

Rural Water Supply Network (RWSN)



Strategy 2018-2023

Mid-Term Update – December 2020

The Rural Water Supply Network facilitates exchange and enables its members to improve their professionalism. Cover Photo: Public water point in Khulna District, Bangladesh (S. Furey)

STRATEGY DEVELOPMENT AND ENDORSEMENT

The preparation of the Rural Water Supply Network (RWSN) Strategy (2018 to 2023) was led by the RWSN Chair, RWSN Secretariat and the leaders of RWSN's themes and topics. It is a continuation of the previous RWSN Strategy (2015 to 2017), with minor changes to reflect the experiences and lessons learned over the past three years and informed by an independent evaluation.

The RWSN Strategy has been jointly developed **and the final version will be** endorsed by the seven members of the RWSN Executive Steering Committee, comprising:

- African Development Bank
- IRC
- Skat Foundation
- Swiss Agency for Development and Cooperation (SDC)
- UNICEF
- WaterAid
- The World Bank Water Global Practice

Strategy Update 2020

This strategy was revised updated through consultation with RWSN Theme Leaders and Executivie Steering Committee members. It was approved at the Executive Steering Committee Meeting of 18 November 2020.

ACKNOWLEDGEMENTS

A huge thanks to the many RWSN members who have been involved in this process, in particular the RWSN Executive Steering Committee, Secretariat and Theme Leaders: Kelly Ann Naylor, Louisa Gosling, Priya Nath, Sara Ahari, Kerstin Danert, Matthias Saladin, Meleesa Naughton, Marieke Adank, Susanna Smets, Ellen Greggio, Antonio Rodriguez Serrano, Andrew Armstrong, Jochen Rudolf, Stef Smits, Hanna Capeda, Jose Gesti-Canuto, Eric Harvey, Miguel Vargas-Ramirez, Lilian Pena Pereira Weiss, Vincent Casey and Bertha Camacho.

Any mistakes or omissions are the responsibility of Sean Furey as lead author.

In Memory of **Ton Schouten** (1962-2016) who was RWSN Chair, 2015-16 and **Piers Cross** (1951-2017) who was RWSN Chair, 2004-2008.

Strategy Update 2020

In addition to the people above, many thanks to the new Theme Leaders and Executive Steering Committee members since 2018: Dr Daniel Maselli (SDC), Francis Bougaire, Nelson Gomanda, Ousmane Diallo (African Development Bank), Dr Mike Fisher, Emma Rose Kelly and Nikki Behnke (University of North Carolina), Temple Oraeki (Water Youth Network Nigeria), Julia Boulenouar and Harold Lockwood (Aguaconsult)

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ABBREVIATIONS

AfDB	African Development Bank
ASN	Affiliated Sub-Network
CapNet	Capacity Development in Sustainable Water Management
FCDO	Foreign, Commonwealth & Development Office (formerly the Department
	for International Development (United Kingdom))
EWP	End Water Poverty
GRIPP	Groundwater Solutions Initiative for Policy and Practice
GWP	Global Water Partnership
HTN	Handpump Technology Network
IAH	International Association of Hydrogeologists
IWA	International Water Association
IWRM	Integrated Water Resource Management
JMP	Joint Monitoring Programme
MDG	Millennium Development Goal
MUS	Multiple Use water Service
NGO	Non-Governmental Organisation
O&M	Operations and Maintenance
REACH	Improving water security for the poor (UK-funded research programme)
RWSN	Rural Water Supply Network
RWSSI	Rural Water Supply and Sanitation Initiative
SCWSN	Small Community Water Supply Network
SDC	Swiss Agency for Development and Cooperation
SDG	Sustainable Development Goal
SuSanA	Sustainable Sanitation Alliance
SWA	Sanitation and Water for All
TAF	Technology Applicability Framework
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UPGro	Unlocking the Potential for Groundwater for the Poor (UK-funded research
	programme)
WHO	World Health Organisation
WIN	Water Integrity Network
WPDx	Water Point Data Exchange
WSSCC	Water Supply and Sanitation Collaborative Council (becoming SHF –
	Sanitation and Hygiene Fund from 2021)

SUMMARY

The Rural Water Supply Network (RWSN) is the global network for rural water supply professionals, with nearly 10,000 members in more than 150 countries.

RWSN is a strategic global platform for knowledge sharing and collaboration in the water sector with a central focus on the achievement of universal access to safe, affordable water supplies. Because 4 out of 5 of those without access to an improved water source live in rural areas, the ambitious Sustainable Development Goal 6 and the legal duties under the Human Right to Water can only be achieved through strong partnerships at all levels from local to global.

This strategy sets out RWSN's approach and priorities for the next six years (2018-2020) which are focused on five Themes:

Theme		Objectives
نځ ۲ ۴	Leave No-one Behind	To develop practical responses to the SDG mandate to leave no-one behind, recognising that the causes of exclusion include physical, attitudinal and institutional barriers, and that realisation of human rights to water and sanitation for the most marginalised requires a focus on power relations
	Sustainable Groundwater Development	Groundwater resources are properly assessed and sustainably developed and managed for drinking water supply and other uses, so ensuring their long term quality and security.
	Sustainable Services	Rural water supply services are adequately financed, meet country service delivery standards, are managed and supported by capacitated service providers and service authorities.
	Self-supply	 The potential and limitations of Supported Self-supply as a service delivery approach for rural water supply is understood and recognized by government agencies, development partners, water users and other key actors. The approach of Supported Self-supply is applied where appropriate.
Ŷ Ŀ	Mapping & Monitoring	Decision-making for ensuring sustainable rural water services (e.g. resource allocation, external support) is evidence based and uses information generated by robust data.
	Multiple Use water Services	Recognising that most rural people in low- and middle- income countries are also farmers and need water for their livelihoods as well as their household health and wellbeing.

Table 1: RWSN Themes

1 SUMMARY OF MAJOR CHANGES FROM 2018

This Strategy was reviewed during the course of 2020 to ensure that it still reflects the direction of the network, the changes across the partnership and the shifts in priorities, particularly resulting from the COVID-19 pandemic.

Below summarises the major changes since the February 2018 version:

CHAPTER 2: CONTEXT

- JMP information updated, Figure changed.
- COVID-19 context added
- Climate Change context added

CHAPTER 3: RWSN STRUCTURE & STRATEGY

- Values: Diversity added "Diversity"
- Outcomes: RWSN Network-level simplified and full log frame, including updates moved to Annex 8
- Updated member data from 2020 survey
- Outcomes: RWSN Themes MUS added
- Activities: RWSN Topics streamlining of number of topicsA
- Activities: Youth and Rural Water Supply updated
- Activities: Supporting diversity added, including new "Gold Standard" for RWSN activities/events.

CHAPTER 4: RESOURCES

- Human Resources updated Online Facilitators added
- Funding strategy updated

CHAPTER 5: RWSN THEMES

- "MUS Multiple Use water Services (MUS)" added
- Added "De-colonialising WASH Knowledge" to Leave No-one Behind, but not yet as a full Topic.
- All Themes checked and updated

CHAPTER 6: RWSN TOPICS

- All Topics reviewed, updated and 2021-2023 activities added
- Downgraded Groundwater Resources Topic
- Removed Sustainable Services Topics, focus will be on building up links with rural water supply operators, regulators and service authorities.

- Removed most Mapping & Monitoring Topics, now covered by the Theme as a whole.
- Water Quality topic updated to include COVID-19 to link to UNC's expertise and network.
- Self-supply Theme updated

ANNEX 1-7

- Reference to Governance document updated
- Figures updated
- Tables updated

ANNEX 8: FULL LOGICAL FRAMEWORK

■ Added.

2 CONTEXT

Sustainable water services play a direct role in poverty reduction, which has been emphasized in the global development agenda. In 2010, the United Nations General Assembly explicitly recognized the Human Rights to Water and Sanitation. This is echoed in the 2030 Sustainable Development Goals (SDGs). Goal 6 of the SDGs calls for ensuring the availability and sustainable management of water and sanitation for all by 2030. Target 6.1 calls for universal and equitable access to safely managed and affordable drinking water. Sustainable rural water services are necessary to end poverty and hunger (Goal 1 and 2); improve health (Goal 3); gender equality (Goal 5); reduce inequalities (Goal 10); climate resilience (Goal 13) improve peace, justice and strong institutions (Goal 16) and work in partnerships towards the goals (Goal 17).

Much progress has been made in access to water services provision under the Millennium Development Goals (MDG). The world met the MDG target of halving the proportion of people without access to improved sources of water in 2010, five years ahead of schedule. Between 1990 and 2015, access to water in rural areas increased from 62% to 84% worldwide. 17 countries achieved 100% coverage; and the number of people without access in rural areas decreased by over half a billion during the same period (WHO/ UNICEF, 2015) despite an overall population increase. However, residents in rural areas globally are less likely to have access to water, and services that meet criteria of water quality, accessibility and availability. In 2015, the Joint Monitoring Programme (JMP) reported that "in many countries and regions, progress has been made towards the MDG target without significantly reducing inequalities." (WHO/UNICEF, 2015).

JARGON BUSTER

Sustainable Development Goals (SDGs): The agreed United Nations goals to be achieved by all nations between 2015 and 2030. www.un.org/sustainabled evelopment/

Millennium Development Goals (MDGs): The UN goals for tackling poverty between 2000 and 2015. www.un.org/millenniumg oals/ The challenge for the period up to 2030 will be not only to increase access to basic water services to reach the unserved, but also to raise service levels by improving the availability, accessibility and quality of the water provided, particularly in rural areas, and sustain existing and future water services. For the SDGs, service levels are monitored under the term "safely managed drinking water services" (WHO/UNICEF, 2017), meaning an improved water source located on premises, available when needed and free from fecal or harmful chemicals. In almost all countries where data are available, there are large gaps between urban and rural coverage, with 55% of the rural population having access to safely managed water services in 2017 compared to 85% of urban residents (WHO/ UNICEF, 2017). These estimates may evolve as more data for monitoring safely managed drinking water services becomes available: less than 100 countries (representing only 35 per cent of the global population) were able to provide data on quality, accessibility and availability of water services; and across countries, data are more readily available in urban than in rural areas (WHO/UNICEF, 2017).

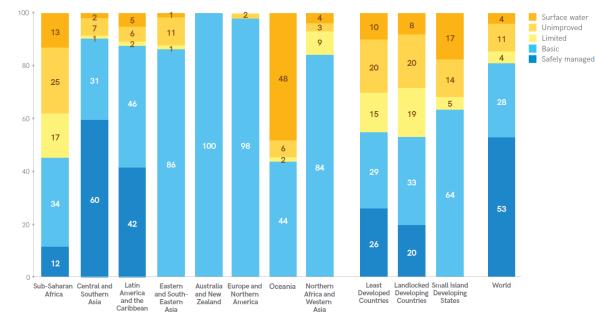
JARGON BUSTER

Fragile State: are defined as those with heightened risks of conflict, violence, protracted political crises, and chronic underdevelopment combined with insufficient capacity by the state, system, and/or communities to manage, absorb, and mitigate these risks. (World Bank, 2017)

If past trends continue, the world will not meet the SDG for water.

844 million people worldwide still lack access to a basic drinking water service in 2015, with populations living in fragile and conflict-afflicted areas four times as likely to lack basic drinking water as others.

In 2017, 31 out of 132 countries are on track to achieve 'nearly universal' basic water services by 2030 in rural areas, with 63 countries improving too slowly and 22 countries going backwards (JMP, 2019)



Rural drinking water ladders

Figure 1: Rural drinking water coverage by SDG region, 2017 (%) (Source: JMP, 2019)

There are considerable inequalities in access to services, not only between urban and rural residents, but also in relation to other vulnerable groups, including people living in poverty, indigenous communities and residents in informal settlements. Over 70% of countries report having specific policy measures to reach poor populations in their Water, Sanitation and Hygiene (WASH) as well as plans. However, the implementation of these measures is lagging: very few countries indicate that they consistently target resources to poor populations (WHO/ UN-Water, 2017). Furthermore, monitoring of progress to extend services to poor populations takes place in only half of responding countries. Older people and people with disabilities are often disadvantaged when services do not adequately consider accessibility issues. There is growing understanding of the impact of this and

of practical solutions, but more work is needed for monitoring and to make sure services are designed to be inclusive.

Gender inequalities are deeply embedded in every aspect of rural water supply. In many rural communities women perform most unpaid tasks associated with the provision, management and safeguarding of water, but have less control over decisions about water resources. Water scarcity has a different impact on men and women, deeply affecting women's health, education, security, and opportunities for empowerment. Gender inequalities are becoming better understood in the water sector (WWAP, 2017)¹ World Bank, 2017)² but there is a need for far greater systematic investment and programming to address these inequalities to achieve the SDG5 goal of gender equality.

Ensuring the sustainability of water services remains a complex challenge, particularly in rural areas. While understanding what affects the sustainability of water services has improved in recent years, there is no single solution: sustainability is a complex issue. Strategies adopted in one place might not be appropriate in another setting (Jimenez *et al*, 2017). Rural areas are diverse, as are their people, cultures, economies and ecologies, from sparsely-populated and remote mountains, deserts, islands, forests to intensively-farmed and populated coastal and river plains. While some challenges are common to all contexts, many present specific opportunities and challenges for sustaining rural water supplies.

Despite lower access to sanitation and drinking water in rural areas, financing for the water sector (both domestic public finance and Official Development Assistance) is still predominantly geared towards urban water services. Urban finance is more than three times rural expenditures globally (WHO/ UN Water, 2017). User fees and tariffs do not manage to cover the costs of Operation & Maintenance (O&M) of water services in many rural (and urban) areas. Lagging investments in new rural water systems and insufficient spending on O&M leads to substandard service levels.

Lack of access to drinking water is first and foremost an economic and institutional issue. Around 1.6 billion people live in countries with physical water scarcity; in just two decades this number may double, with climate change exacerbating water scarcity and variability (World Bank,

¹ WWAP gender and water toolkit; <u>www.unesco.org/new/en/natural-</u> <u>sciences/environment/water/wwap/water-and-gender/</u>

² World Bank 2017, Harnessing a rising tide – a new look at water and gender, <u>www.worldbank.org/en/news/feature/2017/08/29/harnessing-a-rising-tide---a-new-look-at-water-and-gender</u>

2016). Climate change's impacts on water scarcity will in turn have affect economic growth and is projected to cost some regions up to 6% of their GDP (World Bank, 2016). This will be felt on the most vulnerable, with 1 in 4 children projected be be living in areas of high water stress by 2040 (UNICEF, 2017). This increases the reliance on groundwater, on which close to 2 billion people depend for drinking water and livelihoods. Groundwater has historically been a natural 'buffer' for water storage, which has helped deal with climate variability, but it is coming under increased stress due to over-abstraction and contamination in many parts of the world. It is estimated that around 1.6 billion people face economic water shortage, where access is not limited by resource availability, but by human, institutional and financial constraints over distribution of the resource to different user groups (UNESCO-WWAP, 2012). For instance, Sub-Saharan Africa, which has some of the lowest rates of access to water, uses barely 5% of its annual renewable freshwater resources (UNESCO-WWAP, 2012). However, in the 2020 RWSN Member survey, water scarcity, drought and climate change were raised as

Accountability is essential for ensuring sustainable services reach everyone. With the adoption in 2010 of the Human Rights to safe drinking water and sanitation all States are obliged to respect, protect and fulfil these rights for everyone³. This provides a basis in international law for people to hold their governments to account for adequate, affordable and safe water supplies, and some aspects have been domesticated into the national legislation of different countries. Citizens are becoming increasingly aware of water as a human right but there is still a generally low understanding of what his means in terms of specific roles, responsibilities and rights of duty bearers and rights holders. Experiences in promoting effective social accountability in the water sector have been growing but more work is needed to scale this up to ensure communities can really hold governments to account for sustainable services.

