



Special Envoy of the Secretary-General for  
Disaster Risk Reduction and Water



Ministry of Infrastructure and the  
Environment



## High Level Round Table



## Water Security and the Sustainable Development Goals (SDGs)

Yangon, Myanmar  
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## ACRONYMS

ADB	Asian Development Bank
AIRBM	Ayeyarwady Integrated River Basin Management Project
ASEAN	Association of South East Asian Nations
COP	Conference of Parties
DRR	Disaster Risk Reduction
GHG	Green House Gas
GWP	Global Water Partnership
HELP	High-level Experts and Leaders Panel on Water and Disasters
HLPW	High Level Panel on Water
INDC	Intended National Determined Contributions
IPCC	International Panel on Climate Change
IWRM	Integrated Water Resources Management
JICA	Japanese International Cooperation Agency
MLIT	Ministry of Land, Infrastructure and Transport (Japan)
MmWP	GWP Myanmar Water Partnership
MRB	Mekong River Basin
MRC	Mekong River Commission
NAPA	National Adaptation Plan for Action
NGO	Non-Governmental Organization
NLD	National League for Democracy
SDGs	Sustainable Development Goals
UN	United Nations
UNDP	United Nations Development Program
UNDESA	United Nations Department of Economic and Social Affairs
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNFCCC	United Nations Framework Convention for Climate Change
WASH	Water, Sanitation and Hygiene

## PREFACE

Myanmar has embarked on an accelerated road to development. With its as yet sparsely tapped but abundant natural resources and still pristine ecosystems Myanmar has a unique opportunity to ensure that this brisk development will be sustainable and equitable, as well as the chance to avoid the mistakes made by other developing countries. This will test the water management and governance potential of the country to the fullest.

Within this national context and the recent Agreement that the International Community has formulated around Sustainable Development Goals (SDGs), the Global Water Partnership (GWP) in collaboration with the Myanmar Water Think Tank and the Myanmar Country Water Partnership, at the invitation of the Government of Myanmar, has organized a High Level Round Table around the theme of Water Security and the SDGs that aims to benefit both Myanmar and the South East Asian Region. The event was hosted by the Ministry of Transport and Communications and organized back-to-back with the Steering Committee meeting of the GWP Intergovernmental Organization.

This High Level Round Table was designed to be a milestone in the new democracy of Myanmar, accelerating the already consolidated Integrated Water Resources Management, Disaster Risk Reduction and WASH activities ongoing under the guidance of the Government of Myanmar and the World Bank.

The meeting benefited from the experience and strategic vision of several key Regional Organizations with which GWP collaborates in Asia and that have knowledge on water security and SDGs, as well as selected invitees inside Myanmar who play important roles in the Myanmar water sector.

GWP wishes to thank the Organizations that have sponsored this event, in particular the Republic of the Union of Myanmar, the Ministry of Transport and Communications, the Office of the UN Secretary General Special Envoy for Disaster Reduction and Water, the High Level Experts and Leaders Panel on Water and Disasters, the Ministry of Land, Infrastructure and Transport of Japan, the United Nations Department of Economic and Social Affairs (UNDESA), Myanmar Water Think Tank, the Australian Water Partnership, the Australian Department of Foreign Affairs and Trade, the Ministry of Infrastructure and Environment of the Kingdom of the Netherlands.

As the interim Chair of GWP, I particularly wish to thank GWP Myanmar and GWP South-East Asia for their invaluable contributions to making our joint event a success. A special word of thanks to each and every one of the participants who have contributed her/his knowledge and expertise for building a more water secure environment for the people of Myanmar and of the South East Asian Region.

**Drs. Alice Bouman-Dentener**  
**Chair (interim), Global Water Partnership**

## EXECUTIVE SUMMARY

At the invitation of the Government of Myanmar, a High Level Round Table on Water Security and the Sustainable Development Goals (SDGs) was convened on the 24<sup>th</sup> of May 2016, in the Inya Lake Hotel of Yangon, Myanmar. The event benefited from the presence of more than 130 participants representing various Ministries, Academia, NGOs and Civil Society Organizations linked to the water sector of Myanmar, as well as Representatives of Embassies, United Nations Agencies, Regional Development Organizations, and the Global Water Partnership.

At this important moment in the new democracy of Myanmar strategic choices are made about future economic development and community well-being. This High Level Roundtable aimed to contribute to determining the best way forward for achieving water security in the rapidly growing economy of Myanmar, taking into account its social complexity and safeguarding its environmental integrity. The diverse gathering of State and non-State actors presented a unique opportunity to learn from the mistakes that virtually all countries and regions have made in their respective water reform journeys and therefore minimize future need for major and costly corrections to flawed policies and practices.

The 2014 Census in Myanmar shows that almost 30% of the population does not have access to improved water sources and 25% does not have access to improved toilets. In rural areas, 3.1 million households do not have access to improved water sources, 1.07 million households are using unimproved toilets and another 1.5 million households do not have toilets.

Myanmar has frequently suffered from destructive earthquakes, water-related extreme weathers such as cyclones, periodic flooding, as well as droughts, which resulted in many losses and damages including landslides, with major challenges in terms water quality control and wastewater management, quite similar in fact to the challenges that other countries in the South East Asian region are facing.

Myanmar agriculture sector is a good place to start examining how water has been utilized and improve water use efficiency as well as water governance. The agriculture sector employs 65 percent of the country's labour force, but suffers from low productivity. Climate change tends to add to this pressure: increased risks of river floods, changing courses and magnitude of cyclones, longer droughts are key factors to be considered for future integrated water resources planning, implementation and management.

The need to consolidate holistic, inter-sectoral planning approaches to water resources management is stated prominently in the development plans of Myanmar, and Integrated Water Resources Management is the framework for the Myanmar National Water Policy of 2015. This meeting concentrated on how to translate the IWRM principles into practice in the context of the 2030 development agenda.

The outcomes of the roundtable also serve to shape the key messages of the Global Water Partnership for the implementation of the 2030 Agenda for Sustainable Development from an IWRM perspective.

The 2030 Agenda for Sustainable Development – together with the Addis Ababa Action Agenda, the Paris Agreement on Climate Change and the Sendai Framework for Disaster Risk Reduction, provide a renewed framework for development cooperation. Global goals are important for several reasons. They transform declarations into actions, provide focus to global and national development strategies, enhance partnership for implementation, keep development in the spotlight, raise awareness, promote action through review, and provide direction to global and national development strategies.

The SDGs and related targets will require translation into bespoke national development plans taking into account and reviewing existing policies and strategies, and discussing how they can be integrated into these frameworks. Each government will decide on its national process of integration of the SDGs into national plans and strategies and its own entry point.

The High Level Round Table has formulated a series of specific recommendations around five SDGs that are particularly relevant for the country and the region: SDG5 on Gender Equality, SDG 6 on Water and Sanitation; SDG 11 on Cities and Communities; SDG 13 on Climate Change; and SDG 17 on Implementation Means and Partnerships.

It reached the following key conclusions:

### ***1. Need to involve all key stakeholders***

Sustainable development in general and achieving water security in particular require holistic approaches that integrate economic, social and environmental policies. Indeed, stakeholder participation is key to educate the public and to promote better understanding of the problems; but also to inform authorities bottom up, so that solutions are reached that reconcile public priorities with people's reality on the ground. Engagement is also required from all sectors of society. to build trust in the authorities and in each other, to enable multi-stakeholder and transboundary cooperation and to generate innovative ideas while taking into account local experiences and indigenous knowledge. Effective engagement of women in decision-making processes and in the definition of local priorities is vital as it will contribute to greater ownership, socially acceptable solutions, collective commitment and, as a result, more effective implementation of the 2030 agenda. Systematic involvement of Youth will ensure bridging to the next generation.

### ***2. Water Security through an integrated and multi-sectoral approach***

There is a need to turn Myanmar into a water efficient country by fully implementing the country's integrated water resources management plan by 2020. Hence the importance of investing in the water sector, including water supply and sanitation, personal hygiene, environmental cleanliness, navigation, water transport, irrigation and hydropower. Streamlining of the legal and institutional frameworks is key, which should include a focus on the gender dimension of water security. Investment in awareness raising, including in the area of curbing and preventing pollution is important to enhance water stewardship of key actors such as business and industry.

### ***3. Institutional mechanisms for effective water governance***

In order to better respond to increasing sector challenges and a new political setting, institutions need to adapt to changing circumstances. Political will and policy continuity are key in the transition towards more inclusive and sustainable practices. There is now an enhanced recognition that bottom-up and inclusive decision-making is key to effective water policies. This needs to be translated in supporting institutional mechanisms at the appropriate levels.

Coordination of the water sector development is needed to reach water security, which necessarily includes the regeneration of the former National Water Resource Committee (NWRC) as apex body, while making sure that implementation is done by sectoral ministries. Apex coordination is key to ensure that an integrated vision is imbedded in all water sector development and that there is integration with other sectors (such as agriculture, energy and environment) so that balanced trade-offs are being made for the benefit of the entire country and all beneficiaries.

Water also provides opportunities for transboundary cooperation. Investment in data, knowledge and stakeholder engagement precedes implementation of IWRM, which in turn benefits many sectors (such as food, energy, navigation, tourism, and flood protection).

The need for pre-investment in institutional development is well understood; this includes substantial investment in capacity building in human resources, not only of water professionals but equally important of civil society actors that are an important factor in decentralized water governance and disaster risk reduction.

Community water user groups are considered a valuable instrument to prevent and curb pollution and to reach sustainable use and management of water resources, especially in decentralized settings and informal settlements.

### ***4. Disaster Risk Reduction and response to climate change as an integral part of water development policies and vice versa***

Myanmar is determined to play its role in the global effort and to crystallize this will into our Intended Nationally Determined Contributions (INDC). Despite being a relatively low greenhouse gas (GHG) emitter and being a net GHG sink, Myanmar wishes to undertake a series of actions to demonstrate its commitment to climate change mitigation and highlight options for adaptation. The development of the INDC is a nationally led process. Political guidance has been sought from the highest institutional level within the Government of the Republic of the Union of Myanmar.

Myanmar being disaster prone can benefit from experiences of other countries in the region such as Japan; and joining the international Water and Disaster Risk Reduction community would yield mutual benefit.

Water security means investing in resilience, in flood-risk management and early warning systems, but equally in an informed and capacitated civil society to prevent inadequate land use and ensure preparedness for disaster response.

## ***5. Committed financing for securing change***

Providing essential services will require policy to ensure sound public financing through tax collection, sound public spending, and public investments that favor infrastructure and human development.

Water security and food security are intrinsically linked. New investments to enhance agricultural productivity by supplying quality seeds, water efficient farming techniques as well as adopting modern farm technologies can raise incomes for farm families, which comprise most of Myanmar's poor.

Invest in the development of innovative and bespoke solutions that address the acute water and sanitation needs of the population in a structural and sustainable way.

