Rural Water Supply Network (RWSN)

Strategy 2018-2023

FINAL – March 2018

The Rural Water Supply Network facilitates exchange and enables its members to improve their professionalism.

RWSN Strategy 2018-2023

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 was 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

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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.

CONTENTS

ABBREVIATIONS

3R	Recharge, Retention and Reuse
AfDB	African Development Bank
AGLA	Africa Groundwater Atlas and Literature Archive
ASN	Affiliated Sub-Network
CapNet	Capacity Development in Sustainable Water Management
DFID	Department for International Development (United Kingdom)
EWP	End Water Poverty
FAN	Freshwater Action Network
GAP	Groundwater Assessment Platform
GRIPP	Groundwater Solutions Initiative for Policy and Practice
GWP	Global Water Partnership
HTN	Handpump Technology Network
HWTSSN	Household Water Treatment & Safe Storage Network
IAH	International Association of Hydrogeologists
IBNET	International Benchmarking Network for Water and Sanitation Utilities
IOM	International Organisation for Migration
IWA	International Water Association
IWRM	Integrated Water Resource Management
JMP	Joint Monitoring Programme
MDG	Millennium Development Goal
MUS	Multiple Use Service of water
NERC	Natural Environment Research Council
NGO	Non-Governmental Organisation
O&M	Operations and Maintenance
ODA	Overseas Development Assistance
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

RWSN Strategy 2018-2023

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
	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	1) 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. 2) The approach of Supported Self-supply is applied where appropriate.
	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.

1 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 (Figure 1 and 2). 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).

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" (see Figure 2 for definition) (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) (Figure 1 and 2). 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

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

Millennium Development Goals (MDGs): The UN goals for tackling poverty between 2000 and 2015. www.un.org/millenniumgoals/

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. Based on past performance, 4 in 5 developing countries are not on track to achieve universal basic water services by 2030 (WHO/ UNICEF, 2017); and if all countries perform as best as (historically) possible, a large number of countries in Sub-Saharan Africa, but also Asia and Latin America, will not reach universal coverage (Smits, 2016).

Figure 1 : Number of people using different levels of water services in 2015, urban & rural (each unit represents 100 million people) (Source: JMP, 2017)

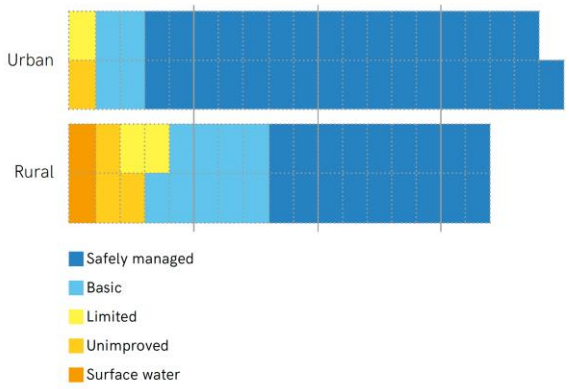
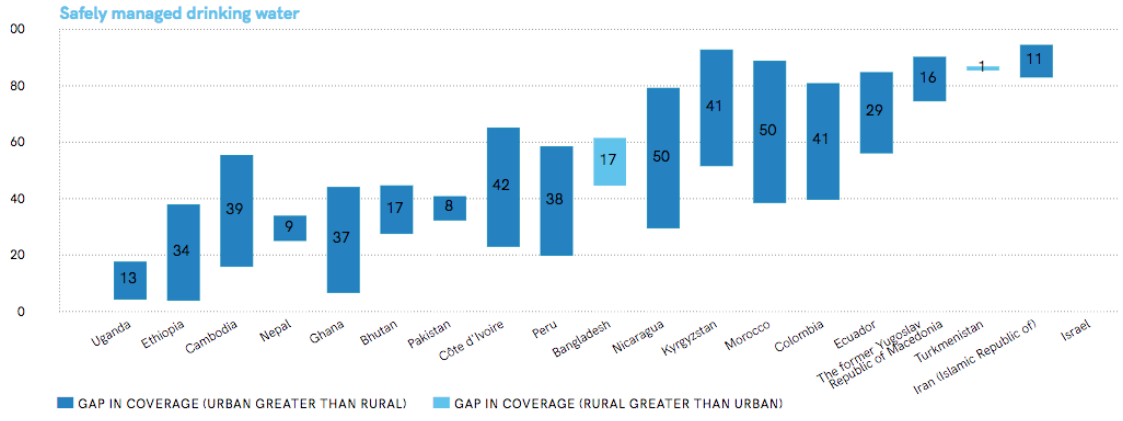