JARGON BUSTER

Water scarcity: is defined as the point at which the demand by all sectors, including the environment, cannot be satisfied fully without being detrimental to the supply or quality of water under prevailing institutional arrangements. (UNESCO-WWAP (2012)

People living in fragile states are the most at risk of lacking of sustainable water services by 2030, as crises and conflict become increasingly protracted. Weak institutions, low levels of human and financial resources, and degraded infrastructure make it all the more difficult to improve the situation: fragile states achieved roughly half the rate of progress of non-fragile states in meeting the water-related MDGs. Failure to provide people with basic water services and to manage water resources are all the more damaging in fragile countries, where populations are particularly vulnerable. (World Bank, 2017).

Climate change urgency grows with every passing day. Rapid global heating is destabilizing the many critical environmental and biophysical processes, often in unanticipated ways. The effects on water resources, particularly from changing precipitation patterns, is highly variable

³ Righttowater.info

worldwide. However, the impacts on climate change on rural water supplies (and Water, Sanitation & Hygiene more generally) includes:

Table 2: Examples of climate resilience challenges

Climate Effect	Hazard	Impact on WASH sector
Decrease in precipitation	Drought	Reduction in raw water supplies, reduced river flows, less dilution/increased concentration of pollutants in water, challenge to hygiene practices.
Increased in precipitation and severe weather	Flooding	Pollution of wells, inundation of wells, inaccessibility of water sources, flooding of latrines, damage to infrastructure, landslides around water sources, sedimentation and turbidy, challenges to sustainability of sanitation and hygiene behaviours, and waterborne diseases.
Increased in temperatures	Heatwaves	Damage to infrastructure, increase in pathogens in water leading to increased risk of disease.
	Melting and thawing of glaciers, snow, and permafrost.	Seasonality of river flows affected leading to a reduction in water availability in summer.
Sea-level rise	Flooding and saline intrusion	Reduction in availability of drinking water, with high impacts on quality.

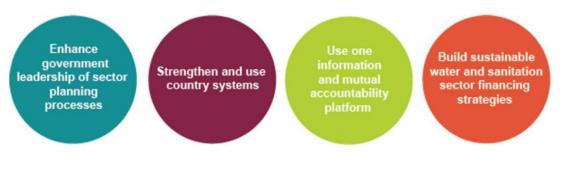
Source: UNICEF/GWP 2014

The COVID-19 global pandemic has been the most rapidly growing public health challenge since the Spanish Flu a century ago. The virus has hit urban areas hardest and the spread of the disease has been unequal among low and middle income countries, with Latin America and India being hit hard and Sub-Saharan Africa barely affected, as of October 2020 (Financial Times https://www.ft.com/content/a2901ce8-5eb7-4633b89c-cbdf5b386938). However, rural areas and rural water supplies have been impacted in direct and indirect ways. On the positive side, there has been growing awareness of the importance of hygiene for preventing transmission of the virus. The cancellation of events and reduced travel has also increased demand for online networking and learning through platforms and networks like RWSN. However, the negatives have been severe: widespread economic downturn has led to cancellations of contracts and funding agreements, and lockdowns have prevented many essential activities (RWSN Member Survey 2020).

Collaboration will be key to achieving sustainable water services for all: this is why working in partnership is a goal in itself under SDG17. This means collaborating within the water sector – between government, private sector, civil society, and academia – but also with other sectors.

The Sanitation and Water for All (SWA) partnership has identified four collaborative behaviours (Figure 2) that are the building blocks for sustainable WASH services that reach everyone, forever. RWSN supports these behaviours encourages the uptake and use of this approach to strengthening context in which sustainable rural water services can operate.

Figure 2: SWA Collaborative Behaviours (SWA, undated)



Over the last 25 years, RWSN has evolved from a small technical community of practice focused on handpumps to a global strategic network (see Annex 7) to address the opportunities and challenges outlined above. RWSN has created a safe space for discussion, collaboration and enables members to share expertise, experience and resources on rural water; it is a trusted source of information for many rural water practitioners worldwide.

References

IFAD (2016) Rural Development Report 2016

- Jiménez, Alejandro; Jawara, Dawda; LeDeunff, Hélène; Naylor, Kelly A.; and Scharp, Cecilia (2017) Sustainability in Practice: Experiences from Rural Water and Sanitation Services in West Africa
- RWSN (2020) RWSN Member Survey 2020 Report (forthcoming)
- Sanitation and Water for All (undated) Four Collaborative Behaviours for the Development of Sustainable WASH Services for All, <u>http://sanitationandwaterforall.org/about/the-four-</u> swa-collaborative-behaviours/
- Smits (2016) Past performance is no guarantee of future results. Blog post
 - https://www.ircwash.org/blog/past-performance-no-guarantee-future-results (accessed 29 August 2017)
- UNESCO-WWAP (2012) World Water Development Report (WWDR).
- http://www.zaragoza.es/contenidos/medioambiente/onu/789-eng-ed4-res12.pdf UNICEF/GWP (2014) WASH Climate Resilient Development | Strategic Framework https://www.gwp.org/en/WashClimateResilience/
- UNICEF (2017) Thirsting for a Future: Water and children in a changing climate. https://www.unicef.org/publications/index_95074.html
- WHO/ UN Water (2017) Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) 2017 report. Financing universal water, sanitation and hygiene under the
 - Sustainable Development Goals.
- WHO/ UNICEF (2015) Progress on Sanitation and Drinking Water:
- WHO/ UNICEF (2017) Progress on Drinking Water, Sanitation and Hygiene: Update and SDG Baselines.

WHO/ UNICEF (2019) Progress on Drinking Water, Sanitation and Hygiene: 2000-2017

World Bank Group. 2016. High and Dry : Climate Change, Water, and the Economy. World Bank, Washington, DC. © World Bank.

https://openknowledge.worldbank.org/handle/10986/23665 License: CC BY 3.0 IGO World Bank. 2017. Turbulent waters : pursuing water security in fragile contexts. Washington, D.C. : World Bank Group.

 $\underline{http://documents.worldbank.org/curated/en/885171489432062054/Turbulent-waters-pursuing-water-security-in-fragile-contexts}$

3 RWSN STRUCTURE & STRATEGY

This strategy is for 6 years (2018-2023) with a longer-term view to the SDG target year of 2030. It has been reviewed in 2020.

Vision

RWSN's vision is of a world in which all rural people have access to sustainable and reliable water supplies which can be effectively managed to provide sufficient, affordable and safe water within a reasonable distance of the home.

The Vision and Mission remain unchanged from the previous strategy (2015-17)⁴ because they remain as relevant as ever and align with the Sustainable Development Goal 6.1 that *"By 2030, achieve universal and equitable access to safe and affordable drinking water for all"*.

Values

People are at the heart of solving rural water supply challenges;

Openness and respect allows for free exchange of experience and knowledge and disagreement is handled in a reasoned and respectful way;

Improved collaboration and learning are core to eliminating poverty and achieving the Vision; and

We should always lead by example with **professionalism**, a commitment to **high quality work**, **integrity** and a focus on **water user needs**.

Diversity is essential and our activities should always have a vibrant mix of voices from different nationalities, backgrounds, professions, genders and ages.

Mission

RWSN is a global network of rural water supply professionals and organisations committed to improving their knowledge, competence and professionalism, to fulfil RWSN's vision of sustainable rural water services for all. Both individuals and organisations participate in the network.

There are thousands of organisations and millions of individuals striving to improve and manage rural water supply services around the world. The Rural Water Supply profession is highly fragmented, a reflection of the numerous organisations and professions involved, the remoteness of the work, and the nature of funding. However, rural water supply practitioners are able to come

^{4 &}lt;u>http://www.rural-water-supply.net/en/rwsn-strategy</u>

together within RWSN to improve their knowledge, competence and professionalism.

Professionalism is defined as the skill, good judgment, and behaviour expected from a person or organisation who can undertake a job well. All professions, including rural water supply requires special education or training, and skills.

More and better jobs in rural water supply are needed in order to reach, and sustain universal access. People at all stages of their careers from education to retirement can improve their professionalism. RWSN has an important role to play in supporting young professionals as well as cross-generational exchange and learning.

Theory of Change

A Theory of Change is way of defining long term goals and then working backwards to map out a pathway of activities, outputs, outcomes and preconditions that need to happen to achieve those goals. Unlike a Logical Framework, which is commonly used in project planning, a Theory of Change allows for the dynamic and unpredictable nature of networking activities, both in terms of constraints and the emergence of new ideas, opportunities and partners.

The RWSN Theory of Change (Figure 3) is that to achieve the RWSN Vision, the network needs to fulfil its Mission. It is proposed that this can be done, and measured, through Outcomes, both as an overall network and for each individual Theme. The Outcomes, such as changes to policy or practice, will require a range of activities and their outputs.

The heart of RWSN's activities are focused around Topics – those thematic areas where it is agreed that the network can effect change and achieve tangible outcomes. Each Topic has its own life-cycle, illustrated in Figure 3. The important feature to note is that RWSN has two main modes, or tracks, of working:

- 1. Knowledge Sharing & Networking;
- 2. Embedding Good Policies and Practice.

Achieving tangible outcomes at national or organisational level is more likely to be achieved through Embedding activities, but they are much more time and resource intensive and therefore should done only where there is a strong enough partnership that can inspire and support leaders and change agents for that topic.

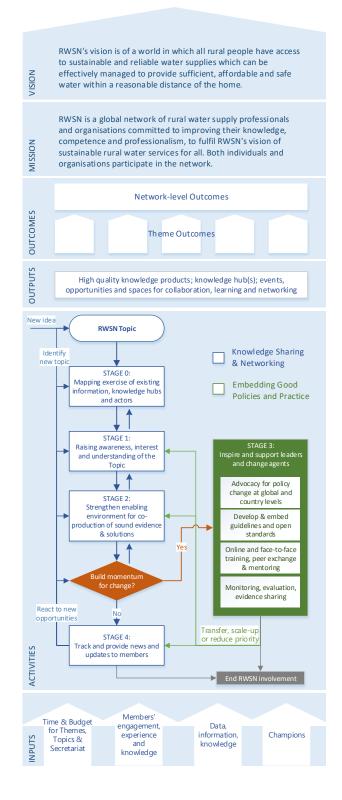
Finally, the network can only function with the right inputs, which can categorised as:

- Time and budget for Themes, Topics and the RWSN Secretariat;
- RWSN Member engagement through sharing knowledge and experiences;
- Data, information and knowledge, to drive evidence-based decisionmaking;

 Champions, who have the motivation and resources to drive the topic forward.

The whole process is dynamic and non-linear, but the Theory of Change provides a guiding structure that enables the network to be managed in a way that time and effort can be directed in the most productive way, and that the progress to which RWSN contributes can be documented and shared.

Figure 3: RWSN Theory of Change



RWSN Network-Level Logical Framework (2018-2023)

Note: This is updated from the previous Strategy document but is the one that has been used in reporting due to minor changes during funding application process to SDC in early 2018 and is presented more fully in Annex 8.

Table 3: RWN Log Frame highlights

Overall Goal	Indicators	Baseline	Latest Update
The Overall Goal of RWSN is to be the	% increase of	2015 (JMP 2017):	2017 (JMP 2019):
leading global network of rural water	access to basic and	World – Rural	World – Rural
supply professionals and organisations	safely managed	Service Levels	Service Levels
committed to improving their	water supply in		
knowledge, competence and	rural areas/ %	Safely Managed: 55	Safely Managed: 53
professionalism, to fulfil its vision of a	decrease of access	%	%
world in which all rural people have	to surface water	Basic: 25%	Basic: 28 %
access to sustainable and reliable water	and unimproved	Limited: 6%	Limited: 4 %
supplies which can be effectively	water sources in	Unimproved: 10%	Unimproved: 11 %
managed to provide sufficient,	rural areas	Surface water: 4%	Surface water: 4 %
affordable and safe water within a			
reasonable distance of the home.			

OUTCOME 1. NETWORK GROWTH

As a dynamic and trusted network, RWSN grows and evolves to meet the demands of its members and makes coherent contribution of knowledge exchange and learning to support the achievement of universal safe water access in rural areas worldwide.

OUTCOME 2: WOMEN AND YOUNG PROFESSIONALS

Women and young people have a strong and equal voice across the network and play an influential role increasing the equality of decision-making power concerning provision of rural water services.

OUTCOME 3: KNOWLEDGE-SHARING AND NETWORKING

Improved access to knowledge for rural water supply sector professionals and organisations, and sharing of knowledge between rural water supply sector professionals and organisations, to advance on strategic issues to the sector.

OUTCOME 4: EMBEDDING GOOD POLICIES AND PRACTICES

Good policies and practices are embedded through rural water supply sector professionals and organisations to enhance sector performance, thereby contributing to improvements of rural water supply at a national/sub-national level.

Description

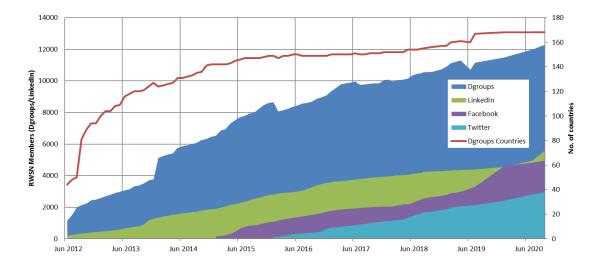
Network-level Local Framework (Annex 8) shows those goals and indicators of success that we want to focus on across the whole of RWSN over the strategy period and way of reporting the growth and impact of the network in contributing to the Mission and Vision, as per the Theory of Change.

Achievement of the RWSN Vision and SDG6.1 will not be accomplished by the network itself but rather through the RWSN members. As a network, RWSN sets out to have as many individuals and organisations who work on rural water supplies to be members of RWSN as possible.

Figure 4 shows the steady growth in the number of individual members, punctuated by period 'clean-up' activities to remove invalid email addresses.

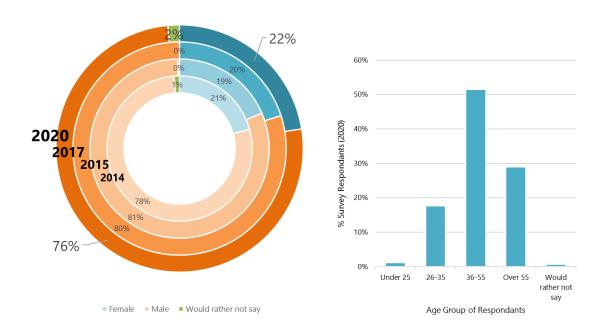
Average net growth between September 2012 and September 2020 has been around 1,200 members per year (100/month)





Insufficient data exists on the whole membership to determine the age and gender of the network members but survey data (with a response rate of around 6%) indicates that the gender split is 20/80 female/male and the majority of respondents were mid-career professionals between 36 and 55 (Figure 5). Representation of women in RWSN activities and governance is strong but not yet reflected in member survey reponses.