## ***6. Delivering change through partnerships, advocacy and leadership***

An important starting point for a strengthened partnership network is advocacy. A key challenge is demonstrating direct attribution between work that is done 'on the ground' and the outcomes and impact this work was designed to influence. Promoting water security requires commitment at the highest political level – when political leaders take the lead, make the tough decisions about the different uses of water, and follow through with investments and implementation. Implementing water security requires leadership at all levels and in all sectors of society to ensure an all-of-society engagement and partnership as propagated by the 2030 development agenda.

## ***7. SDG 17, the engine for the water sector development***

Goal 17, is fully dedicated to the means of implementation and revitalized Global partnership for sustainable development. Its covers such issues as finance, technology, capacity-building, trade, systemic issues, including policy and institutional coherence, multi-stakeholder partnership and data and monitoring.

It also implies for Myanmar to participate in North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing.

Pre-investment in an enabling environment for implementation (capacity development, policy and institutional coherence, inclusive multi-stakeholder partnerships, data and knowledge) will increase efficiency and sustainability of interventions and avoid expensive mistakes. Water budgets should have a provision for ensuring a strong enabling environment for implementation that includes the building and maintaining of relevant MSPs.

# 1. INTRODUCTION

## 1.1 Background

At the invitation of the Government of Myanmar, a High Level Round Table on Water Security and the Sustainable Development Goals (SDGs) was held on the 24<sup>th</sup> of May 2016, in the Inya Lake Hotel of Yangon, Myanmar.

This High Level meeting was built on the multi-stakeholder panel that GWP has organized during the Second UN Thematic Session on Water and Disasters<sup>1</sup>, the SDGs formulations under the leadership of UN ESCAP, and on the recent Asian Water Cycle Conference on regional water security in Tokyo on 1-2 March 2016.

The event benefited from the presence of more than 130 participants representing various Ministries, Academia, NGOs and Civil Society Organizations linked to the water sector of Myanmar, as well as Representatives of Embassies, United Nations Agencies, Regional Development Organizations, and GWP (see List of Participants in Annex 2).

This High Level event was designed to be a milestone in the new democracy of Myanmar, accelerating the already consolidated IWRM, DRR and WASH activities those are ongoing under the guidance of the Government of Myanmar and the World Bank. In the past years, Myanmar has shown impressive strides forwards towards integrated and sustainable water resources management, supported by the core of Myanmar's academia and civil society leaders locally and from abroad, within the context of the Myanmar Water Policy approved by the Government. Building on these past achievements and within the context of the recent Agreement that the International Community has formulated around the 2030 Agenda, the theme of Water Security and the SDGs is addressed in an integrated and participatory way.

It is most fitting and timely for the country to express its capability and keen interest under the new light of democratic government. The High Level Round Table meeting seeks to identify possible challenges to address the inherited impacts from past governments on the water sector. It may contribute to the reforms which the new government led by the Nobel Peace Prize Winner, Lady Aung San Suu Kyi, who at present undertaking the duties of the State Counselor and the Minister of Foreign Affairs, would like to carry out. This High Level event would also make a bridge between past and the present as well as a work plan for the future not only for Myanmar but also for the ASEAN members.

## 1.2 Objectives of the event

The main objective of the High Level Meeting was to contribute to the well-being of the people of Myanmar and of South East Asia, and to Myanmar's commitment and efforts to improve water governance and management as key element of sustainable and equitable development.

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<sup>1</sup> UN Headquarters, New York,

The specific objectives were as follows:

- To reconcile existing National and Regional Strategies / Programs aiming at reaching Water Security with the SDGs and the 2030 Development Agenda approach. The Meeting will focus mainly on five SDGs, namely SDG 5 (Gender), SDG 6 (Water and Sanitation), SDG 11 (Cities), SDG 13 (Climate Change, DRR), SDG 17 (Partnerships).
- To illustrate the importance of national partnerships and regional cooperation as key vehicles for the implementation of the SDGs as highlighted in the 2030 Agenda, under Goal 17 that could be implemented in the South Eastern Asia Region.
- To support the Government of Myanmar in promoting water high on the national development agenda.

The outcomes of this Meeting will feed into the international processes on water governance and the SDGs, including the High Level Panel on Water and other relevant High Level Panels.

### 1.3 Overview of proceedings

The event was introduced by the Lead Moderator Dr Kaye Schofield, Chairperson of the Australian Water Partnership and started with Opening and Welcome Addresses from High Level Officials of the Government of Myanmar, notably by Mr. Phyo Min Thein, Chief Minister, Yangon Regional Government and by U Kyaw Myo, Deputy Union Minister of Transport and Communications , followed by welcoming remarks of Drs. Alice Bouman – Dentener, Chair A.I. of the Global Water Partnership a congratulatory remarks by Dr. Jennifer Sara, Global Water Practice Director, World Bank Group and by Dr. Koji IKEUCHI, Vice Minister, Ministry of Land, Infrastructure, Transport and Tourism of Japan.

The event went on with Key note addresses made by a message from Dr. Han Seung-soo, former Prime Minister of Korea and United Nations Secretary-General's Special Envoy for Disaster Risk Reduction and Water, followed by a key note Prof. Dr. Khin Ni Ni Thein, Secretary of Myanmar Water Think Tank, on Water Security and new Economic policy in Myanmar, then by Mrs Kenza Robinson, United Nations Department of Economic and Social Affairs and finally by Drs Koos Wieriks, Strategic Advisor Water Management at the Ministry of Infrastructure and the Environment of the Netherlands.

The Introductory High Level Sessions were followed by a Round Table Session with the main objective to formulate key recommendations for the realization of Water Security in Myanmar and the South East Asia Region through the implementation of the Sustainable Development Goals (SDGs).

These recommendations should subsequently be discussed in a plenary session, which will be shared with other international events.

The Round Table discussions were organized around five main SDGs:

- Table 1: SDG 5 (Gender/Water Governance), moderated by Mrs Kenza Robinson, and the rapporteur was Ms. Catharina Sahlin Teganader.
- Table 2: SDG 6 (Water and Sanitation/ WASH), moderated by Kenzo Hiroki, and the rapporteur was Jacques Rey.
- Table 3: SDG 11 (Cities), moderated by Rabindra Osti, and the rapporteur was François Brikké.
- Table 4: SDG 13 (Climate Change / DRR), moderated by Toshio Koike, and the rapporteur was Rudolph Cleveringa.
- Table 5: SDG 17 (Partnerships/Investment), moderated by Jerry Priscoli, and the rapporteur was Susanne André.

Each participant was assigned to a specific Table prior to the event. The discussions were held around one key question:

*What are the top five key priority actions to take regarding the implementation of your specific SDG in order to reach water security in Myanmar and South East Asia?*

The results were then shared and discussed in plenary. A contact with the press was organized during the morning break, and facilitated by Steven Downey.

#### 1.4 Messages from the Welcome Addresses

##### ***Dr. Kaye Schofield, Lead Moderator of the High Level Round Table, Chairperson of the Australian Water Partnership***

- The broad national, regional and global participation in today's event reflects the commitment of a wide range of national and foreign Ministries, non-government organizations, businesses and water and environment professionals to making a positive contribution to improved water security.
- As the new democratic government of Myanmar makes its own strategic choices about future economic development and community well-being, it has a unique opportunity to learn from the mistakes that virtually all countries and regions have made in their respective water reform journeys and therefore minimize future need for major and costly corrections to flawed policies and practices. With its immense water resources and the state of technology today, Myanmar has a rare opportunity to chart its own development course and in doing so, contribute to water security and sustainable development for all.
- Cooperation based on trust and collective action are essential elements in the governance and management of the commons.

***Mr. Phyo Min Thein, Chief Minister, Yangon Regional Government***

- Myanmar is one of the most vulnerable countries of the world to the adverse impacts of climate change and it is facing threats from extreme weather events, sea level rise, flooding and drought.
- Without action to adapt to these threats, the prospects for the economic development of our population of over 50 million will be hindered and our environment degraded.
- It affects agriculture productivity and therefore food security. There is a need to go for more integrated water management in order to overcome social disparities and move from ad hoc projects to a holistic coherence and mutual support of SML-term projects.
- Water quality and water supply services are not yet efficient; all stakeholders to be involved in implementation, management and monitoring.
- Need also for zoning processes for 'controlled' sustainable growth of Yangon; Short Medium and Long term plans are required; there is a serious backlog in state of repairs and rehabilitation of infrastructure in Yangon.
- Myanmar is ready to work with development partners in top-down and bottom-up ways.

***U Kyaw Myo, Deputy Union Minister of Transport and Communications***

- Water is poorly managed with shortages, affecting integrity of ecosystems, economic productivity, national well-being and life expectancy.
- The Government of Myanmar has signed the Global Agreement on the Sustainable Development Goals. The coordination between Ministries and stakeholders is important and necessary for their implementation.
- The outcomes of the Round Table are relevant for the future directions of the water sector in Myanmar.

***Drs Bouman – Dentener, Chair A.I. of the Global Water Partnership***

- GWP is founded on the Dublin Principles for integrated and participatory water management (IWRM). In our Theory of Change strong multi-stakeholder partnerships and evidence-based knowledge are the key to advance changes in policy and practice.
- The recent SDG agreement has created an enormous wave. We are not yet fully prepared for that; we need to get new surfboards to ride this wave: develop the right tools and skills, build capacity, and build partnerships. Because business as usual is not an option.
- Water is our common entry point. For water is the foundation and the glue for sustainable development but also accounts for most of the disasters in the world.
- The 2030 Agenda for Sustainable Development wants to be a transformative agenda. It talks about integration across SDGs; it wants us to connect the dots. And in that context, it propagates an all-of-society engagement and partnership.

- From our GWP experience we know that such an “all-of-society engagement and partnership” is indeed key to make solutions sustainable and reach all intended beneficiaries. Experience tells us that this is a long-term process and requires a serious and continuous pre-investment in building social capital in communities, both in civil society, academia and education, private and public business sector and local authorities.
- This is about trust-building as a constant ally in change just as much as about credibility from action. This includes allocating sufficient time and resources and also carrying potential structural and institutional reforms for this purpose and giving specific attention to those stakeholder groups that are easily and usually left behind.

***Dr. Jennifer Sara, Global Water Practice Director, World Bank Group***

- Water is fundamental for economic growth and is clearly a cross cutting issue of the SDGs. There is a need to manage trade-offs, and to go away from silo approaches, therefore supporting the Water Food Energy Ecosystem Nexus.
- Effective water management requires political leadership and sound institutions, High Level Panels on Water; and also participatory management among institutions.
- Development partner coordination is necessary, and the World Bank is ready to partner with all present at the Round Table.