Figure 2 : JMP definitions for tracking water services for the SDG (Source: JMP, 2017)

SERVICE LEVEL	DEFINITION
SAFELY MANAGED	Drinking water from an improved water source that is located on premises, available when needed and free from faecal and priority chemical contamination
BASIC	Drinking water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing
LIMITED	Drinking water from an improved source for which collection time exceeds 30 minutes for a round trip, including queuing
UNIMPROVED	Drinking water from an unprotected dug well or unprotected spring
SURFACE WATER	Drinking water directly from a river, dam, lake, pond, stream, canal or irrigation canal

Note: Improved sources include: piped water, boreholes or tubewells, protected dug wells, protected springs, rainwater, and packaged or delivered water.

Figure 3: Gaps in access to safely managed water serviced (where data available). (Source: JMP, 2017)



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

[1] WWAP gender and water toolkit; www.unesco.org/new/en/natural-sciences/environment/water/wwap/water-and-gender/

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

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, rather than a physical water scarcity 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, 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).

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 everyone[3]. 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

[3] Righttowater.info

all the more damaging in fragile countries, where populations are particularly vulnerable. (World Bank, 2017).

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 4) 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 4: 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.

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2 RWSN STRUCTURE & STRATEGY

This strategy is for 6 years (2018-2023) with a longer term view to the SDG target year of 2030. It will be 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.**

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

[4] http://www.rural-water-supply.net/en/rwsn-strategy

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 pre-conditions 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 5) 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 5. 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.

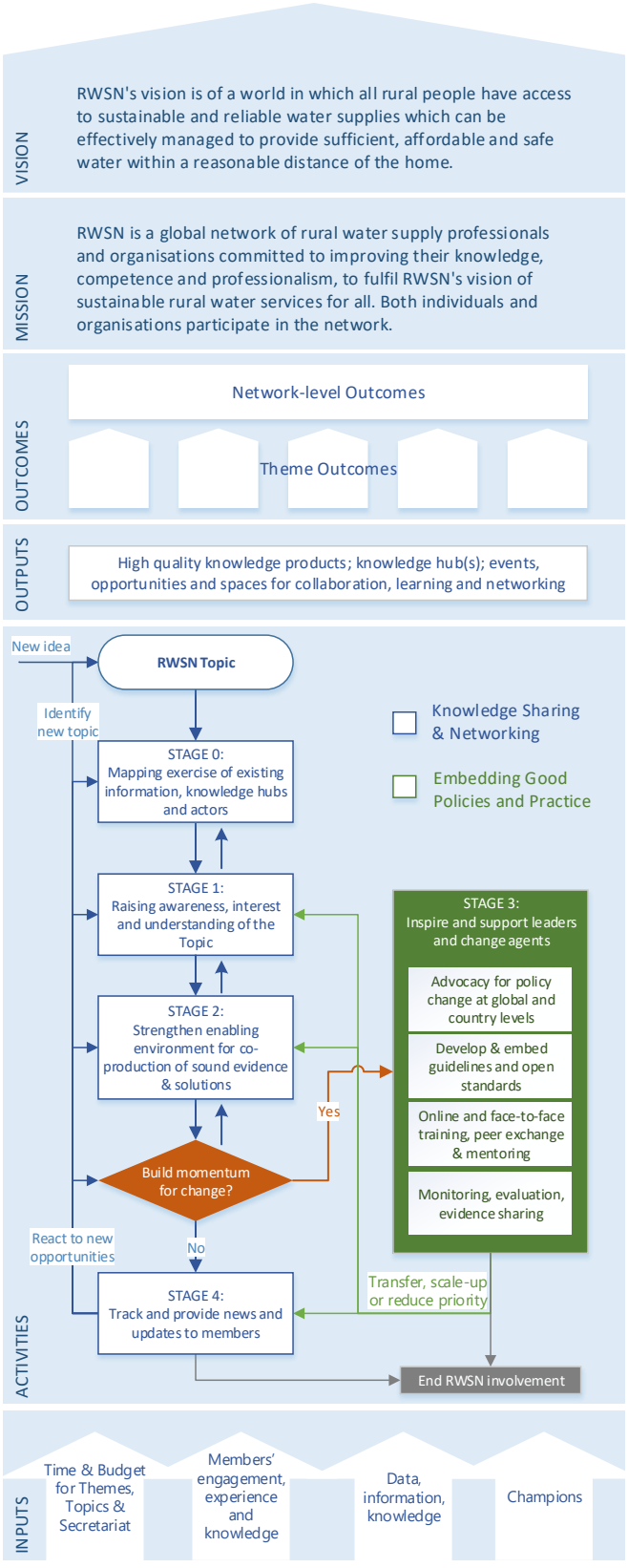
Achieving tangible outcomes at national or organisational level is more likely to be achieved through Embedding activities, but they are much more time and resource intensive and therefore should done only where there is a strong enough partnership that can inspire and support leaders and change agents 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 decision-making;
- 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 5: RWSN Theory of Change