Figure 5: Known age and gender profile of RWSN members from member surveys



Outcomes: RWSN Themes

Strategy 2018-2023

RWSN will have five Themes (see Section 4 for details):

- Leave no-one behind
- Mapping and Monitoring
- Multiple Use water Services (MUS) new
- Self-supply
- Sustainable Groundwater Development
- Sustainable Services

Description

An RWSN **Theme** is a broad area of interest that the RWSN Executive Steering Committee sees as strategically important and has the following characteristics:

- (1) **Clear Outcome(s)** that the Theme wants to achieve to contribute to the higher level Network-level outcomes, Mission and Vision;
- (2) Has **wide applicability and relevance** to rural water supply globally (with an emphasis on low- and middle-income countries where there is greatest need for safe and sustainable rural water supply services);
- (3) 1+ Theme Leaders, with sufficient support and resources to implement their work plan; The role of the Theme Leader is set out in the "RWSN Governance, Roles and Responsibilities – January 2016-December 2018" Annex 1
- (4) **A Dgroup community** with a critical mass of members for stimulating knowledge & experience networking activities and collaboration;
- (5) A wider sphere of **partner organisations and networks** to work on collaborative projects, research, advocacy or embedding.

A Theme is effectively a sub-network of the larger RWSN network.

Activities: RWSN Topics

Strategy 2018-2023

Within and between Themes, RWSN will focus on the Topics set out in Section 4 and seek partners and resources to maximise their usefulness to members and for achieving the Theme objectives and the RWSN Mission and Vision.

New topics will be considered if there is sufficient leadership, demand and resources.

Description

An RWSN **Topic** is a specific area of interest where RWSN can make a contribution by connecting people, sharing knowledge, stimulating debate, providing impartial and relevant guidance, and inspiring professionals to improve rural water services, and the enabling environments which they require to be sustainable, accessible, affordable and safe. A RWSN Topic should have:

- (1) A **clear objective**, or objectives, that link to the Theme objectives and/or the overall RWSN Vision;
- (2) 1+ Topic leaders;
- (3) Either committed resources, or identified possible partners/sources of funding or in-kind support, so that networking or embedding activities can take place.

A Topic can fall within the scope of a single Theme or can be shared by one or more Themes. With sufficient membership and leadership a topic may evolve into a Theme. Annex 5 outlines how topics are chosen and prioritised.

Not all topics are treated equally; in this strategy each topic is assigned one of three an "intensity" levels:

Table 4: RWSN Topic Intensity Levels

Description	Examples of activities	Level 0	Level 1	Level 2	Level 3
Scoping	Mapping out what already exists on the topic; who the main players are; where RWSN could add value	~			
Sign-posting	Posting links on the RWSN website; announcements through social media and RWSN newsletters	~	~		
Active Debate	Structured e-discussions, webinars, RWSN publications/ briefings, conference side events, collating and curating knowledge on the topic	~	~	✓	
Driving the debate	Convening meetings; running online and/or face-to-face training, standalone RWSN events, developing guidelines or manuals, advocacy.	~	~	✓	✓

1. Topics that are Level 0 or 1 may be managed by the Theme as a whole, unless there is Member Organisation or RWSN Executive Partner willing to commit staff time or resources to it specifically (rather than the wider Theme). Consequently, in this mid-term revision, a number of Topics have been removed due to lack of activity in the first half the strategy period.

Activities & Outputs: Annual Work Plan and Management

The Annual Work Plan is developed by the Theme and Topic Leaders and the Secretariat at the beginning of each calendar year and to be reviewed at quarterly online meetings. The plan includes activities, outputs and a schedule (see Annex 5). This process includes a review of the progress of each Topic and whether it is necessary to change its Intensity level or Theory of Change stage (Figure 3).

Activities: Monitoring, Reporting and Transparency

As set out in the Governance document (Annex 1), the RWSN Secretariat, Theme and Topic leaders are accountable to the Executive Steering Committee and to its members through periodic reports of activities, outputs, outcomes and finances:

- 6-month report (January to June)
- 12-month report (January to December)
- 3-year report

All reports, including a financial summary, are published on the RWSN website⁵. RWSN finances handled by Skat Foundation are independently audited each year.

Activities: Sector Scope

Strategy 2018-2023

RWSN will focus on potable water supply in rural areas and small towns.

Any expansion of this scope beyond will be on a topic-by-topic basis and depend on demand and availability of leadership and resources.

Description

A recommendation of the Independent Evaluation 2017 was that RWSN should consider expanding its scope in the following directions:

- Peri-urban areas
- Links to agriculture and multiple use

The scope of RWSN includes water in rural areas and small towns. RWSN's concern is rural rather than urban water supplies. Each country has its own definition of urban (Danert and Flowers, 2012). For RWSN, rural covers a spectrum of settlement patterns including isolated homesteads, hamlets, villages and small towns. Given that settlement patterns continue to change,

⁵ <u>http://rural-water-supply.net/en/rwsn-financial-info</u>

as some rural areas merge into of urban agglomerates, RWSN may at times touch on issues that lie between rural and urban.

RWSN aims to keep a tight focus but with awareness of the bigger picture and while identifying itself as part of the Water, Sanitation and Hygiene (WASH) sector, RWSN will also look beyond to other sectors of rural development. Where appropriate, RWSN will reach out and collaborate with other global networks, listed in Annex 4. Furthermore, RWSN engages with regional and national WASH and water networks.

Activities: Geographic & Linguistic Scope

Strategy 2018-2023

Within tight resource limits, RWSN will:

- Continue to support French and to be as bi-lingual as possible in networking activities and publications;
- Continue to do webinars and e-discussions in Spanish, where there is demand and available resource;
- Be open to collaborations that would allow RWSN materials to be translated into other languages;
- Take time zones into consideration when planning webinars and other live online events;
- Create informal advisory panels for specific geographic areas who can advise the Secretariat, Theme Leaders and Executive Steering Committee on priorities and contextual factors within their regions;
- Encourage the Themes and Topics to promote discussions and case studies from all over the world, with acknowledgement that Sub-Saharan Africa will continue to be the 'centre of gravity' for the near future.
- Seek strategic opportunities for linking with regional-based organisations, networks and intitiatives, in Africa, MENA, Latin America and the Carribean, and Asia.

Description

RWSN is an inclusive, global network with members in over 160 countries (Figure 6), however, member distribution and member surveys from 2014, 2015, 2017 and 2020 show the dominance of interest in Sub-Saharan Africa (

Figure 7). This reflected in many of the networking activities.

Roughly 10% of the individual members are known to be Francophone and a smaller number are Spanish speakers. However, for the majority of members English is likely to be their second or third language.

Activities: Youth and Rural Water Supply

A "RWSN Young Professionals Engagement Strategy" was published in July 2018 after extensive consultation with members are partners. In summary:

The objective of the RWSN Young Professionals' Engagement Strategy is to guide the network in engaging with young people and to empower them to become agents of change, so that they become advocates and contribute actively to the achievement of the SDGs. The timeline of this strategy is set to coincide with the broader RWSN strategy (2018-2023), while the planning of activities will concern only the first phase (2018-2020).

Activities are focused around four pillars:

- Pillar 1: Defining and enlarging RWSN's community of young professionals.
- Pillar 2: Facilitate capacity building of young professionals, and knowledge exchange between junior and senior members (Mentoring).
- Pillar 3: Young professional representation in RWSN's activities.
- Pillar 4: RWSN Young professionals events.

The Pillar 2 Mentoring has been particularly successful and with more resources it is proposed to broaden the scheme to other age groups, and in particular to strengthen mentoring support for women professionals, who need stronger representation at a mid-career and senior levels.

Activities: Supporting Innovation, Scaling-up and Evidence-based Decision Making

Strategy 2018-2023

RWSN will support innovation, scaling-up and evidenced decision making by providing a neutral and rigorous platform for informing and discussing latest technological developments, social and physical science research, innovation in financing, management and social empowerment approaches.

Description

The ambitious goal of universal access to water will only be achieved through a combination of

Innovation/Research Uptake & Scaling up: RWSN will act as a knowledge broker between innovators, researchers, investors and implementers and encourage the use and uptake of sound evidence, the publishing of independent evaluations, and the use of tools like the Technology Applicability Framework (TAF) to facilitate this exchange.

High quality documentation: continuing our emphasis on getting practitioners, in particular, to document what they are doing rigorously and clearly, and helping researchers and innovators explain their work to a broad audience.

Activities: Supporting Diversity

RWSN's focus in on water supplies to households in low and middle income countries. Therefore, that networking activities, such as webinars and publications, reflect the diversity of our membership and give voice to those most affected by the issues on a daily basis – Southern based professionals, women and young people. The need for this was emphasised in 2020 by an active discussion on the need to "de-colonialise WASH knowledge⁶" so that the leadership, expertise and contribution of Southern professionals is acknowledged and visible.

RWSN will continue to monitor and report on:

- % webinar presenters/discussants/facilitators who are women
- % webinar presenters/discussants/facilitators who are young professionals (<35)
- webinar presenters/discussants/facilitators who are Southern (Low and Middle Income Countries).

To further reduce the risk of RWSN activities being dominated by Northern, male experts, it is proposed that from 2021, an **RWSN Gold Standard** for activities and events, such as Sponsored Webinars, similar to that used by SIWI for the World Water Week⁷:

- Gender representation At least 40 percent of presenters (panellists and speakers) must be women. The aim is to ensure balanced gender representation.
- **Young professional representative** At least one of the presenters must be a young professional, i.e., under 35.
- Southern representation: At least 40 percent of presenters (panellists and speakers) must be from a Low or Middle Income Country. The aim is to ensure balanced representation that reflects the demographics of RWSN membership.
- Interactive format: the session should have a format that promotes audience interaction.
- Meet deadlines: the convenor must also meet all determined deadlines as specified by the RWSN Secretariat.

⁶ https://medium.com/@euphresia_luseka/initiating-de-colonization-of-wash-sector-knowledge-c8adoa9f8d6

⁷ https://www.worldwaterweek.org/about/about-world-water-week/gold-standard

4 RESOURCES

Strategy 2018-2023

To match the funding and in-kind support to meet the demand and the anticipate growth in demand will be met by a mix of developing new and existing income streams and decentralising leadership and networking activities to suitable partners.

Human Resources (2021-2023)

Secretariat Staff: From 2021, the RWSN Secretariat Director will be employed by Skat Foundation on an 80% basis. The majority of other Secretariat activities will contracted in from existing Secretariat team members employed by Skat Consulting Ltd. or sub-contracted from other providers.

Online Facilitators: Following a successful trial on the SuSanA online Forum, it is proposed hire 1-3 part time, Southern-based, RWSN facilitators. Their role will be stimulate lively on across the RWSN online communities and support the Theme Leaders and Secretariat to organise networking activities. This opportunity will be open to Young Professionals to increase the capacity of the Theme to meet member needs and increase the knowledge and networks of the Young Professionals to help with their careers.

Theme Leaders: Each of the RWSN Themes and Topics are led by an individual from among the RWSN Executive Steering Committee Organisations with support from some Member Organisations who have expressed a willingness to provide in-kind support for a specific Topic. It should be noted that none of the leaders work full time for RWSN. Their time inputs depend on what they are able to allocate as part of their existing work plus any dedicated resources for RWSN leadership from other sources.

Financial strategy (2021-2023+)

RWSN is not a registered legal entity. Funding for RWSN activities is channelled through the organisations that sit on the Executive Steering Committee, according to their involvement as partners (Table 6).

Funding for core Secretariat and knowledge management services is always a challenge for networks and becoming more difficult. Furthermore, the impact of COVID-19 has had an immediate impact on partner budgets for 2021 and in the medium term, there is high uncertainty on what the full economic impact of the pandemic will be. Therefore, the financial strategy for RWSN is focused on stability and continuation of existing services (Table 5) rather than an ambitious growth plan.

This strategy will be overseen by the Funding Task Group, which was established by the RWSN Executive in 2020 to explore specific fundraising actions.

Table 5: Annual RWSN Financial Goals (through Skat Foundation, excluding in-kind contributions and RWSN projects run by other organisations)

Activity	Swiss Francs ('000 CHF/Year)
Core partner contributions (but ideally attract a major new partner/donor to enable regional expansion in Asia and/or LAC)	200-300
Thematic project funding	250-400
Project-led contributions from Development Banks and UN Agencies	25-100
Sponsored content	10-25
Expanding member contributions/donations	5-15
Overall indicative annual budget	490-840

Furthermore, we need to find some way to have a revenue-generating RWSN Forum event (online, face-to-face, or hybrid), however, even without COVID, climate change mitigation means that international travel must be reduced.

Table 6: ExecSC contributions to themes and topics

RWSN Executive Steering Committee Organisation									
Theme/Topic	AfDB	IRC	SDC	Skat	UNICEF	WaterAid	World Bank	Non-ExecSC	
Leave No-one Behind					Partner	Partner	Partner	Lead: Simavi, Water Youth Network (Nigeria)	
Making Rights Real					Partner	Partner			
Social inclusion Gender equality and women's rights					Partner Partner	Partner Partner			
Social accountability					Partner	Partner		Lead: Simavi	
Decolonising WASH Knowledge		Partner				Partner		Water Youth Network (Nigeria)	
Mapping & Monitoring						Lead		UNC Water Institute co-lead	
Water Quality Monitoring		Partner				Partner	Partner	UNC Water Institute - lead	
Self-supply				Lead					
Capacity building and Vocational training				Lead				SHIPO, Smart Centre Group	
Harnessing the Rain								tbc	
Sustainable Groundwater Development				Lead	Partner	Partner			
Drilling professionalisation					Partner			Ask for Water	
Groundwater Resources Management				Lead					
Water Abstraction (Solar & Manual Pumps)				Partner	Partner	Partner	Partner	Water Mission - Lead	
Sustainable Services					Co- lead			Aguaconsult: co- lead	
Multiple Use water Services (MUS)		Partner		Co-lead				Co-Lead: Dr Barbara van Koppen (IWMI)	
Governance & Management	Der								
Governance	Deputy Chair	Partner	Partner	Partner	Partner	Chair	Partner		
RWSN Secretariat			Co- funder	Lead & Co- funder		Co-funder			
Funding Task Group		Partner	Partner	Lead		Partner		Water Mission, Simavi, UNC	

5 RWSN THEMES

Theme Overview

Table 7: Themes and Theme Leaders

Theme	Lead Organisation(s)	Theme Leaders
Leave No-one behind	Simavi, Water Youth Network	Sara Ahari (Simavi), Temple Oraeki (WYN-N),
	Nigeria, WaterAid	Euphresia Luseka
Self-supply	Skat Foundation	Matthias Saladin (Skat Foundation)
Mapping & Monitoring	WaterAid, UNC	Ellen Greggio (WaterAid), Mike Fisher (UNC)
Multiple Use water Services (MUS)	Skat Consulting	Sandra Fürst (Skat C.) Barbara van Koppen
Sustainable Groundwater	Ask for Water, Water Mission	Kerstin Danert (Ask for Water), Andrew
Development		Armstrong (Water Mission), Sean Furey (Skat Foundation)
Sustainable Services	UNICEF, Aguaconsult	Jorge Alvarez-Sala (UNICEF), Julia Boulenouar (Aguaconsult)

Leave no-one behind

Universal access means access for everyone, leaving no-one out. The SDG focus provides the political endorsement for RWSN to redouble its efforts regarding **Equality**, **Non-discrimination and Inclusion** and strive towards the fulfilment of the human right to water. RWSN has renamed the theme that was previously *Equality*, *Non-discrimination and Inclusion* (*ENDI*) as "leave-no-one behind". The theme leaders feel that this term is widely used across all SDG sectors, and it clearly encapsulate the vision of the network, shining the spotlight on the hard to reach. The theme is still firmly based on the human rights principles of equality and non-discrimination, with a practical focus on inclusion. It sets out to ensure that the targeting of service provision at all levels is inclusive of the needs and rights of all, through every stage of life, with special attention to those who are frequently excluded. The theme also embraces social accountability, based on the understanding that marginalised people are more likely to gain access to services if they are able to hold duty bearers to account.