***Dr. Koji IKEUCHI, Vice Minister, Ministry of Land, Infrastructure, Transport and Tourism, Japan***

- Disaster Risk Reduction (DDR) on water requires to invest in advance, to build back better, and to anticipate Climate Change. This includes all of Cabinet preparation for DRR, and to pay attention on flood-prone areas, ground water abstraction, saline intrusion and subsidence. Water pollution is a serious health challenge via rivers and landscapes.
- Climate Change is a top priority, as well as flood risk management and early warning systems, recycling and ground water abstraction regulations.
- Solutions often only come after damage is done which is more expensive than implementing preventive activities. Structural and non-structural measures to be done in timely manner for the sustainable development of cities and for adaptive landscapes.
- South - South cooperation is done via JICA in South East Asia; the Round Table outputs will be useful to the High Level Panel on Water and High Level Experts and Leaders Panel on Water.

## 1.5 Messages from the Key Note Addresses

### ***Dr. Han Seung-soo, former Prime Minister of Korea and United Nations Secretary-General's Special Envoy for Disaster Risk Reduction and Water***

- Water is life. Water is integral part of life on our planet. The World Economic Forum's Global Risks 2015 report<sup>2</sup> identified water crisis as the biggest threat facing the planet over the next ten years. Other risks that made the list are inextricably tied to water management. They include: extreme weather events; failure of national governance, state collapse or crisis; rapid and massive spread of infectious diseases; and failure of climate change adaptation.
- The serious water-related challenges and the attendant socioeconomic and environmental consequences include not only inadequate and unequal access to water and sanitation, but also lack of adequate water and wastewater treatment, ecosystem degradation and decline in biodiversity, and devastating and ever increasing impacts of water-related disasters.
- Water can also be a threat to life. The Asia Pacific region is particularly vulnerable to natural disasters. The Asia Pacific region accounts for about 60% of fatalities, and almost 90% of all affected people by disasters. Water-related disasters such as floods and droughts represent almost 90% of all disasters in terms of people affected.<sup>3</sup>
- Water provides opportunities for development. The abundant water resources of Myanmar, if managed well, will not only reduce water-related disaster risks, but will also enable effective utilization of water resources for food security, energy production and industrial development, and contribute to the better quality of lives and prosperity of the country.
- Water also provides opportunities for cooperation. The issue of water is at the heart of every nation, developing or developed. Water problems and their effects often spread beyond borders in a world where the global economy and society are inseparably connected. Cooperation and solidarity among nations and relevant partners is the only rational way forward.
- During the Davos Forum this year, Mr. Ban Ki-moon and Dr. Jim Yong Kim, President of the World Bank Group announced the co-convening of the High Level Panel on Water (HLPW). The main objective of the HLPW is to first motivate effective action, and second, advocate on financing and implementation.

### ***Prof. Dr. Khin Ni Ni Thein, Secretary of the Myanmar Water Think Tank***

- Myanmar is engaged in a Water for Peace and Reconciliation process involving: reversing the processes of the past; resource sharing – IWRM; sharing rights and responsibilities; sharing benefits, costs, impacts, risks.

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<sup>2</sup> World Economic Forum, Global Risks 2015 Report, 2015  
[http://www3.weforum.org/docs/WEF\\_Global\\_Risks\\_2015\\_Report15.pdf](http://www3.weforum.org/docs/WEF_Global_Risks_2015_Report15.pdf)

<sup>3</sup> UNESCAP, Overview of Natural Hazards and their Impacts in Asia and the Pacific 1970-2014, 2015  
[http://www.unescap.org/sites/default/files/Technical%20paper-Overview%20of%20natural%20hazards%20and%20their%20impacts\\_final.pdf](http://www.unescap.org/sites/default/files/Technical%20paper-Overview%20of%20natural%20hazards%20and%20their%20impacts_final.pdf)

*“The 2015 election manifesto lays out sector by sector the policies and principles that we will follow if we are able to form a government. We will be able to achieve this only with the support and encouragement of the people of our country. This is the time to change, and I strongly urge you to vote for National League for Democracy (NLD). In establishing a democratic federal union, the NLD will bold firmly to the goal of national reconciliation.”*  
(Signed Aung Sang Suu Xhi)

- The Manifesto proposes a constitution that ensures that all the people of our country can live together in tranquility and security. The current constitution will be amended based on the principles below:
  - To be in accordance with basic human rights and democratic standards. (Access to clean water and basic sanitation is a human right)
  - To ensure internal consistency of the constitution.
  - To guarantee ethnic rights and establish a federal democratic union. (Need to practice IWRM, create enabling environment and good water governance.)
  - To create a genuine multi-party democratic system.
  - To ensure that the three branches of government responsible for mutual checks and balances- the legislative, executive and judiciary- are on an equal footing.
  - To defend and protect the equal rights of citizens. (Water rights should be explicit)
- The Manifesto on the economy: in order to encourage greater foreign investment in line with the highest international standards:
  - We will lay down paths for economic cooperation that can bring sustainable long term mutual benefits for both parties.
  - Through this, we will be able to enter into international markets, develop more new job opportunities, and benefit from the transfer of technology and improved labour skills. (Virtual water trade inside the traditional economy should be aware and taken into account when we chart the paths).
  - We will construct effective basic infrastructure, including for transportation, access to electricity, and access to information. (Transportation infrastructures include water highways, ports facilities, bridges, tunnels, culverts and navigation aids and facilities).
  - We will work towards the development of a modern farming sector, ... We will work to ensure sufficient access to necessary inputs and finances for the development of the farming sector and rural areas ... Through the development of the agricultural sector, we will also see the bolstering of the industrial and service sectors and increased exports. (Here we need to practice water use efficiency, integrated water resources management, to ensure water security for the farming sector in particular and overall Green Economy and Green Growth in general.)

- Where there is natural resource extraction and usage, we will lay down appropriate methods so as to avoid environmental and ecological damage.
  - We will work to ensure that extractive projects are planned transparently and that the public is informed.
  - We will establish a dedicated fund to ensure that the profits of such projects are used for the long-term development of the country.
- The Ayeyarwady Integrated River Basin Management Project (AIRBM) is built on an innovative approach that focusses on water security mainly through the improvement of the following:
    - Water Resources Institutions / Water Law, Water Framework Directive, Water Policy, Standards, Regulations and Procedures (Union and Regional levels);
    - Hydro-Informatics Centre – water operation centre of Myanmar – DSS or decision support organ of National Water APEX Body (in the future);
    - The development of a Ayeyarwady Basin Development Plan – Ayeyarwady Master Plan;
    - The development and implementation of a Multi-Stakeholder Forum/ Platform;
    - Capacity Building and Future Investment.

***Mrs Kenza Robinson, United Nations Department of Economic and Social Affairs***

- The Sustainable Development Goals are action oriented, global in nature and universally acceptable, however they do take into account different national realities, capacities and levels of development and actually respect national policies and leadership.
- These global goals need to be translated into national goals if they are to be operationalized at country level. This will require a thorough review of existing national development plans and strategies as well as discussions on how they could be integrated into existing frameworks, including sectoral and sub-national strategies.
- Translating global goals into national goals also requires effective engagement of all key stakeholders, who really are the key “change agents” in the process of reflection on the main steps needed to start the integration of the agenda into national strategies and plans. The engagement of local actors in decision-making processes and in the definition of local priorities is equally vital and actually contributes to greater ownership, commitments and as a result more effective implementation of the Agenda 2030.
- Truly, the success of the agenda will be mostly measured in the impact it has on people’s lives at the grass-root level. In this regard, countries must be reminded of the vital role women play as agents of development. Without that realization, women and girls will continue to be robbed of the full realization of their human rights and equal opportunities.
- We need to deepen the knowledge, raise the awareness and enhance the capacity of

all actors for effective water management as well as disaster risk and vulnerability reduction and resilience building to natural disasters and weather- and climate-related extreme events. But we must also strengthen financing, technology transfer and capacity building.

- The complexity and daunting nature of tasks ahead require a deeper collaboration among different stakeholders – governments, civil society, academia, private sector, local communities, and the UN system. Only by working together can we achieve real results.

***Drs Koos Wieriks, Strategic Advisor Water Management at the Ministry of Infrastructure and the Environment of the Netherlands***

- Water in the heart of development and the SDGs. But how to get from ambitious goals to practical solutions? The Dutch Delta Program presents a practical experience for a way forward. It has helped keeping the Netherlands a good, safe and attractive place to live and work; safe against flooding now and in the future [2100]; being prepared, with fresh water supply guaranteed also in dry periods for people and the economy, not as a response to a disaster, but as an advance preparation.
- Flood Risk Management policy includes a 3 layered approach: 1) Evacuation, response; 2) Land use planning (new developments); 3) Preparedness, prevention. The Room for the river approach implies cooperation between central government, Water boards, provinces and municipalities. Regions are in the lead, and there is a need of accepting that certain areas will overflow at high water and adapting spatial planning accordingly.
- The Delta Coalition is a Joint Action to get urban deltas on global agenda COP 21, HABITAT III. It focuses on exchange of knowledge and experience, mutual help in implementation. It involves the following countries: Netherlands, Japan, Colombia, France, Korea, Philippines, Vietnam, Indonesia, Mozambique, Egypt, Myanmar, and Bangladesh.
- Our Water Security recommendations are as follows: Know about your water system and the risks– collect data; Look ahead systematically – IWRM - Basin Approach, Water Security = water quality, flood protection / disaster risk reduction, good ecological quality and good sanitation, adopt an Integrated approach.
- Water security contributes to food and energy production, poverty alleviation, stability and sustainable development; Water security = investing in resilience, future development NL financing, water board, delta fund, combine different policy fields and financial sources, cooperation; Prevention and preparedness are at the basis of Water Security & SDG. Water security requires good governance, including cooperation, coordination, participation+ financing + planning + legislation.
- Cooperate between different central ministries, provincial and local government and different stakeholders (science, private sector and NGOs) in a participatory approach. Multilevel, Delta plan, Overdiepse polder; planning alone is not enough. It's about implementation. Capacity building is essential. Just do it! Create public awareness and political will.

## 2. WATER SECURITY AND THE SDGs TODAY

### 2.1 The Relevance of Global Goals to National Development<sup>4</sup>

#### ***A framework for Development Cooperation***

In September 2015, United Nations Member States adopted a landmark agreement on a new global sustainable agenda entitled: “Transforming our World, the 2030 Agenda for Sustainable Development”. This milestone provides a vision and a global framework for national strategies and policies that would eventually lead to the transformation on the road to 2030.

The first 16 Goals of the new agenda define the expected substantive outcomes in different areas of sustainable development across social, economic and environmental dimensions, and the key issues of peaceful societies and effective institutions. Each of these 16 goals includes two types of targets: the outcome type and the “means of implementation” type of targets. The last goal, Goal 17, is fully dedicated to the means of implementation and revitalized Global partnership for sustainable development. It covers such issues as finance, technology, capacity-building, trade, systemic issues, including policy and institutional coherence, multi-stakeholder partnership and data and monitoring.

