Yamuna is not a river because for seven eight months Yamuna doesn't flow in Delhi. No matter even if you treat all the sewage which goes into Yamuna unless you have water. So what we are working on is how do we basically ensure that there is adequate quantity of water flowing into the river. It could be not only by, let's say, determining something on environment flow and then ensuring that kind of thing everybody sticks to, but also things like reducing the consumption of surface water, groundwater, wetland conservation and plantation. All these measures in the second phase we are emphasizing because we are equally concerned about the flow of water in the river. Someone said that the solution to pollution is dilution. So we need water to dilute actually. There are quite a few other things which we are doing but for want of time I wouldn't like to carry on, because another colleague of mine will speak and all we're talking about is Jal Jeevan Mission and other initiatives. So thank you very much once again and I am sure that this is not the only forum we will keep engaging in future too.

Thank you very much.



## Shri Parameswaran Iyer, Secretary (DWS)



Thank you. Minister Jal Shakti, Secretary U P Singh, professor Tare, Excellencies. I'm going to try and keep it very brief. It's the end of the day and I'm initially going to talk about sanitation because there's been a lot of discussion about water. And as all of you know I think the honorable minister would have already mentioned it. Under the Swachh Bharat Mission, I think there was somebody who spoke about India's contributions to the Sustainable Development Goals. Well, on sanitation when the Prime Minister announced this Swachh Bharat Mission in 2014 India was contributing to 60 percent of the world's open defecation, so out of 1 billion people 600 million were Indians. And that was a big challenge, but the Prime Minister always announces big goals. He said that the country will become open defecation free in five years by 2nd October 2019, and so from the coverage of about 39% in 2014 today it's more than 99%, and we are on track to achieve the goal by 2nd October which is of course 150th birth anniversary

### MAKING BEHAVIOURAL CHANGE AT LARGE SCALE IS SOMETHING WHICH WE HAVE EXPERIENCED IN INDIA, TRIGGERED BY SOMETHING WE LEARNT IN THE LAST FIVE YEARS WHICH WE SHARED IN AN INTERNATIONAL CONVENTION LAST YEAR

of Gandhi Ji. But the point I was trying to make was the movement for behavioral change as Secretary, Water Resources mentioned. And what I think is that making behavioral change at large scale is something which we have experienced in India, triggered by something we learnt in the last five years which we shared in an international convention last year. But we just remind ourselves





**We have 35 million household connections in India and the plan is to have about 185 million household connections. So this is an unprecedented program**

about it because it has a direct bearing on the water program.

So we spoke about the four Ps. The first P was Political Leadership, this was the first time we have the Prime Minister of India talking of toilets and sanitation from the Red Fort. The second P was Public Financing where the government invested more than 20 billion dollars—both center and state—in sanitation. The third P was Partnerships. How we are working with development partners and countries such as yourselves, which helped us in that program. And the fourth P, perhaps the most important, was Peoples Participation. It became what we called it a Jan Andolan. Our people took this program, adopted it and implemented it by themselves. So I think lots of lessons are there. We are now working on what we call Open Defecation Free Plus (ODF+) which is a broader sanitation agenda at the intersection of water and sanitation. We are talking about plastic waste management, grey water management, black water management, etc. In that context the second point I want to mention was another big campaign that is going to

be launched in September on plastic waste management. And this program is going to culminate in a big bang collection drive on the 2nd of October. The Prime Minister mentioned that in the 15th August speech again. And we are planning this work with all other ministries and departments, and we would very much welcome participation from you in this campaign which will be going to run from September 11 right up to Diwali which is on 27th of October. So it's about getting people out collecting plastics, but, more importantly, effectively disposing of it. So we will share more details of it as we go long.

Third point the Jal Shakti Abhiyan, which was already mentioned by many of you, and we are already getting support from a large number of countries. We are very grateful for this support. It's about the water conservation program, which again is meant to be a people participation program about which we have learnt a lot from sanitation and many other programs. So this program, we have realized, needs to be scaled up and mainstreamed, which this ministry will do once this campaign

period ends. And so water conservation is very much on agenda.

And, finally, the announcement made by the Prime Minister, the Jal Jeevan Mission which the Honorable Minister spoke about. Just to give you a couple of details about this program: The honorable minister has already been holding extensive discussions with state ministers. Another meeting is planned next Monday, where we will get details, strategies and road mapping of this program together with the states. It's very ambitious. The plan is to go forward from what we have today. We have 35 million household connections in India and the plan is to have about 185 million household connections. So this is an unprecedented program, but like this government, this Prime Minister and Minister are leading us with the phenomenal experience on the ground in Rajasthan and I think globally. I think we are in good shape. Of course, this is up to the states to implement, but again it's a three in one program. We have learnt lesson from the past that unless you provide drinking water with

source sustainability, unless the ground water is recharged, and unless we reuse the water, waste water coming out of drinking water will produce stagnant water in villages. So it's source sustainability, point source recharge, rain water harvesting, then piped water supply in households, followed by 75% piped water supply from households coming out as waste water either from kitchen or from bathing. And that could be reused with relatively low cost treatment so that it can be reused again for recharging the ground water and even for agriculture. We know Israel, for example, are leading the world in reusing waste water, and lots of experience we are getting from Israel from Australia. We are very grateful to the high commission of Australia for bringing experts to give us advice. I am hearing all expressions of support and welcome you all. So the Jal Jeevan Mission will actually get implemented in a few weeks from now and it will be full steam ahead. All the support we can get from you is very welcome.