RWSN as a whole shares practical solutions and recommends practices to ensure access to safe and affordable drinking water for everyone. All of RWSN's themes provide practical means to achieve universal access.

A new topic for consideration in 2021 is "De-colonising WASH Knowledge". This has emerged from concerns from some Southern members around the inequalities and discrimination between Northern and Southern countries when it comes to WASH research and knowledge generation and dissemination.

Table 8: Leave no-one behind Theme Overview

Theme	Leave no-one behind
Objective	To develop practical responses to the SDG mandate to leave no-one behind, recognising that the causes of exclusion include physical, attitudinal and institutional barriers, and that realisation of human rights to water and sanitation for the most marginalised requires a focus on power relations.

Theme	Leave no-one behind
Geographic Focus	Global
Most relevant SDGs	SDG 6: Water: targets 6.1, 6.2, 6BSDG 10: Equality: targets 2,3 and 6SDG 5: Gender: targets 4 and 5SDG 16: Peace, justice and strong institutions, targets 5,6,7,10,12
Theme Leader	Sara Ahari (Simavi), Temple Oraeki (Water Youth Network)
Dgroups	1164 members, 110 countries

Mapping and Monitoring

Effective monitoring of rural water supply services is important to enable progress to be measured and to provide evidence for decision-making. The ICT revolution, coupled with concerns about equity and the sustainability of services has triggered a boom in water point mapping activities and inventories for rural water supplies over the last five years.

RWSN's *Mapping and Monitoring* theme was a topic in the previous 2015-2017 strategy but strengthened in its membership and leadership support. At the heart of the theme is an exploration of how data and information can be gathered, analysed, presented and used in a wide array of decision-making processes, from where to install a new water point, to ensuring that water services are a high standard and are sustained so, to informing new policy development and monitoring the impact of previous interventions and their sustainability.

There is a need to support in-country monitoring processes that allow for decision making. RWSN has an important role share what has been learned and innovative tools and processes that can catalyse and support data management and effective monitoring for informed decision making in different contexts.

Increased availability of regulatory data on water services and sustainability can also support global monitoring initiatives, such as JMP processes, particularly to access detailed data on inequalities and sustainability of services.

Water quality and water safety are critical aspects of the SDG6.1 target for universal water access. Mapping and monitoring water quality is essential, from the water resource to the point of use. However, such data collection is difficult and time consuming, so it is essential the water quality mapping and monitoring meets the needs of water safety decision-making.

Unless specific new projects arise for the Theme, activities will focus on provide news update, moderating discussions on the Mapping & Monitoring Dgroups and running webinars and side events, with a focus in the following areas:

- Data for Decision-making: an overall focus of the Theme is how data is generated and how it can be used to inform decision-making that leads to more sustainable and inclusive rural water access.
- Innovative models in mapping & monitoring: ICT has been a maturing areas of innovation in rural water supplies, from water

point mapping, to real-time monitoring and pre-payment vending systems. The Theme will continue RWSN's role in keeping members informed of on-going innovation and pushing for publishing of independent evaluations so that promising solutions can be replicated and scaled-up.

Indicators Harmonisation: There is a lack of a common set of standards and definitions in the rural water hampers comparability, benchmarking, and learning from best practices. The Water Point Data Exchange (WPDx), the World Bank and the Uptime Consortium have developed, tested or proposed standard indicators. The progress of these, and others, will be shared and discussed across through the Theme.

There will be one standalone Topic (for 2021-2023), the others (above) being covered by the broader Theme:

Safely Managed Water and COVID-19: The SDG6.1.1 Indicator for goal 6.1 is "Proportion of population using safely managed drinking water services". Understanding what "safely managed" means is complex and country-specific. Monitoring water quality and using that information to drive decisions around water safety planning and water treatment is challenging in may contexts. The Theme will focus on promoting exchange of experiences (good and bad) and develop guidelines if the need and resources are identified. The topic will also encompass issues relating to COVID-19, drawing on UNC's expertise and links. Topic Lead: University of North Carolina (UNC) Water Institute.

Table 9: Mapping	& Monitoring	Theme Overview
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Theme	Mapping & Monitoring
Objective	That data collection, mapping and analysis (for a range of environment, physical, social and operational indicators) is linked better to decision-making at all levels that lead to sustainable and universal access to safe drinking water.
Geographic Scope/ Focus	Global, with particular emphasis on Sub-Saharan Africa and Latin America & Caribbean (LAC)
Most relevant SDGs	Water: <u>6.1</u> , 6.3, 6.4
Theme Leaders	Ellen Greggio, WaterAid Mike Fisher, UNC Water Institute
Dgroups	1225 members from 98 countries

Self-supply

Self-supply as a way of upgrading service levels chiefly financed by the users has been going on for centuries. It is particularly strong where public service levels are chronically of poor quality or in situations where these have collapsed, in some instances leading to uncontrolled use of water resources. The concept of "Supported Self-supply" refers to a deliberate set of policies and activities by an actor (or a group of actors) in order to foster an enabling

environment for capacity building, promotion and quality control of water supply services. This form of service delivery usually does not make use of subsidies for infrastructure and the investments are mainly financed by the users and usually delivered by the local private sector.

RWSN's Self-supply theme looks into past and on-going processes of Selfsupply and Supported Self-supply, with the goal of analysing and documenting them. Moreover, the theme aims to establish Supported Selfsupply as a recognised service delivery option for rural water supplies by government agencies, donors and implementing partners and water users, and it wants to foster its application where appropriate. RWSN is actively involved in the debate around capacity building, particularly for the private sector in rural and peri-urban areas. RWSN disseminates knowledge and experiences around rainwater harvesting, as one possible technology to be used under a Self-supply approach. Manual drilling is one of the key technologies implemented under a Self-supply mode, thus there is a direct link to this topic, which shall be made more explicit in the future.

Theme	Self-supply		
Objective	The potential and limitations of Supported Self-supply as a service delivery approach for rural water supply is understood and recognized by government agencies, donors, implementing agencies, water users and other key actors. The approach of Supported Self-supply is applied where appropriate.		
Geographic Focus	Global, with a focus on Sub-Saharan Africa; Rainwater harvesting global		
Most relevant SDGs	6.1		
Theme Leader	Matthias Saladin (Skat)		
Dgroups	Self-supply: 516 members, 74 countries Rainwater harvesting: 869 members, 102 countries		

Table 10: Self-supply Theme Overview

Sustainable Groundwater Development:

Groundwater provides about 45% and 75% of global and African domestic water demands respectively. Without doubt, groundwater supplies have a tremendous role to play in reaching the SDG target for drinking water. Groundwater is playing an ever more important role for drinking water services, particularly in rural areas. In places where it is readily available, and of good quality, it can be a reliable resource. Groundwater storage is extensive in many places, and acts as a natural buffer against climate variability. However, the quantities that can be abstracted are unevenly distributed, and yields vary. Climate change exacerbates this issue, with increased variability of rainfall impacting the amount of groundwater extraction and availability.

In many countries, there has been a large-scale switch from using unprotected surface water to protected groundwater. However, groundwater scarcity and pollution are major concerns in some parts of the world. The days when pumps could be installed without considering the sustainability of

the resource are over. In many countries, inadequate understanding of groundwater resources, coupled with lack of political will undermines the potential of groundwater to be fully harnessed and threatens environmental sustainability. This problem will become increasingly apparent as governments and agencies attempt to move away from handpump based supplies to piped schemes fed by motorised (including solar) pumping. Inadequate appreciation of groundwater potential is likely lead to underperformance and failure of piped water supplies. Greater efforts are required to fully assess and evaluate groundwater potential and associated risks before schemes are implemented.

In order to ensure that water systems that tap groundwater are built to last, and that service provision is cost-effective, there is a need for vigilance within specific projects. Professionalism is needed for the planning process, community engagement, siting, procurement and contract management, drilling and drilling supervision, timely payment for goods and services and reporting. The basis for professionalism is trained, experienced and equipped personnel, with adequate resources to be able to their job properly.

Of all the themes, Sustainable Groundwater Development has the longest history in RWSN. It remains highly relevant, particularly in light of the SDGs. In this strategy, the theme will build on the history and achievements of the past (Annex 7), and further develop the relationships that have been established with others.

The **Sustainable Groundwater Development** theme strives to ensure that Groundwater resources are properly considered and sustainably used for developing drinking water supply sources and ensuring their long-term quality and security. The theme comprises three topics: Groundwater Resources Management, Professional Water Well Drilling and Groundwater Abstraction as summarised. Due to the conclusion of the UPGro programme in 2020, the Groundwater Resources Topic will downgraded from Level 3 to Level 1.

UN-Water focus in 2022 will be on groundwater and RWSN will play an active part in contributing to knowledge exchange at events and publications around this.

Table 11: Sustainable Groundwater Development Theme Overview

Theme	Sustainable Groundwater Development
Objective	Groundwater resources are properly assessed and sustainably developed and managed for drinking water supply and other uses, so ensuring their long-term quality and security.
Geographic Focus	Global, with some activities focusing on Sub-Saharan Africa.
Most relevant SDGs	Water: <u>6.1</u> , 6.3, 6.4, 6.5, 6.6, 6A, 6B
Theme Leader	Dr Kerstin Danert, (<mark>Ask for Water)</mark> Andrew Armstrong (Water Mission)
Dgroups	1550 members, 108 countries

Sustainable Services

Sustainable Services means that water users have reliable and affordable access to enough water of sufficiently high quality to meet their daily needs. There are many ways that such access can be achieved, from household selfsupply to large-scale water utilities.

RWSN Member Surveys, and numerous other studies and reports, have shown that sustaining operation and maintenance of rural water systems is the number one challenge facing users, local government and operators. This is often expressed through the quote from RWSN publications that around a third⁸ or a quarter⁹ of handpumps in Sub-Saharan Africa are not working at any one time. However, this statistic over-simplifies what is a global and complex systemic problem that affects all types of water systems not just community-managed handpumps. It also goes beyond operation and maintenance into broader system of social, economic, environmental, institutional and technological interdependencies.

RWSN's *Sustainable Services* theme, will focus less on convening networking activities around specific topics and more on developing RWSN's membership base and peer-to-peer exchange among specific groups:

- Rural and small water system operators (private, public, community, NGO/Aid Agencies)
- Associations of operators and water users.
- Local government service authorities and regulators.

These actors are critical to achievement of the SDG6.1 target but they are difficult to reach. Other actors, such as development partners, NGOs, donors and researchers have the potential to strengthen these operational actors and their enabling environments. However, it is important to match demand and supply of support.

The strategy for reaching and engaging these actors includes, but is not limited to:

- Actively reaching out through existing members and the links and contacts of the Theme Leaders and Secretariat;
- Compiling and publishing a regular "RWSN directory of rural water supply services, tariffs, management models and lifecycle costs"¹⁰
- Investment by the REACH programme (Oxford University/UKAid) in partnership with the Uptime Consortium;
- Collaboration with the International Water Association (IWA);
- Collaboration with the World Health Organisation (WHO) and their network of small system operators and regulators.

⁸ RWSN, 2009 (https://www.rural-water-supply.net/en/resources/details/203)

⁹ Banks & Furey, 2016 (https://rural-water-supply.net/en/resources/details/787)

¹⁰ https://www.rural-water-supply.net/fr/ressources/details/861

Theme	Sustainable Services
Objective	Rural water supply services are adequately financed, meet country service delivery standards, are managed and supported by capacitated service providers and service authorities.
Geographic Scope/ Focus	Global
Most relevant SDGs	Water: <u>6.1</u> , 6.3, 6.4, 6.5, 6.6, 6A, 6B, 13, 16,
Theme Leaders	Jorge Alvarez-Sala, UNICEF Julia Boulenouar
Dgroups	1027 members, 99 countries

Table 12: Sustainable Services Theme Overview

Multiple Use water Services (MUS)

Rural and peri-urban people need water for drinking, cooking, washing, sanitation, watering animals, growing food and generating income. Multiple-Use water services (MUS) take people's water needs as the starting point. By looking at all water needs and available water resources holistically, it is possible to make more cost-effective and sustainable investments that generate a broader range of health and livelihood benefits than is possible with single-use systems.

Multiple-Use water Services meet people's domestic and productive needs while making the most efficient use of water resources—taking into account different water sources and their quality, quantity, reliability and distance from point of use. A MUS approach can be used to plan a new water service or to upgrade existing domestic or irrigation services. This is a systematic approach that can be scaled up.

The MUS Group¹¹ was established in 2003 as learning platform for MUS. RWSN has hosted the Group's online community since 2014 but it is proposed to formerly make MUS an RWSN Theme from 2021 onwards with the International Water Management Institute (IWMI) to help bridge the gap between rural domestic water use and rural agricultural and small holder use and to make use of thematic overlaps with:

- Self-supply and household investments in water
- Solar pumping for multiple water uses
- Farmer-led irrigation
- Drilling professionalisation for multiple water uses.
- Climate change mitigation, resilience and adaptation

¹¹ <u>https://www.musgroup.net/</u>

Table 13: MUS Theme Overview

Theme	Multiple Use water Services (MUS)
Objective	Rural water supply services are adequately financed, meet country service delivery standards, are managed and supported by capacitated service providers and service authorities.
Geographic Scope/ Focus	Global
Most relevant SDGs	Water: <u>6.1</u> , 6.3, 6.4, 6.5, 6.6, 6A, 6B, 13, 16, Others: SDG 1, SDG2, SDG5, SDG7, SDG8, SDG13, SDG17
Theme Leaders	Dr Barbara van Koppen, IWMI
Dgroups	697 members, 85 countries

6 RWSN TOPICS

This final section provides further detail on the Topics that the network intends to cover during the strategy period and an indication of the intensity of activity, who will be involved and what each Topic aims to achieve in order to contribute to the higher level outcomes. This will be a dynamic process that will be regularly reviewed and adapted to meet the needs, circumstances and resources. Therefore the most recent Annual Work Plan should be referred to get the most up-to-date picture of RWSN activities and priorities.