The 2030 Agenda for Sustainable Development – together with the Addis Ababa Action Agenda, the Paris Agreement on Climate Change and the Sendai Framework for Disaster Risk Reduction, provides a renewed framework for development cooperation.

#### ***Translating global goals into national goals***

Global goals are important for several reasons. They transform declarations into actions, provide focus to global and national development strategies, enhance partnership for implementation, keep development in the spotlight, raise awareness, promote action through review, and provide direction to global and national development strategies.

Global goals set the ambition for and measure global rate of progress, which cannot be applied identically across all the countries. Also, a one-size approach will not fit the different needs of different countries as they do not have the same priorities, initial conditions, levels of development, capacities and resources. The SDGs and related targets will require translation into bespoke national development plans taking into account and reviewing existing policies and strategies, and discussing how they can be integrated into these frameworks. Each government will decide on its national process of integration of the SDGs into national plans and strategies and its own entry point.

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<sup>4</sup> by Kenza Kaouakib-Robinson, Division for Sustainable development, UN Department of Economic and Social Affairs

### ***Water as an entry point***

Many Governments adopted integrated water resources management as their entry point for sustainable development, and hence for SDGs' integration. The Agenda 2030 has water at its core, with a dedicated Goal 6 on water and clear linkages to Goals relating to climate Change, resiliency to disasters and ecosystems, as well as gender among others.

It is common knowledge that water security is greatly impacted by climate change and extreme weather events. Within this context, Agenda 2030 is envisaged to propel a change of mind-set from all actors, to see more deeply the interlinkages between sectors and overcome the silos that impede more coherent and integrated policy. Within this context, effective water resources management should adopt a risk-informed approach.

### ***Stakeholder's engagement and partnership***

The 2030 Agenda places people at the center of sustainable development efforts, and emphasizes the importance of localizing the SDGs and leaving no one behind. Engaging key national "change agents", such as government officers, including from sectoral ministries, parliamentarians, local authorities, media representatives, business and industry, community leaders, Civil society including women, and NGOs in the process of reflection on the key steps needed to start the integration of the agenda into the national strategies and plans is a pre-condition for implementing sustainable development nationally.

Effective engagement of local actors in decision-making processes and in the definition of local priorities is vital and will contribute to greater ownership, commitment and, as a result, more effective implementation of the 2030 agenda. Moreover, the success of development cooperation in support of the 2030 Agenda will be mostly measured in the impact it has on people's lives at the grass-roots level. In this sense, the role of citizens is also essential to measure results and to influence decisions about the future direction of development cooperation. It is equally vital to engage with the private sector and align its incentives with sustainable development needs, strengthen science, technological development, innovation and build capacity for sustainable development.

### ***Engaging women is vital***

The 2030 Agenda for Sustainable Development reminds governments that women play a vital role as agents of development and that realization of gender equality is crucial to progress across all SDGs and targets. SDG #5 aims to ensure that women and girls will enjoy the full realization of their human rights and equal opportunities.

Regarding Goal 6, the Commission on the Status of Women recognized that women and girls still are disproportionately affected by inadequate water and sanitation facilities, and urged governments "to improve water management and wastewater treatment with the active participation of women and to provide universal and equitable access for all to safe and affordable drinking water and adequate sanitation and hygiene, in particular in schools, public facilities and buildings, paying special attention to the specific needs of all". The Commission also expressed concern over the challenges faced by women and girls who are "disproportionately impacted by climate change, environmental issues and diverse types of extreme weather events".

The gendered dynamics of water underscores the close interlinkages between poverty, gender, climate change and sustainable development. The challenge is to continue to explore ways and means to bridge the gap between conceptual comprehension of gender issues and everyday grassroots realities of differential access to and use of water, as well as when considering disaster risk reduction and climate change.

## 2.2 Water Security in Myanmar

### ***Water Challenges in Myanmar<sup>5</sup>***

Although the overall availability of water is abundant, there are distinct regional differences:

- lack of water or rather difficult and costly access to the water resources (e.g. Ayeyawaddy River) in the Central Dry Zone,
- Salinisation in the Ayeyarwady Delta area,
- Flooding in the deltas, flash floods in the mountains and Dry Zone,
- Cyclones and surges along the coast are primary hazards.

The availability of safe drinking water depends on reservoirs, communal ponds, and private collection of rainwater and groundwater. Many groundwater resources are either saline – in the coastal area – or contaminated, predominantly by – natural – arsenic.

Myanmar has frequently suffered from destructive earthquakes, water-related extreme weathers such as cyclones, periodic flooding, as well as droughts, which resulted in many losses and damages including landslides, with major challenges in terms water quality control and wastewater management, quite similar in fact to the challenges that other countries in the South East Asian region are facing.

Future socioeconomic perspectives such as economic growth and population increase and the associated pressure these have on water, need to be taken into account when one is formulating a vision and concrete and feasible strategies for water resources management: higher demands for agricultural and domestic water, potentially a boom in the demand for industrial water and consequent pollution problems, which is very vivid in the Uru river for example, a sharp increase in the demand for hydropower.

Climate change tends to add to this pressure: increased risks of river floods, changing courses and magnitude of cyclones, longer droughts are key factors to be considered for future integrated water resources planning, implementation and management.

The interrelation between water, food, and energy security provides a useful framework to analyse tradeoffs, because food and energy production will have a large impact on water resources, and vice versa. Regional differences require special attention. The differences of each region require diversification of strategies per region which follow logically from the potential water supply in combination with the envisaged socio economic development.

Last three years, from 2013 to 2015, Myanmar has shown impressive strides forwards

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<sup>5</sup> Extracts from Myanmar Integrated Water Resources Management Strategic Study “From Vision to Action”.

towards integrated and sustainable water resources management, supported by the core of Myanmar's water professionals, public intellectuals, academia and civil society leaders locally and from abroad. Myanmar's water activities are recognized by its neighbors in South East Asia as well as UN-Water.

Myanmar is currently undergoing an important water sector reform and the 2030 Agenda with its 17 SDGs provide a framework that can contribute to better orient several sector policies and strategies. The paragraphs below propose to focus on key SDGs that are directly or indirectly relevant for the water sector in Myanmar.

### ***Poverty today***

To reduce rural poverty in Myanmar, first and foremost it will take an increase in agricultural productivity to make farmers richer. More than half of Myanmar's labour force works in agriculture, but the average yield of the dominant crop, paddy rice is amongst the lowest in Asia. Difficulties include high fertilizer prices and a shortage of labour during times of harvest. Boosting productivity and thus profitability will require reform to increase the availability and adoption of modern farm technologies, as well as investments in seeds and extension services.

At present, 80 percent of the rural population lacks access to electricity. 37 percent lack access to clean drinking water and only 12 percent of roads are paved, which can make them impassable in the rainy season. Policies reforms and investment to empower rural communities start from 2012 to 2015. The level of general purpose transfers from the union level to States and Regions has increased from 0.6 percent of GDP to 2.3 percent.

This allows states and regions to fund important economic services (such as local roads, transport and communications, small scale energy projects and cottage industries) that are critical to rural development. The country's national community driven development program, launched in 2013. The 2015 Myanmar Poverty and Household Living Conditions Survey, provide a more complete snapshot of the needs and profile of the poor.

### ***Food Security***

The dry zone of Central Myanmar is the most water-scarce area in the country. Due to the changing climate, variations in water scarcity are more and more prominent, which in turn impacts on the food security. In this region farmers hardly receive enough rain to grow dry crops in some years. For example, a study of 630 households revealed that 19 percent reported receiving sufficient water only in the rainy and winter seasons and 5 percent reported sufficient water only in the rainy season.

To overcome the water scarcity variation and the food security in the dry zone and all over the country government organizations, local civil societies and agriculture water users need to cooperate and coordinate with each other in their available water resources development and management activities in respective areas.

Water for agricultural use in Myanmar is 91% of total water use, however, there is no systematic water allocation and water accounting system. The new democratic government is attracting financial and technical support, investments and many trade and industrial activities even within one and a half month of its rein. With this dynamics Myanmar needs

an APEX body, which can lead the water sector reform in democratic way in order to support the national development plan.

### ***Affordable and clean energy***

Myanmar has adopted an energy saving goal to reduce energy consumption by 12 percent by 2020, 16 percent by 2025 and 20 percent by 2030. The goal is aimed at promoting energy efficiency and energy conservation, thereby reducing greenhouse gas emission and contributing towards environmental conservation. Myanmar formed its National Energy Management Committee in January 2013 to promote energy efficiency through the implementation of short and long term plans.

An energy saving department was also formed under the Ministry of Industry to boost the implementation process for meeting the target of reducing energy consumption annually in the country. According to the department under the Ministry of Industry is conducting training courses on energy efficiency in Yangon and Mandalay in cooperation with United Nations Industrial Development Organization. Plans are underway to heighten energy efficiency awareness among the public in regions and states. Present Electrification ratio is only 33 percent and water can bring most of the rest 67 percent into Light. Working trend is moving to Public Private Partnership.

There is a plan of a waste to energy plant in Yangon aiming to reduce methane, carbon dioxide transmission. 300 KW from 700 KW produced by the plant will go to Yangon residents through national grid line, planning to generate electricity from 60 tons of waste materials per day.

## **2.3 Water Security in South East Asia**

### ***Key Challenges***

Water Security is under threat in the South East Asian Region, due to many sources: population growth, urbanization, increasing water pollution, the over-abstraction of groundwater, water-related disasters, and climate change. Current planning and management have proven insufficient to address the challenges of meeting society's diverse needs for water.

Improving agricultural water productivity, achieving energy objectives, satisfying growing industrial water requirements, and protecting water quality and vitally important natural ecosystems are challenges we still face. The social, economic, and political consequences of water shortages are real, as are the effects of water-related disasters exacerbated by climate change<sup>6</sup>.

According to the Asian Water Development Outlook, 90% of the world's disasters are water-related and 90% of the global population affected by water-related disasters lives in Asia. Southeast Asia<sup>7</sup> is highly vulnerable to climate change as a large proportion of the population and economic activity is concentrated along coastlines; the region is heavily

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<sup>6</sup> Mohamed Ait Kadi, Foreword in the Asia Water Outlook 2013, ADB, APWF

<sup>7</sup> ASEAN Cooperation on Environment

reliant on agriculture for livelihoods; there is a high dependence on natural resources and forestry; and the level of extreme poverty remains high.

### ***The case of the Mekong Sub – Region<sup>8</sup>***

In the Mekong River Basin (MRB) more than 70 million people live in 6 riparian countries: China and Myanmar (in the Upper Mekong Basin) and Thailand, Lao PDR, Cambodia and Vietnam (in the Lower Mekong Basin).