Outcomes: RWSN Network-level

Network-level Outcome	Indicators	Target(s)	Baseline 2017
1. RWSN membership continues to grow and includes as many rural water supply professionals, and organisations working in the sector, as possible.	1.1 Number of individual members. 1.1.1 Number of RWSN Young Professionals 1.1.2 % female member survey respondents 1.2 Number of member organisations. 1.2.1 Number of rural water service operators/users associations/ government bodies 1.3 Number of members from outside the 2 main regions of RWSN membership[5] 1.4 Number of RWSN members in Theme Dgroups (combined)	**Dec 2020 / Dec 2023** 1.1 13,000 / 16,000 1.1.1 250 / 500 1.1.2 30% / 50% 1.2 50* / 100* 1.2.1 15* / 30* 1.3 40% / 45% 1.4 7,500 / 10,000	1.1 - 9,859 1.1.1 – 150 1.1.2 – 21% 1.2 – 46 1.2.1 - 4 1.3 – 35% 1.4 - 4,325
2. RWSN contributes to the furthering of the rural water supply sector globally in its scaling up of solutions to achieve SDG6.1 through improving access to knowledge and capacity development opportunities.	2.1 Knowledge Products per year 2.2 Accessibility and usage of knowledge management platforms 2.2.1 Document downloads from RWSN website 2.2.2 Contributions to RWSN Theme Dgroups/year 2.2.3 "Do you think that RWSN has helped to advance your work in rural water supply?" 2.3 Examples/Stories of where RWSN products or services have been used for training/capacity development	2.1 2/year 2.2.1 Low: 20,000/year Med: 30,000/year High: 40,000/year 2.22 250/year 2.2.3 Agree/ Strongly Agree: >75% 2.3 1-2 per year	2.1– 2 2.2.1 – 21,900 2.2.2 – 180 2.2.3 – 75% 2.3 – not available
3. RWSN contributes to improvements of rural water supply at a national/sub-national level	3.1 Stories of Most Significant Change of where RWSN members have used an RWSN product or service to effect change in their country, locality or organisation, or to influence investment in rural water services	3.1 1 per year	"Zambia government has drafted a policy to regulate groundwater abstraction catalyzed by engagement with RWSN."

**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.*

Description

Network-level Outcomes are those goals 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.

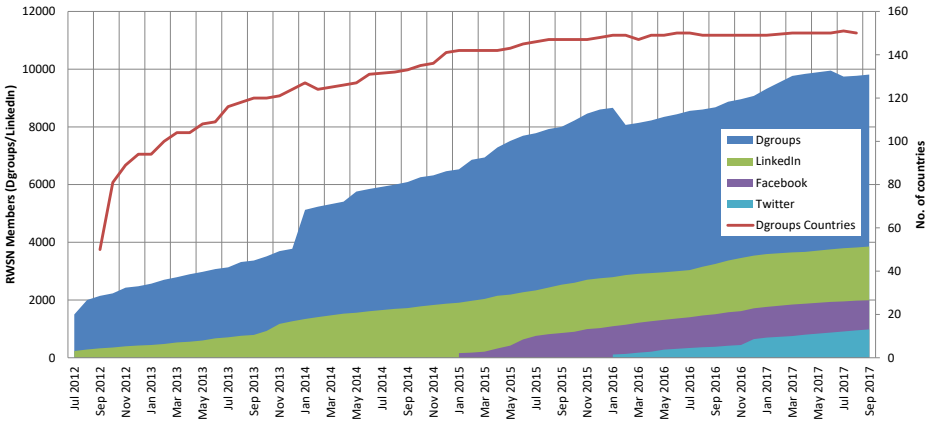
Achievement of the RWSN Vision and SDG6.1 will not be accomplished by the network itself but rather through the RWSN members. As a network, RWSN sets out to have as many individuals and organisations who work on rural water supplies to be members of RWSN as possible.