Table 14: RWSN Topic Overview

Торіс	Theory of Change Activity Stage(s)	Intensity	Topic Leader	Lead Theme	Support Themes
Gender equality and women's rights	1,2,4	2 – Active Debate	Sara Ahari (Simavi)	Leave no-one behind	All Themes
Making Rights Real	1-4	3 – Driving the Debate	Louisa Gosling (WaterAid), Sara Ahari (Simavi)	Leave no-one behind	Sustainable Services
Inclusion	1-4	3 – Driving the Debate	Louisa Gosling (WaterAid), Sara Ahari (Simavi)	Leave no-one behind	All Themes
Social accountability for sustainable services	1-4	3 – Driving the Debate	Temple Oraeki (Water Youth Network)	Leave no-one behind	Sustainable Services, Mapping & Monitoring
Safely Managed Water and COVID- 19	1,2	2 – Active Debate	Mike Fisher (UNC)	Mapping & Monitoring	All Themes
Harnessing the Rain	4 – News updates	1 – Passive Dissemination	tbc	Self-supply	Sustainable Groundwater Development, <mark>MUS</mark>
Capacity building and vocational training	3 – Inspiring & Embedding	3 – Driving the Debate	Matthias Saladin (Skat)	Self-supply	Sustainable Groundwater Development, Sustainable Services
Groundwater Abstraction (Handpumps)	4 – News updates	1 – Passive Dissemination	Sean Furey (Skat)	Sustainable Groundwater Development	MUS
Groundwater Abstraction (Solar Pumping)	3 – Inspiring & Embedding	2 – Active Debate	Andrew Armstong (Water Mission)	Sustainable Groundwater Development	Sustainable Services, MUS, Self- supply
Professional Water Well Drilling	3 – Inspiring & Embedding	3 – Driving the Debate	Kerstin Danert (Ask for Water)	Sustainable Groundwater Development	MUS, Self-supply
(Ground) Water Resources Management	4 – News updates	1 – Passive Dissemination	Sean Furey (Skat)	Sustainable Groundwater Development	All Themes

Topics – Leave No-one Behind lead

Торіс	Making Rights Real		
Description	Making the content and principles of human rights relevant and practical for water supply at local and district levels.		
Leader (theme/org)	Leave no-one behind: Louisa Gosling, WaterAid		
Co-leaders (theme/org)	Leave no-one behind: Simavi, WASH United, Institute for Sustainable Future (ISF), UNICEF, End Water Poverty Sustainable Services		
Aim by 2030 (end of SDG period)	The Human Rights to water and sanitation are widely understood in the sector, frame discussions about accountability, equality, and participation, and provide the basis for accountable and responsive services that reach the poorest.		
Expected Outcomes by 2023 (end of strategy period)	That the content of the 2016 Handbook on human rights to water and sanitation is understood by practitioners and helps to make local governments more accountable to poor rural communities.		
Expected Activity Intensity Level	3. Driving the debate: developing and promoting building blocks of human rights materials		
Activities 2021-23	Knowledge Sharing & Networking	Inspiring & Embedding	
	 Share materials and experience of use E-discussion in RWSN community Updates through Secretariat services Cross-posting with SuSanA Forum 	 Supporting Making Rights Real campaign¹² 	
Confirmed collaborations/ projects	Signed agreement between WaterAid, UNICEF, WASH United, ISF, EWP		

Торіс	Inclusion		
Description	Focus on the inclusion of people across all life stages in rural water supply,		
Leader (theme/org)	leave no-one behind: Louisa Gosling, WaterAid, Sara Ahari (Simavi)		
Co-leaders (theme/org)	Ground water, monitoring, sustainable services, self supply		
Aim by 2030 (end of SDG period)	Understand how to dismantle barriers preventing access to everyone across all stages of life, including disabled, older and other marginalised people in communities.		
Expected Outcomes by 2023 (end of strategy period)	That inclusion of people across all stages of life including those with disabilities, older people and others are systematically taken into account across all themes of the RWSN.		
Expected Activity Intensity Level	3. Driving the debate: Sharing guidelines and tools; learning from experiences; Embedding training and discussions and application; Updates on progress and new guidelines and studies		
Activities 2021-23	Knowledge Sharing & Networking	Inspiring & Embedding	
	 Sharing experiences E-discussion in RWSN community Promote guidelines and tools Cross-posting with SuSanA Forum 	 Sharing examples of inclusive designs Developing policy with governments Influencing investments to make services inclusive 	
Confirmed collaborations/ projects	SIMAVI, WaterAid, Water Youth Network - Nigeria SuSanA Forum management by RWSN Secretariat		

¹² <u>https://human-rights-to-water-and-sanitation.org/mrrcampaign/</u>

Торіс	Gender equality and women's rights	
Description	Empowering women and young girls, and promoting gender equality through rural water services	
Leader (theme/org)	Leave no-one behind: Priya Nath, Louisa Goslin	g, WaterAid, Sara Ahrari, Simavi
Co-leaders (theme/org)	All Themes	
Aim by 2030 (end of SDG period)	Water supply programmes systematically include investment to empower women and promote gender equality	
Expected Outcomes by 2023 (end of strategy period)	Gender equality is applied across all themes in a practical and coordinated manner, with a focus on addressing the unequal distribution of unpaid work, access to water assets, and empowering women to have more influence on decisions about water. More experience and analysis about how to use water supply interventions to promote women's rights.	
Expected Activity Intensity Level	2. Active Debate: webinars and e-discussion; gender lens applied to all topics and webinars across themes; Updates on progress and new guidelines and studies	
Activities 2021-23	Knowledge Sharing & Networking Inspiring & Embedding	
	 Webinars (English/French) E-discussion in RWSN community Promote guidance and tools updates through Secretariat services Cross-posting with SuSanA Forum 	RWSN members and member organisations are inspired by others to identify, implement and monitor investments to empower women and young girls, and promote gender equality
Confirmed collaborations/ projects	Simavi, World Bank, WaterAid SuSanA Forum management by RWSN Secretariat	

Торіс	Social accountability for sustainable services	
Description	Embedding social accountability as a key intervention for sustainable services	
Leader (theme/org)	Leave no-one behind: Temple Oraeki (Water Yo	uth Network)
Co-leaders (theme/org)	Sustainable services , mapping and monitoring	
Aim by 2030 (end of SDG period)	Governments and service providers are increasingly held to account by citizens for the sustainability and quality of water supplies	
Expected Outcomes by 2023 (end of strategy period)	Social accountability mechanisms are well understood across the sector, underpinned by a body of evidence and growing community of practice	
Expected Activity Intensity Level	3. Driving the debate: Promoting tools and experiences; materials relevant to citizens and to service providers and government; How to institutionalise citizens engagement and accountability in programme design implementation and monitoring; Updates on progress and new guidelines and studies	
Activities 2021-23	Knowledge Sharing & Networking Inspiring & Embedding	
	 Webinars (English/French) E-discussion in RWSN community Promote updates through Secretariat services Cross-posting with SuSanA Forum 	 In-country projects in different contexts Developing policy with governments and donors
Confirmed collaborations/ projects	WIN, Water Witness, Oxfam, IRC, SIMAVI , World Bank, EWP, GPSA, Water Youth Network SuSanA Forum management by RWSN Secretariat	

Topics – Mapping & Monitoring Lead

Торіс	Safely Managed Water and COVID-19	
Description	The wording of SDG6.1 places an emphasis on water access that is "safe" and this has raised the priority of addressing water quality, not just water quantity. The challenge is how can this be consistently achieved. Water quality has many different variables and many are difficult or expensive to measure routinely. Therefore any investment in water quality monitoring needs to be done with careful planning and clear view on what decisions will be made based on that data, at operational, planning or regulatory levels. Whilst the COVID virus, SARS-CoV-2, is not known to be transmitted through water, the role of handwashing in preventing the spread the diseased is critical and monitoring and managing the diseases is important because of the disruption that it (and associated lockdowns) are impacting rural water services	
Leader (theme/org)	Mapping & Monitoring Mike Fisher, Nikki Behnke (UNC)	
Co-leaders (theme/org)		
Aim by 2030 (end of SDG period)	That the "Proportion of population using safely managed drinking water services" in rural area is as close to 100% as possible.	
Expected Outcomes by 2023 (end of strategy period)	Greater awareness of what water quality parameters to measure and how do use that data to improve water safety of rural water supplies.	
Expected Activity Intensity Level	2. Active Debate: webinars and e-discussions; promoting exchange and identifying gaps where guidance and training can meet needs.	
Activities 2021-23	Knowledge Sharing & Networking Inspiring & Embedding	
	 Regular updates and posts to the Mapping & Monitoring Community Water quality monitoring within the broader Theme activities on Data for Decision-making Sharing relevant, high quality advice and guidance on COVID-19 across RWSN and SuSanA 	Develop an RWSN Guideline on water quality monitoring for decision-making
Confirmed collaborations/ projects	SuSanA Forum management by RWSN Secretariat	

Self-supply Lead

Торіс	Capacity building and vocational training	
Description	Supporting training (including vocational training) of entrepreneurs to improve the quality and availability of self-supply options	
Leader (theme/org)	Self-supply Matthias Saladin, Skat	
Co-leaders (theme/org)		
Aim by 2030 (end of SDG period)	That the potential of household finance is unlocked by encouraging high quality self-supply services in areas where it an appropriate service delivery option, as part of achieving SDG6.1.	
Expected Outcomes by 2023 (end of strategy period)	Increased capacity of training centres (and networks of training centers) and training opportunities for artisans/entrepreneurs active in rural water supply. Enhanced visibility of the already active training centers/networks and better documentation of their experiences.	

Торіс	Capacity building and vocational training	
Expected Activity Intensity Level	2. Active Debate	
Activities 2021-23	Knowledge Sharing & Networking	Inspiring & Embedding
		 Continued fundraising and technical support to Smart Centres in Tanzania, Malawi and Zambia Continued development and embedding of rural water supply training modules developed by Skat Foundation in Cameroon.
Confirmed collaborations/ projects	SMART Centre Group (incl. SHIPO, Mzuzu, MetaMeta, Aqua for All, Volkart Foundation, ZH2O) Skat Foundation Cameroon Training Modules	

Торіс	Harnessing the Rain	
Description	Rainwater harvesting, in its many forms, has huge potential for domestic and multiple uses in rural areas around the world. Rainwater harvesting can be done from the household, roof water collection level to active watershed management for better soil and water conservation. Rainwater harvesting is a proven way to improve the resilience of households and communities against climate variability, and potentially an important part of climate change adaptation.	
Leader (theme/org)	Self-supply	
Aim by 2030 (end of SDG period)	That rainwater harvesting is used more widely and at a range scales as part of universal access to safe water and greater climate change resilience.	
Expected Outcomes by 2023 (end of strategy period)	Enhanced visibility of rainwater harvesting across countries and settings, with a particular focus on rural remote locations. Documentation of experiences where rainwater harvesting has been scaled up (e.g., Vanuatu)	
Expected Activity Intensity Level	1 – Passive Dissemination – unless resources become available to do more	
Activities 2021-23	Knowledge Sharing & Networking	Inspiring & Embedding
	 Maintaining and recruiting to rainwater harvesting Dgroups Maintaining Rainwater knowledge products on RWSN websites 	
Confirmed collaborations/ projects	University Technology of Sydney	

Topics - Sustainable Groundwater Development Lead

Торіс	Professional Water Well Drilling
Description	If the SDG targets for drinking water are to be met, drilling and pump installation needs to be undertaken in a professional manner, with the data generated used to improve the understanding of groundwater resources, particularly given the importance of groundwater resources in adapting to the impacts of climate change. Over the last decade, RWSN has published and disseminated a set of guidelines and animated films, and hosted several webinars that set out to improve professional water well drilling. These materials have been used to improve projects and have been incorporated into the curricula of some academic and training organisations. Specific initiatives to raise drilling professionalism are underway in a number of countries by key international organisations (e.g. UNICEF, WaterAid). On-going concerns expressed by RWSN members include poor quality

Торіс	Professional Water Well Drilling	
	implementation, use of inferior products, corruption, rogue drilling contractors, little knowledge of boreholes, capacity gaps by districts and lengthy contracting procedures. It is recognised that targeted efforts are required to enable the wealth of knowledge available to be systematically embedded into policy, investments and practice.	
Leader (theme/org)	Sustainable Groundwater Development lead Kerstin Danert, Ask for Water Ltd.	
Aim by 2030 (end of SDG period)	Water well drilling and pump installation is undertaken in a professional manner, with the groundwater data generated used to improve the understanding of groundwater resources.	
Expected Outcomes by 2023 (end of strategy period)	 Skills and knowledge of water well drilling and its management raised. National (or state) policies, regulation, standards and procedures for borehole drilling improved. Better investments to improve and sustain professional groundwater development. 	
Expected Activity Intensity Level	3. Driving the debate: RWSN will continue to push strongly for more professional water well drilling	
Activities 2021-23	Knowledge Sharing & Networking	Inspiring & Embedding
	 Facilitation of relevant online communities (in DGroups). Improved signposting of existing RWSN and other relevant resources on RWSN website and on Wikipedia. RWSN guideline "from drilling data to groundwater maps". Support and facilitate select webinars, structured e-discussions and face to face events on groundwater capacity, institutional frameworks and investment. Publication of existing RWSN guidance materials in other languages. 	 Online training course on professional water well drilling management Face-to-face training and remote support to UNICEF country offices in select countries. Uptake of drilling professionalisation training by other institutions.
	Capacity Development Working Group of the AMCOW Pan African Groundwater Program (APAGroP).	

Торіс	Groundwater Resources Management
Description	The sustainability of domestic water services that rely on groundwater depends on the security of the groundwater resource. Demand for groundwater is growing for domestic, agricultural and industrial use, and more affordable technologies, such as solar pumping provide new options for water users. In some places, this has already led or may lead to competition for limited groundwater resources. Groundwater resources are further threatened by climate change and climate variability, the increase and densification of human populations, deforestation, wetland loss and pollution. Disasters and emergencies can further exacerbate risks to groundwater resources. However, research has shown that in some areas, groundwater is resistant to climate change and that recharge may even increase.
	The gap between the professionals and institutions that build water services and those that manage the natural resources remains large.
	There is an urgent need for improved groundwater resources assessment to quantify the resource and understand its quality.
	Groundwater governance is essential, particularly the monitoring, oversight, and regulation of groundwater abstraction (particularly for town and city supplies, industry and agriculture) and mechanisms that ensure equitable groundwater allocation. Ways of ensuring groundwater

Торіс	Groundwater Resources Management	
	protection are also needed. Improved groundwater recharge could be of major benefit to rural populations. There are a number of global initiatives, national and international associations and regional projects on groundwater resources management, as well as those working on water resources management nationally (see collaborations below). RWSN sets out to complement and strengthen these, with an emphasis on knowledge brokering and fostering linkages.	
Leader (theme/org)	Sustainable Groundwater Development Sean Furey, Skat Founrdation; Kerstin Danert, As	sk for Water
Aim by 2030 (end of SDG period)	Improved security and safety of groundwater-dependent rural water supplies.	
Expected Outcomes by 2023 (end of strategy period)	 Rural water supply and water resource professionals have greater mutual understanding, particularly in relation to climate change and water security issues, and have the tools, knowledge and motivation to work together to address common problems. Groundwater is considered properly when planning climate resilience of rural water supply systems. 	
Expected Activity Intensity Level	1 – Passive Dissemination – unless resources become available to do more	
Activities 2021-23	Knowledge Sharing & Networking Inspiring & Embedding	
	 Facilitation of relevant online communities (in DGroups). Stimulate and facilitate exchange and debate between practitioners, policy- makers and researchers on groundwater use, monitoring and management, including issues of Human Right to Water, legal water rights, gender, climate change and water security. Raise awareness and understanding of the importance of groundwater, and how to effectively monitor and manage it. 	 Encourage enhanced groundwater recharge methods (e.g. sand dams, enhanced road drainage) Find entry points for embedding rural water supply and groundwater management in Integrated Water Resource Management (IWRM) processes.
Confirmed collaborations/ projects	None – an acquisition priority	

Торіс	Groundwater Abstraction (solar pumps and handpumps)
Description	At the global level, there is a push to bring water supply services close to the home via piped supplies. This is particularly to reduce the burden of carrying water over long distances. Nevertheless, political, financial and environmental realities mean that handpumps will continue to significantly contribute to rural water supplies for many remote and/or low income communities.
	RWSN remains the global knowledge hub for handpumps evolving from the Handpump Technology Network (HTN). Up until the late 2000s much effort was placed on agreeing public domain standards for common pumps, such as the India Mark II, Afridev and Tara, and encouraging national governments to adopt handpump standardisation policies to improve viability of supply chains and repair skills. The current high priorities are:
	 Addressing widespread poor quality handpump and borehole hardware problems that are leading to premature failure or corrosion. Supporting 'Smart' handpump innovators to take their technology to scale so that handpump services can be remotely monitored and cost-effective maintenance services established.