The Mekong, one of the world's greatest rivers, is a complex system with high intra-annual and inter-annual flow variability caused by the Southwest Monsoon, bringing both great risks and opportunities. These risks are growing as populations and economies grow and climate change advances, putting more people and assets in harm's way, as recent droughts and floods in the region have demonstrated. These events have made the improvement water security a priority of the Governments in the basin and the Mekong River Commission (MRC).

Assessments of the MRC demonstrate that addressing drought and flood related water security issues requires cooperation between the basin countries on joint management and development projects, along with cost and benefit sharing deals. The recently updated Basin Development Strategy for 2016-2020 prioritizes joint projects and provides directions for their planning. At the recent MRC regional meeting in February 2016, the Lower Mekong Basin Countries agreed to jointly prepare six joint projects, including:

- Integrated development and management of the Cambodian and Viet Nam Mekong delta (Cambodia and Viet Nam, with engagement of other basin countries);
- Sustainable water resources investments and management in the Sesan, Srepok and Sekong river basins (Cambodia, Lao PDR and Viet Nam, with engagement of Thailand);
- Cross border water resources development and management in the Khone Falls area, including environmental impact monitoring of Don Sahong hydropower project (Cambodia and Lao PDR, with engagement of other basin countries);
- Integrated water resources development and management in a shared river basin between Thailand and Cambodia.

The significant and long-term investment that the MRC has made in data and knowledge will greatly facilitate the preparation of these projects for investments and implementation. The development of such projects will lead inevitably to higher levels of transboundary cooperation, benefiting many sectors (such as food, energy, navigation, tourism, and flood protection), and thus advance ASEAN integration.

Regional and bilateral cooperation must be enhanced for better flood preparedness such as in implementing flood preparedness programs, community early warning systems, flood damage / needs assessment, and flood emergency response contributing to the overall flood risk reduction initiative by the national governments.

### ***Change in the way floods are being managed***

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<sup>8</sup> By H.E Watt Botkasal, Deputy Secretary General, Cambodia National Mekong Committee

The flood management paradigm is now progressively evolving, from a reactive to a more proactive approach. “Traditional” approaches to flood management, namely “flood defense,” or “flood control” now seem inadequate. Floods are no longer caused by rainfall alone, and are the result of greater interaction between human society and the natural environment.

Structural defense systems alone cannot address the emerging challenges, therefore non-structural solutions such as watershed management, sustainable farming, risk education, community preparedness with a gender perspective and early warning should be the integral part of the flood management therefore integrated water resources management.

Green cities development calls for holistic planning and management of water, flood, solid waste, storm water, ecosystems, and wastewater. To enhance resilience to climate change, it is necessary to strengthen knowledge about its impacts on water resources, strengthen capacities to move into action with participatory and holistic approaches, and ensure investments focusing on ‘no regret’ options and ecosystem-based approaches to flood management.

### 3. RECOMMENDATIONS FROM THE ROUND TABLES

#### 3.1 SDG 5: Gender Equality

##### **About Gender Equality**

Effective engagement of women in decision-making processes and in the definition of local priorities is vital and will contribute to greater ownership, commitment and, as a result, more effective implementation of the 2030 agenda.

According to the World Water Development Report 2015: “The principle of equity, perhaps more than any technical recommendation, carries with it the promise of a more water-secure world for all”<sup>i</sup>. Gender equality is considered a key factor to boost water management and access, and the inclusion of women in decision-making on water development and management at all levels is called for.

The central role of women in the provision, management and safeguarding of water and their participation as a stakeholder at all levels is already included in the Dublin Principles for Integrated Water Resources Management of 1992 (Dublin Principle 3 and 2 respectively). Women’s participation and involvement in water-related development efforts was also specifically called for in the *International Decade for Action ‘Water for Life’ 2005 – 2015*, proclaimed by the United Nations General Assembly with the aim to propagate water cooperation at all levels, including transnational, between sectors, and with full inclusion of all stakeholders.

Traditionally, women have taken the back seat in Myanmar society until 2000 when the rising living expenses forced many women from their homes to the workplace to become earners themselves. Since 2012, local administrators have been elected from a group of nominated 10 household heads. Little was known about Myanmar’s tiny fraction of female administrators, until a nationwide local governance mapping exercise conducted by the

United Nations Development Programme (UNDP) together with the General Administration Department, under the Ministry of Home Affairs, revealed that during the first election held over 2012-2013, only 42 women were elected, constituting 0.25 percent of the total 16,785 ward/village tract administrators (W/VTA).

### **Recommendations**

Participants of the Round Table on SDG 5 agreed on the following recommendations:

1. Participation in decision -making at different levels is vital, and in order to achieve this, the following is suggested:
  - Track women in decision making positions at all levels
  - Strengthen participation of women in decision making at all levels (village, community, state, province, government)
  - Active possibilities to engage women in IWRM at decision-making level, including in identification of priorities (especially at community / local level)
2. Streamlining of the legal and institutions frameworks, with a focus on the following:
  - Mapping of water laws from a gender perspective
  - Develop gender sensitive laws and introduce gender aggregated data
  - Create a National Commission of Women and a Charter of Women
3. Carrying out awareness raising activities, with a focus on the following:
  - Public and institutional awareness building
  - South – South exchange on how to better involve women
  - Incentive to employers who hire women
  - encourage private sector to invest in gender friendly water technologies
4. Overcoming cultural barriers
  - Encourage women to voice their opinions through a program on Women and Water
  - Develop programs for strengthening women leadership
  - Education of all children
  - Ensure gender sensitive WASH facilities in all institutions
  - Innovation: create groups through Face Book

## **3.2 SDG 6: Clean Water and Sanitation and integrated approaches to water management**

### **About Clean Water and Sanitation**

While the Millennium Development Goals were focusing on improving access to water and sanitation services, the Sustainable Development Goals, in SDG 6, propose a more holistic approach, by reaching universal access to water supply and sanitation as well as the following:

- improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally,

- substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity,
- implement integrated water resources management at all levels, including through transboundary cooperation as appropriate,
- expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies,
- support and strengthen the participation of local communities in improving water and sanitation management.

The 2014 Census in Myanmar shows that almost 30% of the population does not have access to improved water sources and 25% does not have access to improved toilets. In rural areas, 3.1 million households do not have access to improved water sources, 1.07 million households are using unimproved toilets and another 1.5 million households do not have toilets.

Law enforcement is needed to harness illegal gold mining on farms and in forest reserves, which creates environmental problems, including deforestation, the extinction of lakes and reservoirs and also impact on health. Waste water treatment facility constructed for no environmental effect by the industrial waste water released from the Mandalay industrial zone. Pipeline carrying waste water toward the river were helpful in eliminating bad odors caused by the presence of wastewater in the industrial zone. For Yangon area sewage treatment plant has already constructed before it is released into the river. Yangon City Development Committee is doing effective water management for Yangon city.

Rules and regulations for water quality management, water quality monitoring system, technology transfer for waste water treatment, awareness of project owners and the public and regional and international cooperation are needed for the future works.

Finally, there is a need to consolidate holistic, inter-sectoral planning approaches to water resources management, and therefore implement Integrated Water Resources Management approaches.

### ***Recommendations***

Participants of Round Table on SDG 6 agreed on the following recommendations:

1. Awareness raising on water issues at all levels is crucial, and the following is proposed:
  - Water awareness for all Stakeholders: on Water Resources Management challenges and solutions, biodiversity, watershed areas protection with legal frameworks, including the full attention to livelihood of local communities.
  - Awareness raising on sanitation and waste water management, as well as working with the schools.
  - Assessment of problems via community water user groups; followed by policies, laws, and enforcement.

2. Coordination of water sector development is needed to reach water security, and the following key actions are proposed:

- Regenerate the apex body (former National Water Resources Committee), while making sure that implementation is done by sectoral ministries.
- IWRM means to get towards water security (social priorities, equity...). Apex coordination is key to ensure that an integrated vision is imbedded in all water sector development and connection to other sectors is ensured.

3. Institutional reforms will contribute to water sector improvements, through the following:

- Institutional reforms are important for planning, protection, allocation of water resources, accompanied by relevant regulatory frameworks, law enforcement and implementation guidelines.
- Encourage private sector involvement in the wash sector, while promoting standards, regulation, and legal framework.

4. Plan for the implementation of IWRM and WASH, through the following:

- Strengthen collaboration among stakeholders, and get political will.
- Include sector review and develop investment plan.
- Dissemination of rural water strategy implementation (to 2030) to all stakeholders.
- Investigate smart solutions for inventory, retrofitting / rehabilitation of the existing stock of water infrastructures with full consideration of O&M requirements in present context (adaptive, risk management
- Implementation of IWRM on the ground. Watershed program for use and protection of Water Resources.
- Attention to ground water as a source of safe drinking water supply. While recognizing it is a nonrenewable resource.
- Step up Rainwater harvesting systems, and purification techniques.
- Drought management is needed but not well known. Water efficiency in agriculture, rainwater harvesting is needed.
- Capacity building of practitioners and stakeholders, including technical knowledge transfer, on the job training, experience from other countries. Provide seed resources to test ideas.
- Data generation, information knowledge sharing. Areas priorities: drivers of change: urban, power, ground water.

### 3.3 SDG 11: Sustainable cities and communities

#### ***About Sustainable Cities and Communities***

Cities are hubs for ideas, commerce, culture, science, productivity, social development and much more. At their best, cities have enabled people to advance socially and economically.

However, many challenges exist to maintaining cities in a way that continues to create jobs and prosperity while not straining land and resources. Common urban challenges include congestion, lack of funds to provide basic services, pollution, a shortage of adequate housing and declining infrastructure.

The challenges cities face can be overcome in ways that allow them to continue to thrive and grow, while improving resource use and reducing pollution and poverty. The future we want includes cities of opportunities for all, with access to basic services, energy, housing, water supply, wastewater and sanitation, transportation and more.

### ***Recommendations***

Participants of the Round Table on SDG 11 agreed on the following recommendations:

1. Urban Planning should adopt a holistic approach, considering the following:
  - The city lives in a watershed / delta context reality; upstream - downstream linkages that include IWRM principles are therefore vital.
  - This implies an integrated planning approach where all city stakeholders are involved. Green and public spaces (Green city/Resilient city) need to work together with urban planners, architects and water engineers. Hence a need of the promotion of integrated research.
  - Lakes are part of cultural and recreational spaces; lakes and artificial wetlands are for water retention and ecological values.
2. Urban Water Governance needs to adapt as suggested below:
  - A coordination mechanism and institutional structure to bring together stakeholders for the development and protection of the city is needed.
  - Most water decisions are made in the cities, and work is done in close coordination with champions, the press, and the local political will with integration of the views and interests.
  - Spatial planning and integrated urban planning is needed and should be closely linked to/integrated with IWRM planning taking into consideration the wider (watershed and ecosystem) context; Urban poor particularly affected;
  - Capacity development on the need for an integrated approach within the city government is required.
3. Investments in resilience and not only in disaster reduction:
  - Flood and solid waste management are in the top priority for public and private investment, and need therefore to have sufficient funds secured
  - Private sector involvement can be asset, with effective business model development
4. Sanitation and waste water are a priority:
  - Need of change of mind set: turning the waste stream into a resource and not consider it only as a nuisance. Recycling, reusing and reducing the amount of waste.
  - In the context of rapid population growth, urban poor are highly exposed and are

the most vulnerable group.