Thank you.

## Rajiv Ranjan Mishra, DG, NMCG



Thank you.

Honorable Minister of Jal Shakti Mr Shekhawat, Secretaries Mr Iyar, Mr Singh, Excellencies. I would start with thanking all of you profusely for coming in such good number. And not just coming, rather giving your absolute commitment to support our endeavor, and also to share your rich experience in respective countries. I won't take much time, but while I was listening to each one of you, certain broad areas emerged. They border upon river basin planning from Australia and data related issues; Argentina talked about research, underground

water, climate change; Brazil also talked about SDG 6, national water agency, and behavioral change was also flagged there; then Gambia talked about importance of water in smaller countries and how mutual exchange can benefit. With Israel, of course, we have a number of areas to work together, but they also have experience of center of excellence and various technologies and methods to conserve water. With US, we had discussion about clean water project, clean water solution plus various MoUs and various agencies which are working together. Similarly we had, in case of Slovenia, a very interesting Twining project talked about. Then

## NATIONAL MISSION OF CLEAN GANGA AND cGANGA, WE HAD REQUESTED ALL THE MISSIONS, AND WE GOT VERY GOOD RESPONSE FROM ALL OF YOU ABOUT CREATING A KIND OF WORKING GROUP LIKE STRUCTURE WHERE WE CAN HAVE MORE INSTITUTIONAL DISCUSSION AND DIALOGUE AND THEN CARRY IT FORWARD

from Korea we had very interesting experience about how the Han River was rejuvenated. I mean it as an experience for a big city that kind of thing is possible, and that is something really to learn, and there is also something to learn that they started with a very long term national water plan for 20 years. Similarly Spain, we're, yes, very close and we have had a lot of discussion separately as secretary Mr Singh also said about Yamuna and what could be done. With Canada we had lot of discussion about some delegation visiting, technology, then also IC-IMPACTS and MoU, which I think we have to note in our mission and also work on that. With Germany we have a very close partnership, and they talked about the technology, technical support, and financial support. There was also discussion about some of the public outreach programs that they have supported. And then with EU we had a lot of discussion about river basin management,

investment and other things. Norway, we had discussion about waste water treatment plant, and also marine related issues where we can work together.

This was also a forum to remind us, like I have also been told, to reflect on the road map. We have lots of existing relationship like the India Africa Water forum, India – EU Partnership, that's one way of working. Last year from National Mission of Clean Ganga and cGanga, we had requested all the missions, and we got very good response from all of you about creating a kind of working group like structure where we can have more institutional discussion and dialogue and then carry it forward. I would request all of the Excellencies to once again look at them or may be nominate some nodal agency/ person from your mission with whom we can discuss on more regular basis. I think they were





**Now the experience that we learnt will go to other rivers and can go to the entire water sector**

also nominated but we have to revisit that once again.

This is also a very good opportunity to know about the visits of many delegations coming in the next couple of months and maybe we can prepare together to make best use of those delegations. This is also an occasion to look at some of the MOAs which we have already signed, and may be bilaterally take it up about what we have achieved and how we can further strengthen those MoUs. And maybe we can look at new MoUs or new institutional structures to develop with more partners. There are a number of visits planned, a number of international events planned, and then I will again remind you about your support and participation in the India Water Week and then the Indian Water Impact Summit. These are some of the things I just got the opportunity to

talk about and, before I close let me also very briefly tell, we have been discussing about water sector and river rejuvenation. Now when we started this Namami Gange Program –maybe I will take just a few seconds and tell because there are some issues whether it is Ganga or Gange: See, Namami Gange is an expression from Sanskrit where we basically, as The Honorable Minister rightly said, value the river as mother, and Ganga is one of the most revered rivers. So when we say NAMAMI it means we salute you, and GANGE is kind of calling her, so basically the meaning is WE SALUTE YOU MOTHER GANGE. The name of river is Ganga. This is the way we call and give respect to the river and that's why the name of the mission is Namami Gange. That is one thing. And in this we actually first time tried kind of basin management approach for river rejuvenation. That's why you

have pollution abatement related things, you have also environmental flow, and then after we have started that way many of the countries told us about basin management – whether its Murray-Darling basin management, Germany basin management plans for Rhine River and the Danube River, and other places also. We are having interactions; basically the idea is to develop a kind of River Basin Organization, a very robust river basin organization on these lines learning from them for our country also. So that's one area. On public outreach sir talked about behavioral change and the sanitation issue and Jal Shakti Abhiyan and water mission under the leadership of honorable minister. So there will be much more attention about making it a kind of people's movement. So what I would suggest from my side, from cGanga's side, we will summarize some of the bilateral

issues which have been expressed and then we will come back to you and request some of the bilateral meetings to be carried forward and broad ways to not just Ganga River as sir rightly said. Now the experience that we learnt will go to other rivers and can go to the entire water sector. So once again I thank all the Excellencies, all the distinguished guests for coming here, sharing your views, your rich experience, and also committing that you are going to be very strong partners with us. I thank the Honorable Minister for sparing so much quality time and guiding us. I also thank Mr Iyer, Secretary, Drinking Water and Sanitation and also Mr. U P Singh, Secretary, Water Resources River Development and Ganga Rejuvenation; Professor Tare and each one of you making this meeting a success.

Thank you.

# Group photograph







**ROUND TABLE  
DISCUSSION ON  
WATER IMPACT  
INITIATIVE ORGANISED  
BY cGANGA & NMCG**