Figure 6 shows the steady growth in the number of individual members, punctuated by period 'clean-up' activities to remove invalid email addresses.

[5] The two most important regions in terms of membership are Sub-Saharan Africa and Developed Countries.

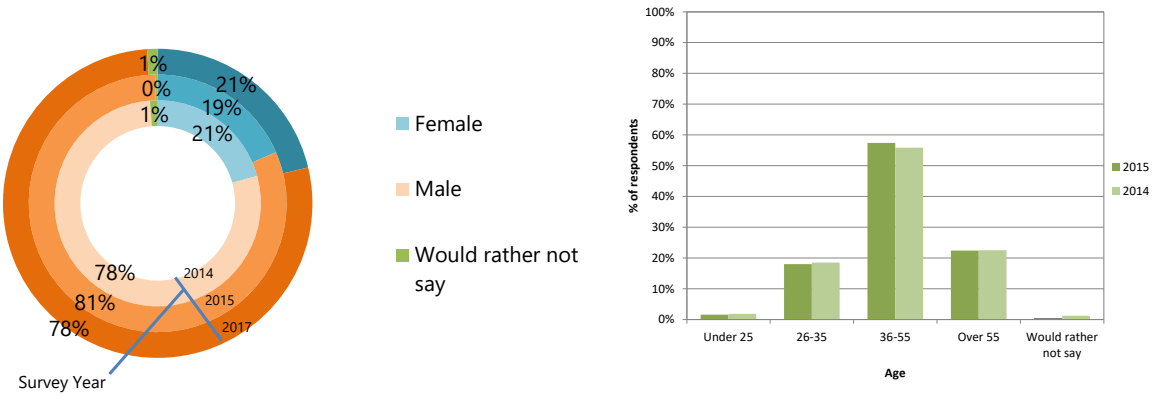
Average growth between September 2012 and September 2017 has been 1,516 members per year (126/month)

Figure 6: RWSN Individual Membership & Social Media Followers



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 4).

Figure 7: Known age and gender profile of RWSN members



Outcomes: RWSN Themes

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

- Leave no-one behind
- Mapping and Monitoring
- 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

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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 1: 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	✓			
Information Dissemination	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.	✓	✓	✓	✓

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 5).

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 website[6]. RWSN finances handled by Skat Foundation are independently audited each year.

The current monitoring framework will be updated to reflect this strategy and the recommendations from the 2017 evaluation to improve network outcome level reporting.

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

[6] http://rural-water-supply.net/en/rwsn-financial-info

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 150 countries (Figure 8), however, member distribution and member surveys from 2014, 2015 and 2017 show the dominance of interest in Sub-Saharan Africa (

Figure 9). 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

Strategy 2018-2023

RWSN will learn from other networks, associations and organisations on how best to empower young rural water supply professionals and early-career researchers to develop resources to meet their needs such as:

- Access to information, contacts and resources to help their studies and early careers;
- Widening their personal networks and understanding of rural water supply through active involvement in RWSN Themes and Topics.
- Having a space and some resource to connect, learn from each other and develop innovative ideas and projects;
- Having their voices heard at a political level as part of wider Youth and Water movements;
- Using RWSN networking events and platforms;
- Foster inter-generational exchange and learning;
- Opportunities for further learning, leadership development and mentoring.

Description

Rural water services can only be sustainable if there is a sufficient pipeline of young talent coming into the sector and willing and able to stay in it. They are the problem-solvers of tomorrow therefore RWSN has a role to play in finding and nurturing talent.

The guideline target group for RWSN are young people who are:

- between the ages of 18 and 35 interested in rural water supply in low and middle income countries;
- Studying or have recently completed studies related rural water supply (and rural WASH) who are looking ahead to the first step on their career ladders;
- Early Career Researchers who are undertaking postgraduate or postdoctoral research with a view to a career in academia;
- Young Professionals with less than 10 years' experience working in government, NGOs, private sector or with development partners.

RWSN youth activities will be prioritised towards young professionals from low and middle income countries and young women generally, as there is a need for greater representation from these demographic groups. Youth engagement activities will be determined as part of a specific plan in early 2018.

RWSN is not planning to engage with those younger than 18, however, some RWSN Topic may engage with the education sector more broadly or on a specific basis, for example to promote understanding of groundwater in school curricula.