- There is a high risk of ground and water pollution, triggering high health risks

5. Cities need to become water resilient:

- DRR Preparedness through awareness raising among people, promote preparedness activities; creation of disaster database, as well as risk identification.
- Disaster risk information is being shared in a timely fashion; a bottom – up approach is part of the whole approach. It requires to change the mindsets of people

### 3.4 SDG 13: Climate Action

#### ***About Climate Action***

SDG 13 is to take urgent action to combat climate change and its impact. The United Nations Framework Convention on Climate Change (UNFCCC), the primary intergovernmental forum for negotiating the global response to climate change, unanimously recognized the need for bold action at the Conference of Parties (COP) 21 in Paris last year, at which governments agreed to hold the increase in the global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C.

Myanmar is one of the most vulnerable countries in the world due to climate change and is very alarming. Among the major impacts of the climate change, particularly of the global warming, the increasing rise in sea levels every year has been the most alarming one so far, with the possibility of submerging a substantial portion of ‘flood-prone’ coastal areas of Myanmar under water by 2050 (a prediction made in the 4th assessment report by the International Panel on Climate Change or IPCC). The rise in sea levels has been causing more floods, especially during storms. With flat and low lying land scape, the whole coastal area of Myanmar is highly vulnerable to such floods and storms.

A sizable portion of Myanmar’s population live in the coastal areas, where majority of the population are affected, directly or indirectly, by coastal floods or tidal flows, salinity, tropical cyclones, erosion of river bank etc. With the rise of sea level ‘even by a meter’, Myanmar could lose a substantial percentage of its total coastal landmass under the sea water, turning millions of inhabitants living in the coastal areas of Myanmar into climate refugees.

Moreover, the fresh water sources in the coastal areas of Myanmar face deep intrusion of saline water from the Bay of Bengal during the dry season. Agriculture, industry, school hospitals, roads bridges, livelihoods, marine resources, forestry, biodiversity, human health and other utility services will suffer severely. Myanmar must start addressing these above mentioned concerns with utmost urgency in the global platforms. The greatest challenge is to prepare for extreme climate events. A combination of structure measures (such as flood prevention structures) and non-structural measures will work best. In addition to floods, droughts also need to be addressed through integrated drought management. Farmers’ access to science-backed knowledge and best practices for coping with drought needs to be improved.

Parliamentarians submitted urgent motion call on the Union government to adapt risk mitigation measures against the negative effects of El Nino, which is expected to hit Myanmar this year. It is important to take necessary measures to guarantee the socioeconomic wellbeing of the people, including farmers, as agricultural outputs and fishery exports are likely to be limited by the consequences of El Nino. The government urged to be involved in the agriculture, food security, water supply, electricity, health, fishery, water transportation and tourism sectors to take precautionary measures.

According to Myanmar Fisheries Federation, there is a prediction that the country's fisheries sector is likely to get worse in 2016 than in previous years due to natural disaster affected inland fisheries and shortage of fish stock to catch in the waters of the country. Developing of illegal fish farming with the use of inappropriate methods, climate change and decreasing of mangroves have led to the decline of fisheries resources. Urged need people to promote participation in sustainable management of fisheries resources and biodiversity conservation activities.

### ***Recommendations***

Participants of the Round Table on SDG 13 agreed on the following recommendations:

1. Strategy and planning based on sound knowledge and information, with the following key activities:

- Reliability of advice is to be based on scientific and traditional knowledge and data on CC /DRR (Underpins scenario building and allows for alternative choices of impact pathways)
- Quantifying damage and substitutive finance (requiring reliable national capacities). Only big numbers attract big investments, but domestic opportunities for smaller level interventions not sufficiently considered; insurance aspects; attracting private sector investment when risk profiles known.

2. Institutional capacity building is important, with the following key activities:

- Local, provincial and national governance to be strengthened and enforced (Accountability, transparency, inclusion and leadership fostered for preventive and remedial action).
- Capacity development accelerated, scaled up and mainstreamed of leaders, women, youth, indigenous people, marginalized groups, on monitoring CC/DRR effects/damages (Local level response capacities build ownership of change of society through water agenda).
- CC/DRR Resilience building to be central in action, information, learning-by-doing and capacity development (Lower loss of life; improve quality; Enhance likelihood of other SDGs being enabled).
- Increasing resilience and adaptive capacities at local level with special attention to vulnerable mountains people, especially women and children.
- Sharing experiences between and within countries and pay attention to local publicly financed (non IFI) action and local projects.

### 3.5 SDG 17: Partnerships for the SDGs

#### **About Partnerships**

A successful sustainable development agenda requires partnerships between governments, the private sector and civil society. These inclusive partnerships built upon principles and values, a shared vision, and shared goals that place people and the planet at the center, are needed at the global, regional, national and local level.

Urgent action is needed to mobilize, redirect and unlock the transformative power of trillions of dollars of private resources to deliver on sustainable development objectives. Long-term investments, including foreign direct investment, are needed in critical sectors, especially in developing countries. These include sustainable energy, infrastructure and transport, as well as information and communications technologies.

The public sector will need to set a clear direction. Review and monitoring frameworks, regulations and incentive structures that enable such investments must be retooled to attract investments and reinforce sustainable development. National oversight mechanisms such as supreme audit institutions and oversight functions by legislatures should be strengthened.

#### **Recommendations**

Participants of the Round Table on SDG 17 agreed on the following recommendations:

##### 1. Partnerships are needed at all levels, with the following:

- Myanmar – to enhance democracy, networking within the water sector. Other countries to network with Myanmar as well, especially between countries who share same water resources
- Partnership between ministries in Myanmar is crucial, since water is relevant to all ministries, need to share the water within the country.
- Need to understand influence of private sector on investments, and to enable government to manage private sector to be partners in development.
- Indigenous representation into negotiations through their own institutions. Myanmar has an indigenous community as well as marginalized groups.

##### 2. IWRM is key for sector integration:

- Myanmar needs to take a long term view even though there are immediate needs, but still need some short term targets to show progress.
- Water governance, access to water for all communities in Myanmar are linked to political discussion on access to resources.
- Implementing IWRM and building capacity of best institutional body to promote it.
- At regional level, monitoring, indicators developed that are regionally acceptable in terms of monitoring and evaluation of water management, data sharing.

## 4. CONCLUSIONS

### 4.1 Conclusion 1: Need to involve all key stakeholders

Sustainable development requires holistic approaches to economic, social and environmental policies. Engagement is also required from all sectors of society. Indeed, stakeholder participation is important to educate the public, to promote better understanding of the problems, to gain better sense of public priorities, to build trust in the authorities, and to get more ideas.

In this sense, the role of citizens is also essential to measure results and to influence decisions about the future direction of development cooperation. It is equally vital to engage with the private sector and align its incentives with sustainable development needs, strengthen science, technological development, innovation and build capacity for sustainable development.

Effective engagement of women in decision-making processes and in the definition of local priorities is vital as it will contribute to greater ownership, commitment and, as a result, more effective implementation of the 2030 agenda. There can be no sustainable water reform journey unless women and men walk together at all levels on all the highways and byways of that journey.

Calling for cooperation between the government and the people, to promote the water sector, the Myanmar Water Think Tank emphasized the need for public awareness, participation, consultation, legislation, regulation, institutional arrangement and education on sustainable water management and need for highest level coordination body such as a National Water Committee which can be placed under the President's office.

The Global Water Partnership was the first initiator of promoting partnerships for Integrated Water Resources Management (IWRM) in the country Myanmar, through its Regional Water Partnership (GWP-SEA) and Country Water Partnership (MmWP). MmWP's constitution was drafted under the old regime and it never take off until now. It is time to revisit its constitution under the democratic principles to match with the new government's policy and outlook. International community and development partners as well as the World Bank and ADB will remain in supporting role.

### 4.2 Conclusion 2: Water Security through an integrated and multi-sectoral approach

Many Governments adopted water resources management as their entry point for sustainable development, and hence for SDGs' integration. The Agenda 2030 has water at its core, with a dedicated Goal 6 on water and clear linkages to Goals relating to climate Change, resiliency to disasters and ecosystems, as well as water supply and sanitation, water quality and wastewater management, food and energy production, city development, and gender among others.

Within this context, Agenda 2030 is envisaged to propel a change of mind-set from all actors, to see more deeply the interlinkages between sectors and overcome the silos that

impede more coherent and integrated policy.

There is a need to turn Myanmar into a water efficient country by fully implementing the country's integrated water resources management plan by 2020. Hence the importance of investing in the water sector, including water supply and sanitation, personal hygiene, environmental cleanliness, navigation, water transport, irrigation and hydropower, in order to maintain parallel infrastructure development and capacity building in human resources.

The country is implementing the process of ensuring integrated water resources management in cooperation with the Netherlands, Australia, Japan, the World Bank and other international organizations on water sector development.

#### 4.3 Conclusion 3: Water Governance needs to adapt to new circumstances

In order to better respond to increasing sector challenges and a new political setting, institutions need to adapt to changing circumstances. Political will and policy continuity are key in the transition towards more inclusive and sustainable practices. There is now an enhanced recognition that bottom-up and inclusive decision-making is key to effective water policies. In addition, a number of legal frameworks could trigger major evolutions in water policy.

The sector lacks policy, strategy and targets. As a result, best practices in the planning, delivery and maintenance of infrastructure and services have not been identified and taken to scale. There is a lack of reliable and detailed information on the adequacy and coverage of existing water supply and sanitation services. As a result, investment forecasting is currently weak. While transitioning towards a more inclusive governance system, water sector reforms will need to take these consider all the above mentioned challenges.

Coordination of the water sector development is needed to reach water security, which necessarily includes the regeneration of a water resource committee, an apex body, while making sure that implementation is done by sectoral ministries. Apex coordination is key to ensure that an integrated vision is imbedded in all water sector development.

Water also provides opportunities for transboundary cooperation. The issue of water is at the heart of every nation, developing or developed. Water problems and their effects often spread beyond borders in a world where the global economy and society are inseparably connected. Cooperation and solidarity among the neighboring countries of Myanmar and relevant partners is the only rational way forward.