Торіс	Groundwater Abstraction (solar pumps and h	nandpumps)
	 Worldwide, solar pumps are rapidly being installed by humanitarian and development agencies, for-profit industries, and private households. The uptake rate of solar pumping installations escalates a number of impending issues, with implications for: planning, implementation, operation and maintenance, monitoring, and regulation of rural water supplies sustainability of groundwater resources in light of increased abstraction appropriateness and feasibility of upgrading from handpumps to solar pumps The interrelated issues between handpumps, and solar pumps will be tackled in RWSN's groundwater abstraction topic. 	
Leader (theme/org)	Sustainable Groundwater Development Andrew Armstrong (Water Mission) and Sean Fu	urey (Skat Foundation)
Aim by 2030 (end of SDG period)	 National standardisation policies and practices ensure that corrosive handpump components are not installed. Rural water supply professionals consider national standardisation policies and practices for handpumps when selecting technologies. Solar pumping contributes significantly to the goal of universal water access, with management and regulatory systems in place to ensure sustainability of finance and the water resources. 	
Expected Outcomes by 2023 (end of strategy period)	National policies, strategies and plans for rural water supply include solar pumping and incorporate technical guidelines promoted by RWSN. Rural water supply professionals have a sound understanding of the opportunities and constraints of handpump and solar pumping technologies. alongside other water lifting technologies.	
Expected Activity Intensity Level	 Handpumps - 1. Passive Information Dissemination: While there remains interest within the network, in recent years there has not been the strategic drive or resources to update the Public Domain handpump standards or national handpump standardisation. If resources are secured then work with partners to improve hardware quality control in supply chains. Solar Pumps - 2. Active Debate: These is need for more evidence on the extent that solar pumping will replace or complement handpumps, and the best way to implement, upgrade or manage such systems. 	
Activities 2021-2023	Knowledge Sharing & Networking	Inspiring & Embedding
	 Facilitation of relevant DGroups. Raise awareness of handpump corrosion and more general hardware quality control/supply chain problems Convene 'Smart' handpump innovators to support them to scale-up. Stimulate discussion on challenges and opportunities for solar pumping (with private enterprise, government and development agencies). Signposting of existing RWSN and other relevant initiatives on solar pumping on RWSN website and Wikipedia 	 Face-to-face and online training on solar pumping. Collaboration with national (or state) governments to improve institutional frameworks and provide training for solar pumping. Investigate and identify ways and stakeholders to improve hardware quality control.
Confirmed collaborations/ projects	Water Mission/UNICEF Programme Cooperation Agreement (PCA) Skat Foundation looking for financial support to investigate handpump and borehole hardware supply chains and quality control.	

Topics - Sustainable Services Lead - None

Topics – Multiple Use water Services Lead - None

ANNEX 1: RWSN MEMBER STRUCTURE

Legal Status

RWSN is not a legal entity. It is a partnership of organisations and individuals who are motivated to collaborate to improve rural water services.

The Secretariat is hosted currently by Skat Foundation, St. Gallen, Switzerland.

The appointment of the Secretariat and the Theme Leaders is reviewed by the Executive Steering Committee every three years.

Network Governance

Refer to **"Rural Water Supply Network Governance, Roles and Responsibilities January 2019 to December 2021"** (Separate document)

Membership

RWSN has individual and organisational members:

Executive Committee Members

Priorities 2018-2023

Recommendation 5 of the independent evaluation (PEM 2017) was to increase diversity at the governance level to include greater representation from the target countries and users. This will be explored during 2018/19 to get the right balance between diversity and active engagement/leadership.

Description

The network is governed by an Executive Steering Committee which meets physically at least once every 18 months, and virtually one a year. The Committee comprises two named representatives from each of the organisations who are members. The committee nominates a chair for a three year term, which can be extended once. The first term of office of the current chair will come to an end in December 2016. The organisations on the Committee cooperate under a signed "Statement of Common Intent".

Membership of the Executive Committee remains open to organisations able to make the strategy and annual commitments set-out in the Governance document (Annex 1). Organisations that bring particular geographical or thematic expertise or links are welcomed.

Individual Members

Priorities 2018-2023

The current free, low-threshold member criteria will remain because a more formal membership process would create a high administrative burden for limited benefit, but a mechanism for voluntary annual, or one-off, contributions, will be established.

Description

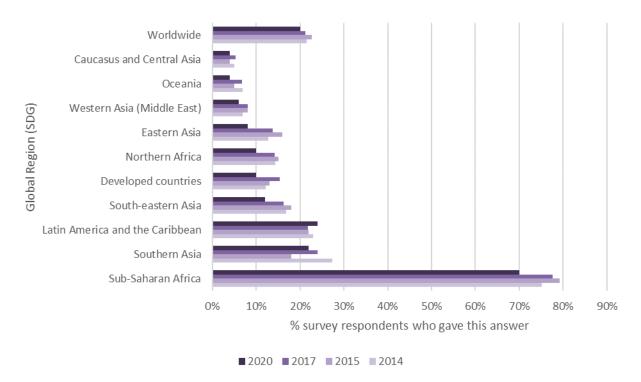
Individual members of RWSN are practitioners and professionals that are actively engaged in improving rural water supplies, or have a strong interest in the subject. Anyone can join and there is no membership fee. Members are from different stakeholder groups including national and local government, the private sector, donors, research and training institutions as well as water users.

Figure 6: Distribution of Individual RWSN members (12347 in 169 countries¹³)



¹³ Registered on dgroups.org/rwsn/ as of 21.10.2020. From these 2,168 have no country assigned to their Dgroups profile.

Figure 7 : Regions of the world where survey respondents have most interest in rural water supply?



Member Organisations

Priorities 2018-2023

It is proposed to review and revise the Member Organisation grade in light of the findings of the 2017 independent evaluation which corroborated the view of the Secretariat that this membership grade is not achieving its potential. The aim should be that Member Organisations should:

- Actively engage in RWSN knowledge sharing activities;
- Actively encourage staff and partners to become individual members of the RWSN;
- Not just sign up to agreed core principles (the Kampala Statement 2011) but also demonstrate some progress to carrying them out;
- Renew on a periodic basis (annually or biannually) without creating unrealistic administration burden.

Review of this membership grade could include a market survey of what paid-for benefits or services Member Organisations would be interested in, as part of a wider review of the financial sustainability and capacity of the network secretariat.

Stronger focus will be put on connecting and engaging with rural water user associations.

Description

RWSN organisational membership was launched in 2013. It provides another mechanism for organisations to share their knowledge and good practices and ultimately influence how the network operates. The current threshold for

joining is low and free of charge. In September 2016 there were 46 RWSN member organisations representing a mix of government, NGO, private companies, associations, research institutes and community groups. A list of current member organisations is presented in Annex 3.

Affiliated Sub-Network (ASN)14

Priorities 2018-2023

While not actively encouraged or recruited, AFNs that meet the requirements below will be welcomed.

Description

From time-to-time, RWSN is approached to host a small network or mailing list on behalf of another network or organisation on our Dgroups space¹⁵. Requirements are:

- There is sufficient thematic overlap for the members of the Sub-Network to value being part of the wider RWSN family of networks;
- Where the responsibility for managing the Sub-Network moderation is not placed on the RWSN secretariat, but there will be quality checking of the discussions from time-to-time.
- That the RWSN Secretariat can post the Sub-Network when new publications, resources or events come up of that are of potential interest to those members.

Affiliated Sub-Networks do not explicitly contribute RWSN Strategy, other than contribution of members to the overall member total. Current Affiliated Sub-Networks are in Annex 2.

Role of the Secretariat

Priorities 2018-2023

The Secretariat will be focused on delivering and reporting on this strategy, with particular emphasis on:

- Improving the financial sustainability of the network;
- Investigating opportunities for more national, or regional, level networking activities;
- Continue to support the Technology Applicability Framework (TAF) as an important tool to support innovation and scaling-up.

¹⁵ <u>https://dgroups.org/rwsn</u>

¹⁴ This grade is not included in the current revision of the Governance document (Annex 1) and should be considered in the next revision.

Description

The Secretariat is responsible for the day-to-day leadership and coordination of the network. Support is given to the Themes and Topics in the following ways:

- Management of networking and communication activities, including management of online platforms, organisation of events, ediscussions and webinars, peer-review and publishing process for RWSN publications.
- Strategic: Liaison with other networks and partnerships on strategic topics of common interest to develop common outputs or work towards common outcomes, e.g. policy-change.
- Innovation/Research Uptake & Scaling up:
 - Large agencies and government can implement at scale but are struggle with innovation; while innovators are generally poor at having impact at scale;
 - A role of RWSN is to act as knowledge/innovation broker so that good, proven ideas get the support they need;
 - Another role is promoting high-quality implementation in large-scale programmes because many things that work in a well-resourced pilot often have problems when scaled up. The Technology Applicability Framework (TAF) was developed by RWSN partners between 2011-2013 and been used throughout the world.
- High quality documentation: continuing our emphasis on getting practitioners, in particular, to document what they are doing rigorously and clearly, and helping researchers explain their work to a broad audience.

ANNEX 2: ONLINE COMMUNITIES WITHIN RWSN'S DGROUPS

Active Public RWSN-moderated Communities

RWSN América Latina y el Caribe
RWSN Bulletin – Francais (mailing list for Francophones, occasionally used for discussions)
Discussions francophones du RWSN
RWSN E-discussions
RWSN Leave No-one Behind
RWSN Mapping and Monitoring
Multiple Use water Services (MUS)
RWSN Rainwater Harvesting
RWSN Self Supply
RWSN Sustainable Groundwater Development
RWSN Sustainable Services
RWSN_Young-Professionals

Affiliated Sub-Networks (ASNs) (closed or limited access)

RWSN Member Organisations

Sanitation and Water for All (SWA): Country Processes Working Group Research & Learning Governance & Finance Working Group SWA High-level Political Dialogue Working Group

Affiliated Sub-Networks (ASNs) (open access)

Gansu Academy of Water Conservancy (GAWC) Rainwater Harvesting Alumni

Liberia National WASH of the Government of Liberia's national WASH coordination unit

Rwanda WASH Media Net

Rwanda WASH Working Group

Sierra Leone WASH

ANNEX 3 LIST OF RWSN MEMBER ORGANISATIONS

Name	Туре	Country (HQ)	Year Joinec
AWDROP (Association of Water Well drilling Rig owners and Practitioners)	National Association	Nigeria	2013
Connect International	iNGO	Netherlands	2013
Ministry of Water & Environment	National Government	Uganda	2013
Fatigern Drilling	Private Company	Nigeria	2013
WaterCan EauVive (now WaterAid Canada)	iNGO	Canada	2013
Water for People	iNGO	USA	2013
WEDC, Loughborough University	Education/Research	UK	2013
Kenya Water Institute	Education/Research	Kenya	2013
Development Initiative	National NGO	India	2013
Living Water International	iNGO	USA Sri Lanka	2013
National Water and Sewerage Drainage Board	National Government		2013
CAWST	iNGO	Canada	2013
IRSP - Integrated Regional Support Programme	National NGO	Pakistan	2013
Basic Water Needs	Private Company	Netherlands	2014
charity: water	iNGO	USA	2014
GOAL	iNGO	Ireland	2014
SOMGIT	National NGO	Somalia	2014
MSABI	National NGO	Tanzania	2014
Water&pH Soluces	iNGO	Switzerland	2014
Dando Drilling	Private Company	UK	2014
Action For Sustainable Rural Advancement (ASRA)	National NGO	Pakistan	2014
	iNGO		-
Welthungerhilfe Valas State Burgh Water & Constantion Authority		Germany	2014
Yobe State Rural Water & Sanitation Authority	Local Government	Nigeria	2014
Water Mission	iNGO	USA	2015
Whave Charles and	Social Enterprise	Uganda	2015
Cotton Gin International	Private Sector/ Education	USA	2015
Lifewater Drilling Technology	Private Sector	USA	2015
Practica Foundation	iNGO	Netherlands	2015
AWARE	National NGO	Pakistan	2015
Team and Team	iNGO	South Korea	2015
Dublin Institute of Technology	Education/Research	Ireland	2015
Human Initiative Network	Regional NGO	Liberia	2015
The Water Trust	iNGO	USA	2015
ACRA-CSS	iNGO	Italy	2015
German WASH Network	Network	Germany	2015
FEDWASUN	Association	Nepal	2016
SRUJANEE	National NGO	India	2016
Max Foundation	iNGO	Netherlands	2016
Rainwater Association of Somalia-RAAS	National NGO	Somalia	2016
Kanem Borno Human Development	National NGO	Nigeria	2017
Association(Kabhuda)			
Rotaract Club of Mengo	National NGO	Uganda	2017
Lifewater International	iNGO	USA	2017
Chipembere Community Development Organisation(CCDO)	National NGO	Malawi	2017
Safe Water & Sustainable Hygiene Initiative (Sawashi)	National NGO	Kenya	2017
Gender Equality and Women Empowerment for	National NGO	Uganda	2017
Development (GWEFODE)			
Simavi	iNGO	Netherlands	2017
Aquaya	iNGO	USA	2017
Think East Africa	National NGO	Rwanda	2018
SEED Madagascar	National NGO	Madagascar	2018
LYSE Concept	iNGO	Switzerland	2018
EcoHimel	National NGO	Nepal	2018
RAHA Solutions	Private Sector	Kenya	2018
Sepro	Private Sector	Canada	2018
JENIO	Filvate Sector	Candua	2010