RWSN is not planning to duplicate the efforts of other youth and young professional initiatives, particularly those with a more urban bias, for example those of the International Water Association, or political bias, such as Youth Water Parliaments. However, partnerships with such initiatives will be important, particularly those supported by the SDC Global Programme Water, such as the #watergeneration movement of the International Secretariat for Water.

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.

3 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

Each of the RWSN Themes and Topics are led by an individual from among the seven 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. As this strategy is launched, it is anticipated that the RWSN secretariat services will dedicate the equivalent of an 60-80% Full Time Equivalent staff position to this role (split between two or more people). Specific activities are undertaken by small groups from within the organisations identified for collaboration.

Opportunities for Young Professionals to support the Theme Leaders in organising networking activities will be explored 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.

Financial Resources (2018-2020)

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 4). Most of RWSN's funding is for specific collaborations or projects within the network. The SDC has provided financial support for the RWSN Secretariat activities for 25 years. Currently, Skat Foundation and WaterAid UK also provide regular finance for the secretariat. Detailed budgets for all four themes and the RWSN Secretariat are detailed separately.

Table 3 summarises the overall budget for this three-year phase of RWSN. The funding of the remainder of the strategy period (2021-2023) will be considered in at a mid-term review in 2020.

Some funding gaps remain and an early activity in 2018 will be to take on the recommendations of the external evaluation (PEM 2017) to "continue to diversify its funding from a diverse range of sources, including donor, public and private funds and potentially in the future from upgraded services," and to consider engaging a fundraising specialist to support the development of a network funding strategy.

Table 2: ExecSC contributions to themes and topics

Theme/Topic	RWSN Executive Steering Committee Organisation							Non-ExecSC
	AfDB	IRC	SDC	Skat	UNICEF	WaterAid	World Bank	
Leave No-one Behind					**Partner**	**Lead**	**Partner**	**Simavi**
Making Rights Real					Partner	Lead		
Social inclusion					Partner	Lead		Partner
Gender equality and women's rights					Partner	Lead		Partner
Social accountability					Partner	Lead		Partner
Mapping & Monitoring						**Lead**	**Lead**	
In-country monitoring		Partner			Partner	Lead	Lead	
Indicators Harmonisation		Partner			Partner	Lead	Lead	
Innovative models in mapping & monitoring		Partner				Lead	Lead	
Self-supply				**Lead**				
Monitoring , Regulation and Support of Self-supply				Lead				
Capacity building of providers and Vocational training				Lead				SHIPO, Smart Centre Group
Harnessing the Rain				Lead				RAIN, JustDiggit
Sustainable Groundwater Development				**Lead**	**Partner**	**Partner**		
Drilling professionalisation				Lead	Partner			
Groundwater Resources Management								UPGro, REACH
Water Abstraction (Solar & Manual Pumps)				Partner	Partner	Partner	Partner	Water Mission - Lead
Sustainable Services		**Lead**					**Lead**	
Direct Support to Service Providers		Lead					Lead	
Evolving Service Delivery Approaches		Lead					Lead	
Innovation in Rural Water Supply Finance		Lead					Lead	
Governance & Management								
Governance	Partner	Partner	Partner	Partner	Chair	Partner	Partner	
RWSN Secretariat			Co-funder	Lead & Co-funder		Co-funder		

Table 3: Budget for the Rural Water Supply Network 2018-2020

	Amount (US$)			
Theme/Topic/Component	**2018**	**2019**	**2020**	**Total**
Leave No-one Behind	15,700	107,300	107,300	230,300
Sustainable Groundwater Development	244,549	198,495	146,795	589,839
Sustainable Services	69,391	74,809	62,031	206,232
Self-supply	129,731	142,936	142,936	415,603
Mapping and Monitoring	13,982	13,982	13,982	41,945
Young Rural Water Supply Professionals	19,879	28,455	66,849	115,183
Governance and Management/RWSN Secretariat	360,796	277,692	310,435	948,923
Grand Total	**854,028**	**843,669**	**850,328**	**2,548,025**
% In-kind contribution from Theme & Topic Leaders	**13%**	**16%**	**16%**	**16%**
% SDC contribution	**30%**	**30%**	**30%**	**30%**

Note: The in-kind contributions included are conservative estimates and relate to specific RWSN networking activities. These staff and their colleagues and partners will make additional thematic contributions related to their roles and projects. The exception is Water Mission who were able to provide a detailed estimate of their team's input on the Groundwater Abstraction Topic (within the Sustainable Groundwater Development Theme)