#### 4.4 Conclusion 4: Disaster Risk Reduction as an integral part of development policies

Increasing climate-induced hazards<sup>9</sup>, significant exposure and vulnerabilities to climate change, make adaptation and disaster risk reduction (DRR) a priority for the country. In 2012, Myanmar identified short, medium and long-term priority actions in the sectors of: i) agriculture; ii) early warning systems; iii) forestry; iv) public health; v) water resources; vi)

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<sup>9</sup> <http://www4.unfccc.int/submissions/INDC/Published%20Documents/Myanmar/1/Myanmar's%20INDC.pdf>

coastal zone; vii) energy, and industry; and viii) biodiversity by adopting the National Adaptation Program of Action (NAPA).

Myanmar is determined to play its role in the global effort and to crystallize this will into our Intended Nationally Determined Contributions (INDC). Despite being a relatively low greenhouse gas (GHG) emitter and being a net GHG sink, Myanmar wishes to undertake a series of actions to demonstrate its commitment to climate change mitigation and highlight options for adaptation.

The development of the INDC is a nationally led process. Political guidance has been sought from the highest institutional level within the Government of the Republic of the Union of Myanmar.

#### 4.5 Conclusion 5: Committed financing for securing change

Myanmar agriculture sector is a good place to start examining how water has been utilized and improve water use efficiency as well as water governance. The agriculture sector employs 65 percent of the country's labour force, but suffers from low productivity.

New investments to enhance agricultural productivity by supplying quality seeds, water efficient farming techniques as well as adopting modern farm technologies can raise incomes for farm families, which comprise most of Myanmar's poor. Such steps can enable a structural shift for the rural work force to more labor-intensive and higher productivity sectors and sustainable reductions in poverty and inequality.

Inclusive growth also means greater investment in Myanmar's greatest resource-its people by ensuring education for all, health care for all, and energy for all. Providing these essential services will require policy to ensure sound public financing through tax collection, sound public spending, and public investments that favor infrastructure and human development. Infrastructure investments can spur private sector job growth and support more productive and labor-intensive economic activities, such as manufacturing and textile production. Today Myanmar faces both the opportunity and the challenge of building on the development gains.

#### 4.6 Conclusion 6: Delivering change through partnerships, advocacy and leadership

A delivering change strategy is embedded in a multi-stakeholder partnership based on the belief that only when a broad range of stakeholders works together will the way a country manages water change for the better.

An important starting point for a strengthened partnership network is advocacy. A key challenge is demonstrating direct attribution between work that is done 'on the ground' and the outcomes and impact this work was designed to influence. This can be the basis for the development of appropriate and relevant awareness raising activities that the Round Table has recommended.

Advocacy alone, though, is not enough. Decision-makers and institutions must acquire the attitudes and skills needed for a behavioural change to manage water effectively. But to build capacity, knowledge is required, and it has to be the right knowledge at the right time delivered to the right stakeholders.

Finally, promoting water security requires commitment at the highest political level – when political leaders take the lead, make the tough decisions about the different uses of water, and follow through with investments and implementation.

#### 4.7 Conclusion 7: SDG 17, the engine for the water sector development

Goal 17, is fully dedicated to the means of implementation and revitalized Global partnership for sustainable development. It covers such issues as finance, technology, capacity-building, trade, systemic issues, including policy and institutional coherence, multi-stakeholder partnership and data and monitoring.

Among other key targets, this includes for Myanmar strengthening domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection, as well as to mobilize additional financial resources for developing countries from multiple sources.

It also implies for Myanmar to participate in North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing.

And as mentioned in Conclusion 1, Goal 17 clearly calls for multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development.

## ANNEXES

### Annex 1: Round Table Agenda

08:00 – 09:00 Arrival and Registration of Participants (to be seated by 08:50)

#### Introductory High Level Session

	<b><u>Welcome addresses</u></b>
09:00 – 09:10	Introduction by Dr. Kaye Schofield, Lead Moderator of the High Level Round Table, Chairperson of the Australian Water Partnership
09:10 – 09:25	Opening Speech by Mr. Phyo Min Thein, Chief Minister, Yangon Regional Government
09:25 – 09:30	Welcome Address by U Kyaw Myo, Deputy Union Minister of Transport and Communications
09:30 – 09:35	Welcome remarks by Drs. Alice Bouman – Dentener, Chair A.I. of the Global Water Partnership
09:35 – 09:40	Congratulatory remarks by Dr. Jennifer Sara, Global Water Practice Director, World Bank Group
09:40 – 09:45	Congratulatory remarks by Dr. Koji IKEUCHI, Vice Minister, Ministry of Land, Infrastructure, Transport and Tourism, Japan
	<b><u>Key Note addresses</u></b>
09:45 – 09: 55	Keynote by Dr. Han Seung-soo, former Prime Minister of Korea and United Nations Secretary-General's Special Envoy for Disaster Risk Reduction and Water
09:55 – 10:10	Keynote by Prof. Dr. Khin Ni Ni Thein, Secretary of Myanmar Water Think Tank, on Water Security and new Economic policy in Myanmar
10:10 – 10:20	Keynote on the Sustainable Development Goals, by Mrs Kenza Robinson, United Nations Department of Economic and Social Affairs
10:20 – 10:30	Keynote by Drs Koos Wieriks, Strategic Advisor Water Management at the Ministry of Infrastructure and the Environment of the Netherlands
10:30 – 10:35	Wrap up by Lead Moderator
10:35 – 10:45	Group Photo
<b>10:45 – 11:15</b>	<b>Pause and Meeting with the Press</b>

## Round Table Session

11:15 – 11:20	Introduction to the Round Tables by Lead Moderator
11:20 – 12:20	Round Table discussions on priority actions for the implementation of the five SDGs <sup>10</sup> : <ul style="list-style-type: none"><li>– Table 1: SDG 5 (Gender/Water Governance);</li><li>– Table 2: SDG 6 (Water and Sanitation/ WASH);</li><li>– Table 3: SDG 11 (Cities);</li><li>– Table 4: SDG 13 (Climate Change / DRR);</li><li>– Table 5: SDG 17 (Partnerships/Investment).</li></ul>
12:20 – 12:50	Feedback from table moderators and plenary discussion
12:50 – 12:55	Final wrap up by Lead Moderator
12:55 – 13:00	Closing of the event by Myanmar Government Official
<b>13:00 – 14:30</b>	<b>Lunch</b>

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<sup>10</sup> Each participant has been assigned to a specific Table and is expected to come prepared by proposing a list of top priority actions regarding the implementation of the specific SDG in Myanmar and the South East Asian Context. Senior representatives from key water related Ministers, Yangon City Development Committee, Mandalay City Development Committee, and Nay Pyi Taw City Development Committee will be especially invited to relevant tables together with water professionals and experts from the Region. Priority actions will be discussed in each table with the facilitation of a Table Moderator and then shared in Plenary. The approved Recommendations will be compiled in a document called the Myanmar Recommendations.

## Annex 2: List of Participants

- H.E. Mr. Kyaw Myo, Deputy Minister, Ministry of Transport and Communications
- Honorable Ms. Shwe Sein Latt, Member Parliament Union of Myanmar Parliament, Upper House
- Dr. Aung Thu, Union Minister, Ministry of Agriculture, Livestock Breeding and Irrigation
- U Ohn Myint, Chairperson Myanmar Water Think Tank
- Daw Hla Oo Nwe, Deputy Director Ministry of Agriculture, Livestock Breeding and Irrigation
- Dr. Win Thein, Member Myanmar Water Think Tank
- U Tin Maung, Former Director Irrigation Dept Ministry of Agriculture, Livestock Breeding and Irrigation
- U Tar (Dr. Thant Lwin Maung), Member Myanmar Water Think Tank
- U Hla Baw, Former Chair of GWP South East Asia Ministry of Agriculture, Livestock Breeding and Irrigation
- U Cho, Member Myanmar Water Think Tank
- Mr. Pe Zin Tun, Union Minister Ministry of Electric Power and Energy
- U Win Hlaing, Director AIRBM
- Mr. U Ohn Win, Union Minister Ministry of Natural Resources and Environmental Conservation
- Daw May Khin Chaw, Component (2) Director AIRBM
- Mr. Win Thein, Chief Minister Bago Regional Government
- U Aung Myo Khaing, Component (3) Director AIRBM
- Mr. Phyo Min Thein, Chief Minister Yangon Regional Government
- Tarek Ketelser AIRBMP
- Ms. Nilar Kyaw, Minister for Electric Power, Industry and Transport, Yangon Regional Government
- U Tin Than, Biodiversity Expert
- Mayor U Maung Soe, Chairman Yangon City Development Committee
- U Than Win, Visiting Associate Professor Yangon Technological University, Civil Engineering Department
- Mayor U Ye Lwin, Chairman Mandalay City Development Committee
- Dr. Khin Than Yu, Prorector Yangon Technological University
- Mayor Dr. Myo Aung, Chairman Naypyitaw Development Council
- Dr. U Khin Maung Lavin
- U Khant Zaw, Director General Department of Rural Development, Nay Pyi Taw, Myanmar
- Dr. Hrin Neithiam, DG (DMH) MOTC
- Honorable Thura U Shwe Mann, Chairman Legal Affairs and Special Cases Assessment Commission of the Assembly of the Union
- Daw Khin Ohnmar Htwe Myanmar Environment Institute

- U Bo Ni, Director MNREC
- Aung Muint Oo Embassy
- Dr. Win Maung Myanmar Environment Institute
- Dr. Koji Ikeuchi, Vice Minister Ministry of Land, Infrastructure and Transport
- Prof. Dr. U Nyo Maung Environmentalist & Botanist
- Mr. Kenichiro Tachi, Director for International Coordination of River Engineering Water and Disaster Management Bureau of MLIT
- U Aung Myint, General Secretary Renewable Energy Association Myanmar
- Mr. Kunihiro Moriyasu, Senior Advisor to Director General Water and Disaster Management Bureau of MLIT
- Dr. Ohnmar Khaing, Program Manager Australian Centre for International Agriculture Research
- Dr. Ralph Allen Acierto, Project Researcher Institute of Industrial Sciences, University of Tokyo
- Dr. Saw Mon Theint Biodiversity and Nature Conservation Association
- Prof. Toshio Koike, Director University of Tokyo, ICHARM
- Prof. Dr. Sein Thein, President EverGreen Environmental Group
- Dr. Akiyuki Kawasaki, Associate Professor University of Tokyo, Department of Civil Engineering
- U Kyaw Oo, Writer
- Mr. Hisaya Sawano, Chief Researcher ICHARM, Public Works Research Institute
- Dr. Kyaw Mae Oo DDG CDMH
- Prof. Kaoru Takara Disaster Prevention Research Institute, Kyoto University
- U Khin Latt NEPS, MOALI
- Mr. Hideshi Sasahara, Director, NARBO Vice Secretary General International Affairs Division Water Resources Engineering Department, Japan Water Agency
- Dr. Tun Lwin, Meteorologist, Former Director General Myanmar Climate Change Watch/DMH
- Mr. Kei Kudo Japan Water Agency
- U Thet Khaing Htun
- Dr. Ni Than Share Mercy
- Mr. Hishamuddin Koh, Executive Advisor Confexhub Group
- H.E. Mr. Mark McDowell, Ambassador Embassy of Canada
- Mr. Paul Yeo, Director Confexhub Group
- Mr. Eduardo Calleja Mestre, Consul First Secretary Embassy of Chile
- Ms. Yumiko Asayama, Manager Japan Water Forum
- Mr. Henning Nohr, Development Counsellor Embassy of Denmark
- Mr. Keiichiro Nakazawa, Chief Representative JICA Myanmar Office
- Mr. Christian-Ludwig Weber-Lortsch, Ambassador Embassy of Germany
- Mr. Kotaro Nishigata, Senior Representative JICA Myanmar Office
- Mr. Péter Jakab, Ambassador Embassy of Hungary