Name	Туре	Country (HQ)	Year Joined
Water Trust	iNGO	USA	2018
Initiative Eau	iNGO	USA	2018
FAIRBPS	Private Sector	India	2018
Ennos	Private Sector	Switzerland	2019
Nazava	Private Sector	Ethiopia	2019
Safe Water Network	iNGO	USA	2019
GAIN	iNGO	Canada	2019
Business Connect	Private Sector	USA	2019
Hamada	National NGO	Nigeria	2019
Kothowain	National NGO	Bangladesh	2019
Red Joevenes	Network	Central America	2020
WATALUX	Private Sector	Switzerland	2020
Banlieues du Monde Mauritanie	National NGO	Mauritania	2020
Hope Spring	iNGO	UK	2020
EOS International	iNGO	USA	2020
Ugandan Water Project	iNGO	USA	2020
Well Beyond Water	Social Enterprise	USA	2020
BFD Yemen	National NGO	Yemen	2020
Just a Drop	iNGO	UK	2020
The New Wash Burn Foundation (NWBF)	National NGO	Tanzania	2020
Project Maji	National NGO	Ghana	2020
Rural Aid Pk	National NGO	Pakistan	2020
ADRA	iNGO	USA	2020
Research for Development Innovation CIC	Social Enterprise	UK	2020
Spunvertek	Private Sector	Nigeria	2020
Kigoma Press Club	National NGO	Tanzania	2020

ANNEX 4: PARTNER NETWORKS AND ASSOCIATIONS

Network/Association/Partnership	Issues they lead on:	MoU or other agreement?	
GRIPP - Groundwater Solutions Initiative for Policy and Practice	Global groundwater policy and data issues	Skat Foundation is a core member	
GWP - Global Water Partnership	Integrated Water Resources Management (IWRM)		
HHWTN – Household Water Treatment & Safe Storage Network	Household treatment and storage technologies and business solutions		
IAH – International Association of Hydrogeologists	Groundwater science		
IWA - International Water Association	Urban water supplies	MoU to be agreed for 2021 onwards	
SCWSN - Small Community Water Supply Network	WHO Guidelines for small water systems		
SuSanA - Sustainable Sanitation Alliance	Sanitation and hygiene	Joint management of SuSanA online forum	
SWA - Sanitation and Water for All partnership	High level political engagement	Member of Research & Learning Constituency	
UNDP CapNet	Training and capacity development; Virtual Campus	Regular collaborator with online courses	
UN-Water	Coordination of water/WASH issues across theUN	RWSN is a UN-Water Partner since 2020	
WIN - Water Integrity Network	Integrity and tackling corruption		
WASH Agenda for Change	WASH systems thinking and advocacy	IRC, WaterAid and Aguaconsult are core members	
WPDx – Water Point Data Exchange	Water point mapping data and open standard	Steering Committee Member	

ANNEX 5: WORK & TOPIC MANAGEMENT

There are many urgent and important issues to address across rural water supply services globally, beyond what the network can realistically tackle. Therefore, the choice of Topic for the Strategy and operational prioritisation of resources for those chosen Topics will be driven by the following factors:

- Strategic importance (relevance to major policy drivers such as the Sustainable Development Goals and the Human Rights to Water and Sanitation);
- Member interest/demand (determined from participation in activities and feedback provided through surveys and interviews);
- RWSN expertise/body of knowledge (some topics, such as handpumps and manual drilling have a long association with RWSN and we curate an acknowledged knowledge hub, while other topics maybe new the network);
- **Funding and resources** (while important, if there are topics for which the three other factors are strong then lack of funding should not allowed to be a barrier).

Activities are managed by means of a A3-size Dashboard, an example is presented below, which is regularly updated and reviewed:

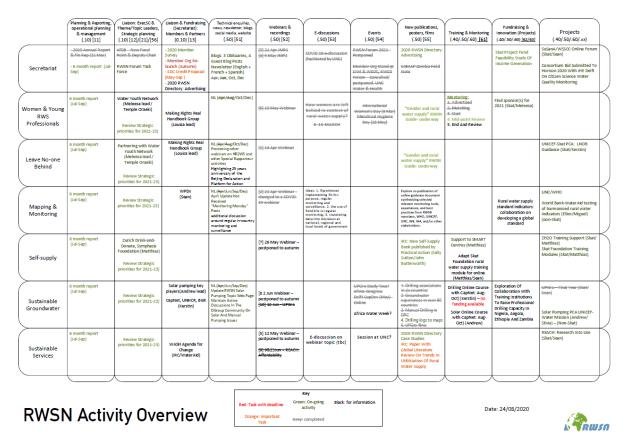


Figure 8: Example RWSN activity dashboard

ANNEX 6: RWSN SECRETARIAT – OVERVIEW OF ACTIVITIES

GOVERNANCE &	Governance	RWSN Executive Steering Committee
MANAGEMENT		RWSN Policies
	Planning	RWSN Strategy
		Annual Work Plans
		RWSN Calendar
	Reporting	Six-month report
		Annual Report
	Member and Partner	Regular meeting and liaison with members, RWSN partners
	Management	and wider rural water/WASH stakeholders
KNOWLEDGE-SHARING & NETWORKING	Synthesis Reports	Experiences and lessons learned across multiple countries and/or organisations
	Dialogue	One-to-one or small group exchange to identify and develop areas of common interest.
	Crown fosilitation	
	Group facilitation RWSN Forum	Facilitation of working groups/task forces or interest groups
		6 th Forum in Kampala 2011; 7 th Forum in 2016
	Small Events	Sessions, side events and stands at WEDC Conference,
	DIA/CDLIA/ L. S	Regional Water Weeks, Stockholm World Water Week
	RWSN Website	http://www.rural-water-supply.net
	TAF Website	http://www.washtechnologies.net
	RWSN Blog	https://rwsn.blog/
	UPGro legacy	https://upgro.org/
	RWSN Communities	Dgroups - <u>https://dgroups.org/rwsn</u>
	Social Media	RWSN blog
		LinkedIn
		Twitter
		Facebook
	Structured e-discussion	e.g. Multiple Use water Services - Potential and Challenges for Rural Dwellers (2014)
	Informal e-discussion	e.g. questions, answers and debate on water point mapping (2012 to 2014)
	Translation	Website, key publications and e-discussion questions
EMBEDDING GOOD	Advocacy	Raising awareness of good policies & practices, or promising
POLICIES & PRACTICES		innovations at all levels through face-to-face and online events and liaison with decision makers within government
		and other implementing agencies
	RWSN Publications	In-country research, developing codes of conduct, standards
		and guidelines
		RWSN Member Publications & case studies
	Adapting Guidelines	National protocols & standards
		Project implementation guides
	Training & Mentoring	Short-courses
		E-learning
		Support and coaching to apply

ANNEX 7: EVOLUTION OF RWSN & THEME HISTORY

The Rural Water Supply Network (RWSN) was established in 1992, as the Handpump Technology Network (HTN). The focus of the network has evolved over time. Most of what RWSN tackles started out as an innovation for rural water supplies and was pioneered by specific institutions or individuals. Through the network, some of these innovations have now developed into recognised good practices or mainstream approaches (e.g. standard handpump designs and drilling code of practice). RWSN also covers topics which are still emerging (e.g. water point mapping and self-supply).

The Evolution of the RWSN and its Themes and Topics

1992 to 2004:	Handpump Technology Network (HTN) founded at the International Handpump Workshop in Kakamega , Kenya. HTN focussed on handpump standardisation, manufacture and quality assurance, as well as the supply chain of spare parts. First HTN Chair, Peter Wurzel (UNICEF Pakistan) hands over to Rupert Talbot (UNICEF India) in 1996 and focus continues on Asia. HTN Forums held in Malawi in 1997 and in Hyderabad, India in 2000.
2003:	HTN Forum in Durban, South Africa endorses the broadening of the network. RWSN was established in 2004 as the mandate of the network was widened to cover cost-effective boreholes, self-supply and the sustainability of rural water supplies. Piers Cross (WSP Africa) becomes Chair.
2004 – 2011	RWSN focuses on four "flagships": cost-effective boreholes, self-supply, the sustainability of rural water supplies and handpumps. 5 th RWSN Forum held in Accra Ghana in 2006 and 6 th RWSN Forum held in Kampala, Uganda.
2012:	RWSN launches its first strategy. Mandate is broadened further to consider groundwater resources. A new theme: Equity and Inclusion16 is added, which includes the human right to water. The sustainability theme is renamed Management and Support.
2012 to 2013:	Water point mapping and monitoring grew into key topics for the network, there was a focus on manual drilling within the groundwater theme and the topic of rainwater harvesting grew in importance. Returning to the network's roots in technology and innovation, but mindful of sustainability concerns, new tools were developed: the "Technology Assessment Framework - TAF and Technology Introduction Process - TIP" evaluate the applicability of technologies and enable stakeholders to understand processes to introduce them.
2014:	RWSN Secretariat agrees to provide knowledge management support to RAIN Foundation on the subject of rainwater harvesting. The Groundwater theme takes on a new role as knowledge broker for a groundwater research programme: <i>Unlocking the Potential of Groundwater for the Poor</i> (UPGro). RWSN supports MUS group to host and e-discussion on multiple-use services. Management and Support theme is renamed "Sustainable Services". It is agreed that Mapping and Monitoring will split off from ENDI and become a cross-cutting theme in the 2015-2017 strategy.
2015:	RWSN invited to support the development and rollout of the 'Research into Action' strategy of the <i>REACH: improving water security for the poor</i> programme
2016:	7 th RWSN Forum held in Abidjan, Côte d'Ivoire.

Equity and Inclusion¹⁶ Theme Efforts 2012 to 2017

The key activities and outputs of the theme were:

- Online communities established for (i) equity and inclusion and (ii) water point mapping
- Collaboration with the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation
- Three structured e-discussions (human right to water x2; water point mapping)
- Three webinars (human right to water, mainstreaming of disability and aging; barriers for marginalised groups)
- RWSN Publication: "Human Right to Water: What does it mean in Practice?"
- Sharing of blogs, films, questions and practical experiences on disability and gender and WASH
- Dissemination of reports

Sustainable Groundwater Development

Phases of RWSN's Work on Cost-Effective Boreholes

Since 2005, RWSN's work on Cost-effective boreholes has been supported by WSP-AF, UNICEF, SDC and USAID. Coordination activities have comprised up to two-person months per year by Kerstin Danert (Skat). Additional financial support has been provided for specific case studies, support to the drillers associations, the development of guidelines (published as field notes) and tools and the development of the Code of Practice. Broadly speaking the flagship has gone through three phases:

- Foundation Phase (2005 to 2006) in depth study of water well drilling sector in Ethiopia; development of a framework for evaluating cost-effective boreholes in other sub-Saharan African countries and promotion of manual drilling including the establishment of a hand drilling cluster group. Publication of four field notes: Solutions for Reducing Boreholes Costs in Rural Africa, Who is going to drill the African boreholes?, Ten-step Guide towards Cost-effective Boreholes and A Brief History of Hand Drilled Wells in Niger. This work was funded by WSP-AF and involved a team of consultants, including Richard Carter, Kerstin Danert and Erich Baumann.
- Code of Practice Phase I (2007 2008) examination of water well drilling sector in Nigeria and Mozambique; analysis of UNICEF History of Water Well Drilling; development of zero draft of a Code of Practice for Cost-Effective Boreholes; further promotion of manual drilling; establishment of Drillers Associations in Nigeria and Mozambique. Publication of field note *Hand Drilling in Nigeria*. This work was funded by UNICEF-Headquarters and WSP-AF and undertaken by Kerstin Danert, Dotun Adekile and Tom Armstrong.
- Code of Practice Phase II (2009-2010) finalisation of a Generic Code of Practice for Water Well Construction; studies of the drilling sector in Burkina Faso, Ghana, Nigeria, Mozambique, Sudan, Uganda and Zambia; publication of field notes entitled Costing and Pricing: A guide for Water Well Drilling Enterprises and Siting: A Guide for Project Managers; development of a drilling costing tool. A Hand Drilling Directory was also published. Hand drilling promotion work was largely taken on by UNICEF – New York during this period. The activities undertaken in Phase II were funded by UNICEF-Headquarters and USAID as well as UNICEF Nigeria, UNICEF Sudan and UNICEF Uganda. Activities were undertaken by Kerstin Danert, Dotun Adekile, Bruno Duffau, Clement Kwei, Inoussa Ouedraogo, Ron Sloots and Tom Armstrong.
- Code of Practice Phase III (2011-2014) Guidance note entitled Sustainable Groundwater Development: use, protect and enhance, cost-effective boreholes synthesis report, support and monitoring of Country Level Processes in Nigeria and Sri Lanka and

¹⁶ From Oct 2014 the theme is called: Equality, Non-discrimination and Inclusion

Sudan. Guidance notes on *Drilling Supervision* as well as *Procurement and Contract Management of Drilled Well Construction*. Establishment of a Sustainable Groundwater Development working group of about 25 members and opening review. Establishment of an online Sustainable Groundwater Development Community, now with over 270 members. Four-week E-discussion in September October 2012. UNICEF-hosted webinar/panel discussion in November 2012.

Manual drilling webinar series (sharing experience from 12 countries); manual drilling country studies in Chad and Nigeria, as well as workshop in Sierra Leone. Manual drilling photo documentaries and study reports for Chad and Nigeria. 2014 Manual Drilling Compendium.

Code of Practice Phase IV (2015-2017) a series of publications and animated films that provide guidance on borehole siting, costing and pricing, supervision, procurement and contract management; a generic code of practice for borehole drilling; and the UNICEF Guidance Note on Professional Water Well Drilling published in 2016; promotion of awareness and building understanding of groundwater and drilling professionalism through online information-sharing as well as at international events and through webinars and professional magazines; documentation and raising awareness of the potential, as well as challenges of manual drilling for domestic water supplies¹⁷; in-country studies, reflections and capacity strengthening efforts for drilling professionalism in over 15 countries¹⁸;

UPGro and Groundwater Management

Since 2013, RWSN has become recognised sharing point between groundwater researchers and practitioners. While this has been largely driven by Knowledge Broker mandate for the UPGro programme, wider links and collaborations have been established with key organisations like AMCOW (African Ministers' Council On Water), the German Geological Service (BGR) and the International Water Management Institute (IWMI), with whom Skat, and other RWSN partners, co-founded GRIPP to raise the profile and understanding of groundwater at a policy and political level.

Pump Technologies

Although the historical roots of the network are in handpump technology, in recent years there has been a lack of investment and priority given to research and development of handpump technologies. Most of the innovation has been driven by information communications technologies (ICT) for monitoring the use and functionality of handpumps. RWSN has regularly reported and provided a sharing platform for those researchers active in this area.

Online-sharing

The topics covered by the theme increased from an emphasis on mechanised and manual borehole drilling cost-effectiveness to include groundwater resources management in Africa. The RWSN Groundwater dgroup has become a vibrant online communities of practice where there is active information sharing and discussion on groundwater development practices.

Sustainable Services Theme Efforts 2012 to 2017

The focus of the management and support theme has been:

¹⁷ Includes studies in Chad, Niger and Nigeria as well as compiling information individuals and organisations working in 36 countries.

¹⁸ Burkina Faso, Chad, Ethiopia, Ghana, Kenya, Mozambique, Niger, Nigeria, Sierra Leone, Sri Lanka, Sudan, Tanzania, Uganda and Zambia.