4 RWSN THEMES

Theme Overview

Table 4: Themes and Theme Leaders

Theme	Lead Organisation(s)	Theme Leaders
Leave No-one behind	WaterAid, Simavi	Louisa Gosling (WaterAid), Priya Nath (WaterAid), Sara Ahari (Simavi)
Self-supply	Skat	Matthias Saladin (Skat)
Mapping & Monitoring	WaterAid, World Bank	Ellen Greggio (WaterAid), Antonio Rodriguez (World Bank)
Sustainable Groundwater Development	Skat, UNICEF, Water Mission	Kerstin Danert (Skat), Andrew Armstrong (Water Mission)
Sustainable Services	IRC, World Bank	Marieke Adank (IRC), Susanna Smets (World Bank)

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.

Table 5: 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.
Geographic Scope/ 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	Louisa Gosling (WaterAid), Priya Nath (WaterAid), Sara Ahari (Simavi)
Dgroups	516 members, 77 countries
Core Partners	WaterAid, Simavi, WASH United, UNICEF, Institute of Sustainable Futures (University of Technology Sydney), The World Bank

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.

Table 6: Mapping & Monitoring Theme Overview

Theme	Mapping & Monitoring
Objective	Identified and promote practical models and innovation to support decision-making for ensuring sustainable rural water services (e.g. resource allocation, external support) is evidence based and uses information generated by robust data. Indicators adopted by local and national government are in line with and contribute to SDGs monitoring and include key rural water supply sustainability indicators
Geographic Scope/ Focus	Global, with particular emphasis on Sub-Saharan Africa and Latin America & Caribbean (LAC)
Most relevant SDGs	Water: 6.1, 6.3, 6.4
Theme Leader	Ellen Greggio, WaterAid Antonio Rodriguez, World Bank
Dgroups	901 members from 83 countries
Core Partners	IRC, Water Point Data Exchange (WPDx),

Self-supply

Self-supply as a way of upgrading service levels chiefly financed directly 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, chiefly 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 Self-supply and Supported Self-supply, with the goal of analysing and documenting them. Moreover, the theme aims to establish Supported Self-supply as a recognised service delivery option for rural water supplies by government agencies, development 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.

Table 7: Self-supply Theme Overview

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, development partners, water users and other key actors. The approach of Supported Self-supply is applied where appropriate.
Geographic Scope/ Focus	Global, mainly in Sub-Saharan Africa; Rainwater harvesting global
Most relevant SDGs	6.1
Theme Leader	Matthias Saladin (Skat)
Dgroups	Self-supply: 307 members, 56 countries Rainwater harvesting: 840 members, 97 countries
Core Partners	Skat Foundation Implementing Organizations as potential partners: Smart Centre Group, IRC, Welthungerhilfe, WaterAid, Water.org Potential partners for Harnessing the Rain: RAIN, Justdiggit, IRHA

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.

Table 8: 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 Scope/ Focus	Global, with some activities focusing on Sub-Saharan Africa.
Most relevant SDGs	Water: 6.1, 6.3, 6.4, 6.5, 6.6, 6A, 6B
Theme Leader	Dr Kerstin Danert, Skat Foundation (Sean Furey, Skat Foundation – for a transition period)
Dgroups	1067 members, 96 countries
Core Partners	Skat Foundation, UNICEF, WaterAid, UPGro programme partners (including British Geological Survey, University of Oxford, University College London, University of Reading, UNESCO-IHE Institute for Water Education), Africa Groundwater Network – AGW-Net, Bundesanstalt für

Theme	Sustainable Groundwater Development
	Geowissenschaften und Rohstoffe (BGR), Eawag, Water Mission, Groundwater Solutions Initiative for Policy and Practice - GRIPP/International Water Management Institute - IWMI, International Association of Hydrogeologists – IAH and National Groundwater Association.

Sustainable Services

The word sustainability has been flaunted in the development arena for over 60 years but there are still flaws with respect to policies as well as implementation. With the change in a one-size-fits-all "community management" approach to a plethora of ways to maintain services, there is need for scrutiny, guidance and learning as well as a recognition that government has a central role and responsibility. Whatever the water resource, technology used or means of investment, rural water supply services can only be sustained if they are properly managed.

RWSN's ***Sustainable Services*** theme sets out to ensure that rural water supply services are adequately financed, that they meet country norms and standards and are managed by defined service providers with adequate support. It will focus on the different modes of (i) service delivery and the evolving landscape of service delivery models, including supporting institutions, policies and procedures; (ii) the planning and budgeting of direct Support to Service Providers as unsupported community based management models are unsustainable and (iii) Innovation in Rural Water Supply Finance, including public/ private finance.