- Ms. Noriko Sakurai, Project Formulation Advisor (Water Resource, Disaster Management, and Environmental Sector) JICA Myanmar Office
- H.E. Mr. Tateshi Higuchi, Ambassador Embassy of Japan
- Dr. Seck Abdoulaye, Country Manager World Bank in Yangon
- Mr. Shoichi Watanabe, Second Secretary Embassy of Japan, Economic and ODA Section
- Dr. Greg Browder, AIRBM Task Team Leader, Regional Senior Water Resources Specialist, Lead Water Resource Management Specialist and focal point for Myanmar program World Bank
- H.E. Mr. Hassan Mahmoud Mohammad Al Jawarneh, Ambassador Embassy of Jordan
- Ms. Jennifer Sara, Director Global Water Practice Group, World Bank
- H.E. Mr. Karel Hartogh, Ambassador Embassy of The Netherlands
- Mr. Ousmane Dione, Practice Manager East Asia Programme, World Bank
- Ms. Carola Baller, Chargé d'affaires a.i. Embassy of The Netherlands
- H.E. Mr. Nicholas Coppel, Ambassador Embassy of Australia
- Mr. Koos Wieriks Embassy of The Netherlands
- Mr. Nick Cumpston, Counsellor Embassy of Australia
- Mr Willem Mak, Program Coordinator for Myanmar Water Cooperation Embassy of The Netherlands
- Mr. Mag. Enno Drofenik, Ambassador Embassy of Austria
- Mr. Shakil Ahmed Siddiqui, Chargé d'Affaires Embassy of Pakistan
- Mr. Matias Nicolas Babino, Chargé d'affaires a.i. Embassy of Argentina
- Mr. Johan Hallenborg, Minister Counsellor & Head of Office Embassy Section Office of Sweden
- H.E. Mr. Alcides Gastão Rostand Prates, Ambassador Embassy of Brazil
- Mr. Bernhard Huwiler, Counsellor and Head Humanitarian Affairs Embassy of Switzerland
- Mr. Benedikt Kälin, Programme Officer Embassy of Switzerland
- Ms. Theingi Soe, WASH Specialist UNICEF
- H.E. Mr. Andrew Patrick, Ambassador Embassy of United Kingdom
- Ms. Roberta Clarke, Regional Director UN Women
- Mr. James Robertson, WASH Specialist UNICEF
- Dr. Sui Khar Asia Indigenous Peoples Pact
- Mr. Giuseppe de Vincentis, UNHCR Representative in Myanmar UNHCR
- Mr. Ngoc Son Nguyen, Officer-in-Charge for Assistant Director, Head of Disaster Management and Humanitarian Assistance Association of South East Asian Nations
- Mr. Bijay Bahadur Karmacharya, UN-Habitat Country Programme Manager UN Habitat
- Mr. Rabindra Osti, Water Resources Specialist Asian Development Bank, East Asia Department
- Ms. Janet E. Jackson, UNFPA Representative for Myanmar UN Population Fund
- Ms. Janelle Saffin Australia

- Dr. Shamshad Akhtar, Executive Secretary UN ESCAP
- H.E. Mr. Roland Kobia, Ambassador European Union Delegation to Myanmar
- Dr. Kaye Schofield, Chairperson Australian Water Partnership
- Mr. Tadashige Kawasaki, Coordinator Network of Asian River Basin Organisations
- Prof. Gary Jones, Chief Executive Australian Water Partnership
- Dr. Aditi Mukherji, Theme Leader of Water & Air ICIMOD
- Mr. John Dore, Senior Specialist - Water Resources DFAT
- Dr. Jeremy Bird, Director International Water Management Institute
- Dr. Kenzo Hiroki UN HELP
- Dr. Robyn Johnston, Country Representative Myanmar International Water Management Institute
- Mrs. Kenza Kaouakib-Robinson, Focal Point for Natural Disasters and Focal Point for Gender UNDESA
- Mr. Dom Scalpelli, Resident Representative and Country Director World Food Programme in Myanmar
- Ms. Taeko Yokota, Programme Management Officer Office of the Special Envoy of the UN Secretary-General for Disaster Risk Reduction and Water
- Chusit Apirumanekul, Research Fellow Stockholm Environment Institute
- Mr. Toily Kurbanov, UNDP Myanmar Country Director UNDP in Myanmar
- Ms. May Thazin Aung, Research Assistant Stockholm Environment Institute
- Mr. Mark Cutts, Head of Office UN Office for the Coordination of Humanitarian Affairs
- Mr. Dennis Wichelns, Senior Research Fellow Stockholm Environment Institute, Asia Centre
- Mr. Paul Nichols, Chief Executive Officer WaterAid Myanmar
- H.E Mr. Watt Botkosol, Regional Chair GWP South East Asia
- Dr. Gellért Horváth, Coordinator of Southeast Asian Strategic Projects Waterworks of Budapest I Fővárosi Vízművek Zrt.
- Dr. Zaw Lwin Tun, Regional Steering Committee Member, Director GWP Myanmar, Ministry of Agriculture, Livestock Breeding & Irrigation
- Ms. Kusum Athukorala Women for Water Partnership
- Mr. Rudolph Cleveringa, Executive Secretary Global Water Partnership Organisation
- Ms. Asma Bachikh, President World Youth Parliament for Water
- Ms. Catharina Sahlin Tegnander, Head of Finance & Administration Global Water Partnership Organisation
- Drs. Alice Bouman Dentener, Chair a.i. Global Water Partnership Steering Committee
- Dr. Jacques Rey, Head of Network Operations Global Water Partnership Organisation
- Prof. Dr. Khin NiNi Thein Global Water Partnership Steering Committee
- Mr. Steven Downey, Head of Communications, Global Water Partnership Organisation
- Prof. Dr. Michael Campana Global Water Partnership Steering Committee
- Ms. Susanne André, Senior Legal & HR Officer Global Water Partnership Organisation

- Dr. Gunilla Björklund, Global Water Partnership Steering Committee
- Mr. Francois Brikké, Senior Network Officer Global Water Partnership Organisation
- Mr. Salvador Montenegro Guillen Global Water Partnership Steering Committee
- Ms. Helena Gunnmo-Lind, Executive Assistant Global Water Partnership Organisation
- Prof. Dr. Mochammad Amron Global Water Partnership Steering Committee
- Ashor Mananduar Myanmar Times
- Prof. Dr. Meera Mehta Global Water Partnership Steering Committee
- Ei Thu Myanmar Times
- Dr. Dionysia Avgerinopoulou Global Water Partnership Steering Committee
- Daw Phya Thinn Myanmar TV
- Mr. Jean-Paul Penrose Global Water Partnership Steering Committee
- Dr. Claudia Sadoff Global Water Partnership Steering Committee
- Dr. Jerry Delli Priscoli, Chair Global Water Partnership Technical Committee

## Annex 3: Media and Social Media Coverage

### Media advisory

A Media Advisory informing and inviting 34 local and international press about the press briefing on 24 May was emailed on Friday 20 May and Sunday 22 May. In addition, 10 journalists were contacted on Twitter, a standard procedure today for informing media. (Media list available.)

### InterPress Service (IPS)

Three articles were written by a local IPS stringer. IPS also published a guest editorial by GWP.

### Press briefing

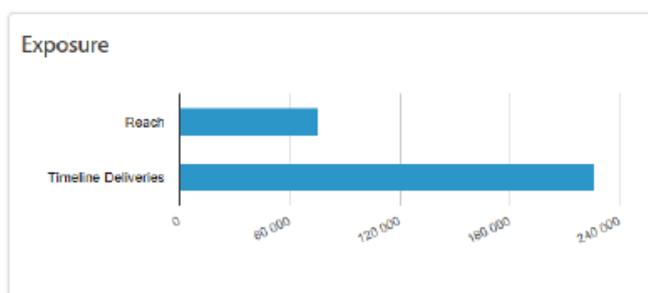
A press briefing was held the morning of 24 May. Participating were Khin Ni Ni Thein, Alice Bouman-Dentener, and Rudolph Cleveringa. Media present were IPS, Myanmar Times, and MRTV-4.

### Media coverage

1. [Myanmar Seeks to Break Vicious Circle of Flood and Drought \(IPS News\)](#) \*
2. [Water: An Entry Point for SDG Implementation in Myanmar \(IPS News Op-Ed\)](#) \*
3. [Water Security Critical for World Fastest-Growing Economy \(IPS News\)](#) \*
4. [Can the new government protect Myanmar's water resources? \(Myanmar Times\)](#) \*
5. [Water Woes Put a Damper on Myanmar's Surging Economy \(IPS News\)](#) \*
6. [Water Security Critical for World's Fastest-Growing Economy \(The Citizen, India\)](#)
7. [Water: An entry point for SDG implementation in Myanmar \(Eco-Business\)](#)
8. MRTV-4 broadcast on 25 May: interviews with Khin Ni Ni Thein, Alice Bouman-Dentener

### Social Media

A dedicated hashtag - #SDGMyanmar - was created before the event and shared on Social Media, targeting relevant media and organisations. Statistics for #SDGMyanmar (used by GWP and others):



**Reach:** 75,568 = # of people who received delivery of messages.  
**Timeline Deliveries (impressions):** 226,065 = # of times someone could have viewed a message, based on follower count of the original tweeter.

#### Most Influential users:

- SEI
- Inter Press Service
- Henk Ovink (Special Envoy International Water Affairs, Sherpa High Level Panel on Water)

Statistics for **GWP's Social Media accounts** (Twitter and Facebook):

Incoming Messages	185	320 INTERACTIONS BY 140 UNIQUE USERS 203,881 POTENTIAL REACH
Sent Messages	25	
New Twitter Followers	33	
New Facebook Fans	20	

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<sup>i</sup> WWAP (United Nations World Water Assessment Programme). 2015. *The United Nations World Water Development Report 2015: Water for a Sustainable World*. Paris, UNESCO. Page 6. Available at: <http://www.unwater.org/publications/publications-detail/en/c/281166/>