- Management models and support arrangements for piped water supply in rural areas and small towns (face-to-face meeting in 2012) and a review of management models in 16 countries around the world (World Bank, IRC, Aguaconsult, 2017)
- Professionalisation of rural water supplies (session at the 2013 World Water Week in Stockholm and the 2013 webinar series)
- E-discussion on the roles and responsibilities of local government.
- World Bank and partners host two regional events in 2016 at LatinoSan Conference (Lima, Peru) and a standalone workshop for Asian governments, in Bangkok, Thailand.
- SIWI World Water Week 2017 session: "Searching for universal sustainability metrics for rural water services"

Accelerating Self-supply Theme Efforts 2012 to 2017

The key activities and outputs of the Accelerating Self-supply theme were:

- Presentation of Self-supply at conferences and symposia (World Water Forum 2012, IRC Symposium 2013, WEDC 2012, 2013, 2014, 2017, Tech4Dev 2014, 2016)
- Two structured e-discussions (Self-supply and multiple use services)
- Supporting South-south exchange for providing practical training on Self-Supply e.g. in Sierra Leone
- Support to and documentation of Self-supply initiatives in Tanzania, Malawi, Madagascar, Zimbabwe, and Sierra Leone
- Studies on Self-supply in Zambia and Zimbabwe (commissioned by UNICEF)
- Field note of Rainwater Harvesting in Thailand as a successful case of Supported Self-supply at scale
- Webinars (World Bank 2012, IRC 2013, Red Cross 2014, RWSN 2012-2017)
- Support to the SMART Centre Group 2015-2017 for concept/content development, fundraising, documentation
- Getting Self-supply into mainstream portals such as Wikipedia and Akvopedia

ANNEX 8: FULL LOGICAL FRAMEWORK

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Strategy of Intervention	Indicators	Target(s)	Baseline 2017	Progress Jun 2020
OUTCOME 1. NETWORK GROWTH As a dynamic and trusted network, RWSN grows and	1.a. Document downloads from RWSN website (RWSN + 3 rd party)	1.a. Low: 20,000/year Med: 30,000/year High: 40,000/year	1.a. 27,000 (average 2015-17)	1.a. 28'307 ✓ (Low-Med)
evolves to meet the demands of its members and makes coherent contribution of knowledge	1.b. No. of contributions to all RWSN Theme (Dgroups discussions/year)	1.b. 1000/year	1.b. 932 (average yearly inputs to all Themes, 2012-17)	1.b. 942 ✓ contributions (target raised)
exchange and learning to support the achievement of universal safe water access in rural areas worldwide.	 c. Responses to the RWSN member Survey question "Do you think that RWSN has helped to advance your work in rural water supply?" 	1c. Agree/ Strongly Agree: >75%	1.c. 75% (2017)	1.c. 82% ✓
Output 1.1: Growth of RWSN membership to include as	1.1.a. Number of individual RWSN members.	Dec Dec 2020 2023 1.1a 13,000 16,000	1.a. 9,743	1.1.a. 12,001 ×
many rural water supply (i) professionals and (ii) organisations as possible,	1.1.b. Number of RWSN member organisations.	1.1b 50 150 ¹⁹ 1.1c 40% 45%	1.b. 42	1.1.b. 86 ✓
and with increased membership from under- represented regions (Latin America & Caribbean, and Asia)	1.1.c. % of members from under-represented regions ²⁰		1.c. 35% (based on RWSN member list, country overview)	1.1.c. 35% (LAC: 4% and Asia: 10%, other/unknown: 21%) ×
Output 1.2: RWSN identifies where and how it can add most value on emerging topics.	1.2. Scoping Paper on emerging topic(s) (e.g. water safety, water quality and pollution)	None.	1.2. N/A – scoping to start in 2018.	Water Quality topic introduced in 2019, led University of North Carolina.
OUTCOME 2: WOMEN AND YOUNG PROFESSIONALS Women and young people have a strong and equal voice across the network and play an influential role increasing the equality of decision-making power in regard to provision of rural water services.	Evidence that youth and gender is being adequately addressed across all the RWSN Themes and Topics as reported by the Theme Leaders and is being championed by RWSN core partner organisations.	See outputs	2. Gender included in activities reported previously under "Equity, Inclusion & Non-Discrimination" Theme, now called "Leave No-one Behind"	 Gender has been explicitly addressed in Themes. A guideline for gender and rural water projects due for completion late 2020. Gender and Youth has been explicitly an advocacy priority by RWSN projects and Exec partners.
Output 2.1: A new global community of practice, within RWSN, for young water professionals is established and operational in providing	2.1.a. Creation of the RWSN Young Professionals community of practice, and no. of members in CoP	Dec 2020: 250 Dec 2023: 1,000	2.1.a. 174 YPs (2017), YP CoP not created yet	2.1.a. YP community of practice created (May 2018) with 648 members ✓ (target raised)
an opportunity for youth- led initiatives and raising the voice of young people	2.1.b. % RWSN Young professional CoP female members	50% female	2.1.b. YP CoP not created yet	2.1.b. 45% female members in YP community
within the wider network. RWSN strengthens the voice of (i) women and (ii) young professionals in the network to empower them to become agents of change in the rural water sector.	a the wider network. 2.1.c. Adoption and implementation of RWSN Youth Engagement Strategy performing against its goals and outcomes. of (i) women and (ii) g professionals in the rok to empower them come agents of ge in the rural water Strategy, with activities (i) representation and (iii) capacity building of junior Youth Engagement Strategy performing against its goals and outcomes.	2.1.c. Youth strategy drafted in 2018	2.1.c. Youth strategy adopted by RWSN Exec SC (February 2018), with active consultation of stakeholders and YP community; 11 out the 15 webinars (73 %) at least 1 YP presenter; 25 % of all speakers YPs	
	2.1.d. Stories/ case studies of Young Professionals' empowerment in relation to rural water services	1/year	2.1.d. no data in 2017	2.1.d. Blog posts by YP prize-winner; Tom Schouten Award winner; blog posts by YPs and UPGro ECRs
Output 2.2: The voice and visibility of women within the network	2.2.a % RWSN female members	20	2.2.a. 20%	2.2.a. 22%
is equal to men to demonstrate the value and importance of gender equality for achieving rural water services for all.	2.2.b. Gender disaggregation of RWSN webinars are gender/age balanced, and reflect geographical diversity.	100% of webinars have at least 1 women 50 % of webinars presenters are women	2.2,b 92% of webinars had at least 1 woman presenter, and 72% of webinars had presenters from	2.2.b. 87 % of webinars were gender inclusive (at least 1 female speaker); 80 % of speakers were Southern-based; and 73 % YP speakers.

¹⁹ It is proposed to review the RWSN Member Organisation category in 2018, so the current baseline number is likely to reduce if the current member organisations are asked to renew on different terms.

²⁰ Members based in the Developed Countries and Sub-Saharan Africa regions represented 30 and 35% of members respectively in 2017.

Strategy of Intervention	Indicators	Target(s)	Baseline 2017	Progress Jun 2020
Intervention		100% of webinars have Southern-based speakers	Southern countries. No data on age.	
	2.2 c. Gender disaggregation of RWSN training events (see outcome 4.1.)		2.2.c. Angola drilling training 2017: 11 of 28 were women	2018. RWSN online course on professional drilling (2018): 18 of 97 2019. RWSN online course on professional drilling (2019) RWSN webinars (registered participants): 321 (35.1 %) female participants; 351 (36.8 %) participants under the age of 35.
	2.2d. Stories/case studies of women's empowerment in relation to rural water supply.			2.2.d. 2 stories: 2 RWSN blogs
Output 2.3 RWSN guidance document on how women can be empowered through rural water supply interventions.	2.3. Downloads of completed document	To complete and downloaded at least 1,000 times within a year of being published.	N/A	To be completed by end of 2020.
OUTCOME 3: KNOWLEDGE-SHARING AND NETWORKING Improved access to	3.a. No. of downloads of RWSN Knowledge products		3.a. RWSN knowledge products downloaded 400 times/ year (average of top 5, 2017)	
knowledge for rural water supply sector professionals and organisations, and sharing of knowledge between rural water supply sector professionals and organisations, to advance on strategic issues to the sector.	3.b. No. of users of RWSN platforms (website, blog, social media, Thematic Dgroups)		3.b. Thematic Dgroups (2017): 4500+ users Social media: 7000 followers (all channels combined, 2017)	RWSN Blog 2018 2019 2020 Views 14,191 16,990 Visitors 7,373 8,934 Visitors 7,373 8,934 Visitors 7,373 8,934 Social media: 11,000+ (all combined): (LinkedIn): 4539 (Facebook): 4588 (Twitter) = 2426 Thematic DGroups: 7,599 users Visitors 7,599 users
Output 3.1: RWSN has provided high quality information and guidance to rural water supply sector individuals	3.1.a. No. of RWSN Knowledge Products per year (guidance notes, case studies, peer-reviewed publications)	2 per year	2 per year	2018: 2019: 2020 (Jun): 5
and organisations globally across its five Themes,	3.1.b. No. of RWSN Knowledge Products per year translated in more than one language	2 per year	1 in French	2018: 2019: 2020 (Jun): 1
	3.1.c. Number of documents and case studies peer reviewed and disseminated through RWSN	2 per year	3.1.c. data not available for 2017	2018: 2019: 2020 (Jun): 1
Output 3.2: RWSN remains the preeminent platform for online and face-to-face knowledge sharing and	3.2.a. Number of (i) RWSN structured e-discussions and (ii) contributions to e- discussions		3.2.a. 1-2 per year; latest structured e- discussion had contributions from 18 countries.	2018: 2019: 2020 (Jun): 1 e-discussion on COVID-19
networking for rural water supply sector individuals and organisations globally across its five Themes.	3.2.b. Number of (i) RWSN webinars and (ii) participants in RWSN webinars		3.2.b and c. 11 webinars (2017) in 2 languages, and 1 in 3 languages, with on average 39 participants each.	2018: 2019: 2020 (Jun): 15 webinars. Over 1200 participants, i.e. 81 participants per session on average, up to 175.
	3.2.c. No. of RWSN webinars and e- discussions in more than one language			2018: 2019: 2020 (Jun): 7 webinars and 1 E- Discussions in more than one language.
	3.2.d. No. of presentations/ networking opportunities at key events organised or facilitated by RWSN		3.2.d. 3 from RWSN Secretariat in 2017 (SIWI, WEDC, Zambia); no data on Thematic event attendance	2018: 2019: 2020 (Jun): 2 (AfWA Congress; Joint World Water Week Session with other WASH networks)
	3.2.e. No. of presentations/ networking opportunities at key events targeting young professionals		3.2.e. 2 at university of Cranfield, and university of Milano	2018: 2019: 2020 (Jun): 2 webinars on the RWSN mentoring scheme
Output 3.3: A range of Knowledge Broker products and services (technical advice	3.3.a. No. of queries addressed by Thematic leaders/ helpdesk on topics (all Themes)		3.3.a. no of queries handled by Secretariat: 200/ year; no data on Themes	3.3.a 98 queries
and reports, newsletters, syntheses, events, briefing notes, webinars, media articles and narratives) that connect and create mutual understanding of	3.3.b. Proposed RWSN sustainability indicators matrix available for download and use by organisations/ countries (M&M Theme)		3.3.b. Indicators not designed yet but recommendations made (2017)	3.3b. World Bank indicators developed and tested in 3 African countries
key issues an innovation between rural water supply practitioners,	3.3.c. Stories of Most Significant Change when organisations have		3.3.c. No data	3.3.c. 8% of survey respondents (2020) said that had accessed

Strategy of	Indicators	Target(s)	Baseline 2017	Progress Jun 2020
Intervention decision-makers, innovators and researchers.	accessed funding / partnering opportunities through RWSN (all Themes) 3.3.d. No. of research		3.3.d. 17 (2017)	funding/partnering opportunities through RWSN. 3.3.d. UPGro website converted to an
	outputs are disseminated to practitioners through RWSN (all Themes)			online final report https://upgro.org/ for disseminating over 100 academic papers and reports
Outcome 4: Embedding good policies and practices Good policies and practices are embedded through rural water supply sector professionals and organisations to enhance sector performance, thereby contributing to improvements of rural water supply at a national/sub-national level. Responsibility : all 5 RWSN Themes (see Table 2	4.1 Stories of Most Significant Change of where RWSN members have used an RWSN product or service to effect change and/or build capacity in their country, locality or organisation	No Target, depends on project/funding availability	Presented in 3 year report (2015-2017)	To be presented in 3 year report (2018- 2020)
below) unless specified otherwise per output.				
Output 4.1: RWSN increases the availability of training and capacity-building for rural water sector professionals	4.1.a. No. of training centres supported, including those focused on private sector in WASH (Self-Supply Theme)	No Target, depends on project/funding availability	4.1.a. 1 (SHIPO Tanzania)	4.1.a. 2 SHIPO training centres supported (SHIPO Tanzania and Zimbabwe)
and organisations	4.1.b. No. of training opportunities shared through RWSN (all Themes)	No Target, depends on project/funding availability	4.1.b. no data	4.1.b. Training opportunities shared: Newsletter 28; RWSN YP: various;
	4.1.c. No. of online and face-to-face training courses (Sustainable Groundwater Dvp Theme)	No Target, depends on project/funding availability	4.1.c. 1 in Angola (2017)	4.1.c. 1 online training course on drilling, 1 F2F on innovations in rural water sustainability.
	4.1.d. No. (and gender/age/ nationality) of people trained (S- Supply and SGD Themes)	No Target, depends on project/funding availability	4.1.d. no data	4.1.d. 23 local young men trained in Tanzania and 25 local young men trained in Zimbabwe; for online drilling course: 26% young professionals.
	4.1.e. Number of training/ education curriculums influenced (all Themes)	No Target, depends on project/funding availability	4.1.e. no data	4.1.e.Cranfield University (UK); WEDC (UK)
Output 4.2.: RWSN influences rural water supply programmes and policies (i) within organisations and (i) at national/sub-national level.	4.2.a. Example(s) of influence of RWSN concepts/ guidelines programme design / implementation by countries or partner organisations (All Themes)	No Target, depends on project/funding availability	4.2.a. no data	4.2.a. Facilitation of minister's dialogue at SWA SMM, influence of SWA regional strategic meetings and sessions through nomination and election of researchers and organisations
	4.2.b. No. of organisations/ countries which contribute to RWSN concepts/ guidelines/ e- discussions (All Themes)	No Target, depends on project/funding availability	4.2.b. 9 organisations (RWSN Exec SC and Theme Leaders) currently contribute to RWSN strategy and implementation of topics. See 2.2.a. for contributions on e- discussions.	4.2.b. E-discussion on financing LNOB: 32 contributors from different organisations
	4.2.c. No. of countries/ organisations which contribute to, adopt and/or use rural water services sustainability indicators (responsibility: Mapping and Monitoring Theme)	No Target, depends on project/funding availability	4.2.c. indicators not yet defined	4.2.c. World Bank, with support from WaterAid in Myanmar
	4.2.d. No. of key actors (organisations/ countries) which address (or implement) Self-supply in documents/ policies (Self- Supply Theme)	No Target, depends on project/funding availability	4.2.d. no data	4.2.d. One (World Bank)