Table 9: Sustainable Services Theme Overview

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: **6.1**, 6.3, 6.4, 6.5, 6.6, 6A, 6B, 13, 16,
Theme Leaders	Marieke Adank – IRC Susanne Smets – World Bank
Dgroups	633 members, 85 countries
Core Partners	IRC, UNICEF, World Bank, AfDB, WaterAid, SNV, Water for People,, Aguaconsult

5 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 10: RWSN Topic Overview

Topic	Theory of Change Activity Stage(s)	Intensity	Topic Leader	Lead Theme	Support Themes
Water quality	1,2	0 – Scoping	Sean Furey (Skat)	All Themes	n/a
Gender equality and women's rights	1,2,4	2 – Active Debate	Louisa Gosling (WaterAid)	Leave no-one behind	All Themes
Making Rights Real	1-4	3 – Driving the Debate	Louisa Gosling (WaterAid)	Leave no-one behind	Sustainable Services
Inclusion	1-4	3 – Driving the Debate	Louisa Gosling (WaterAid)	Leave no-one behind	All Themes
Social accountability for sustainable services	1-4	3 – Driving the Debate	Louisa Gosling (WaterAid)	Leave no-one behind	Sustainable Services, Mapping & Monitoring
Innovative models in M&M	4 – News updates	1 – Passive Dissemination	Antonio Rodriguez, World Bank + Ellen Greggio, WaterAid	Mapping & Monitoring	Sustainable Groundwater Development
In-country monitoring	1 – Awareness raising	2 – Active Debate	Antonio Rodriguez, World Bank + Ellen Greggio, WaterAid	Mapping & Monitoring	Sustainable Services
Indicators Harmonisation	2 – Solutions & Evidence	2 – Active Debate	Antonio Rodriguez, World Bank + Ellen Greggio, WaterAid	Mapping & Monitoring	Sustainable Services
Harnessing the Rain	1-4	1 – Passive Dissemination	Tbc	Self-supply	Sustainable Groundwater Development
Monitoring, Regulation and Support of Self-supply	1 – Awareness raising	2 – Active Debate	Matthias Saladin (Skat)	Self-supply	Mapping & Monitoring Sustainable Groundwater Development
Capacity building of providers and Vocational training	3	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	n/a
Groundwater Abstraction (Solar Pumping)	0 - Mapping	2 – Active Debate	Andrew Armstong (Water Mission)	Sustainable Groundwater Development	Sustainable Services
Professional Water Well Drilling	3 – Inspiring & Embedding	3 – Driving the Debate	Kerstin Danert (Skat)	Sustainable Groundwater Development	n.a
(Ground) Water Resources Management	1-4	3 – Driving the Debate	Sean Furey (Skat)	Sustainable Groundwater Development	All Themes
Evolving Service Delivery Approaches	2 – Solutions & Evidence?	2 – Active Debate		Sustainable Services	Self-supply
Innovation in Rural Water Supply Finance	1-2?	2 – Active Debate		Sustainable Services	Sustainable Groundwater Development
Direct Support to Service Providers	2 – Solutions & Evidence?	2 – Active Debate?		Sustainable Services	

Greater emphasis is placed in this strategy of collaborative working between the Themes so networking activities engage a range of audiences (Table 11).

Table 11: Topic Matrix

		Lead Theme				
		Leave No-one Behind	**Self-Supply**	**Mapping & Monitoring**	**Sustainable Groundwater Development**	**Sustainable Services**
Support Theme	**Leave No-one Behind**				(Ground) Water Resources Management	
	Self-Supply	Inclusion Gender equality and women's rights	Harnessing the Rain		Solar Pumping (Ground) Water Resources Management	Evolving Service Delivery Approaches
	Mapping & Monitoring	Inclusion Gender equality and women's rights Social accountability for sustainable services	Monitoring, Regulation and Support of Self-supply		(Ground) Water Resources Management	
	Sustainable Groundwater Development	Inclusion Gender equality and women's rights	Capacity building of providers and Vocational training Monitoring, Regulation and Support of Self-supply	Innovative models in M&M	Professional Water Well Drilling Handpump Technology	Innovations in Rural Water Supply Finance
	Sustainable Services	Making Rights Real Inclusion Gender equality and women's rights Social accountability for sustainable services	Capacity building of providers and Vocational training	In-country monitoring & SDGs Indicators Harmonisation	Solar Pumping (Ground) Water Resources Management	Direct Support to Service Providers

Topics – Leave No-one Behind Lead

Topic	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: UNICEF, WASH United, Institute for Sustainable Future (ISF), 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 2018-20	Knowledge Sharing & Networking	Inspiring & Embedding
	▪ Share materials and experience of use ▪ E-discussion in RWSN community ▪ Updates through Secretariat services	▪ In-country training (India, Burkina Faso, Ghana) ▪ Online training course with CapNet
Confirmed collaborations/ projects	Signed agreement between WaterAid, UNICEF, WASH United, ISF, EWP	
Potential partners	WSSCC	

Topic	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 2018-20	Knowledge Sharing & Networking	Inspiring & Embedding
	▪ Sharing experiences ▪ E-discussion in RWSN community ▪ Promote guidelines and tools	▪ Sharing examples of inclusive designs ▪ Developing policy with governments ▪ Influencing investments to make services inclusive
Confirmed collaborations/ projects	SIMAVI, WaterAid	
Potential partners	World Vision	

Topic	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 Gosling, 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 2018-20	Knowledge Sharing & Networking	Inspiring & Embedding
	▪ Webinars (English/French) ▪ E-discussion in RWSN community ▪ Promote guidance and tools ▪ updates through Secretariat services	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	
Potential partners	WSSCC	

Topic	Social accountability for sustainable services	
Description	Embedding social accountability as a key intervention for sustainable services	
Leader (theme/org)	Leave no-one behind: Louisa Gosling, WaterAid, Sara Ahrari, Simavi	
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 2018-20	Knowledge Sharing & Networking	Inspiring & Embedding
	▪ Webinars (English/French) ▪ E-discussion in RWSN community ▪ Promote updates through Secretariat services ▪ peer support	▪ 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	
Potential partners		

Topics - Mapping & Monitoring Lead

Topic	In-country monitoring	
Description	Country-led monitoring is critical to scale-up data collection and analysis and ensure it is embedded in decision-making in the rural water subsector at the different levels. In-country sector data needs to be in line with and contributes to SDGs monitoring. The topic will support sharing of innovative models and supportive tools and best practices of effective country-led monitoring systems and processes that can be replicated and scaled-up.	
Leader (theme/org)	Ellen Greggio, WaterAid + Antonio Rodriguez, World Bank	
Co-leaders (theme/org)	Sustainability Services– S. Smets + M. Adank	
Aim by 2030 (end of SDG period)	Strong country-led rural water supply monitoring processes in place to respond to data needs for local and national planning and international reporting	
Expected Outcomes by 2023 (end of strategy period)	Sharing of required building blocks and best practices for sustained and used in-country monitoring– including indicators selection, data collection, analysis and use for planning and course correction. Best practice mainstreamed for reference and adoption by countries for strengthening in-country monitoring. In-country data is in line with and contributes to SDGs monitoring	
Expected Activity Intensity Level	**2. Active Debate:** This is a strategically important topic, not just for RWSN but for the JMP and SWA.	
Activities 2018-20	Knowledge Sharing & Networking	Inspiring & Embedding
	▪ Compiled and shared evidence from existing adopted country monitoring case studies (SIASAR, West Africa) ▪ Peer to peer knowledge sharing / training ▪ RWSN publication from e-discussion + webinar + other ongoing work ▪ Disaggregated data ▪ Country experience sharing	▪ Supporting best practices sharing scale up to strengthen n-country monitoring processes ▪ Identify mechanisms for successful institutionalisation of monitoring processes ▪ Linking operational support to global initiative (JMP,SWA etc)
Confirmed collaborations/ projects	Rural Water and Sanitation Information System (SIASAR)	
Potential partners	IRC, National water ministries; UNICEF, AMCOW, SWA, JMP, Other iNGOs;	

Topic	Indicators Harmonisation	
Description	The lack of a common set of standards and definitions in the rural water subsector hampers comparability, benchmarking, and learning from best practices. This topic will promote the definition of harmonized metrics for rural water to improve the tracking of sustainable rural water service delivery.	
Leader (theme/org)	Antonio Rodriguez, World Bank; Ellen Greggio, WaterAid	
Co-leaders (theme/org)	Susanna Smets – WB, Unicef Promotion by SNV, WaterAid, IRC	
Aim by 2030 (end of SDG period)	Agreement on KPI / Indicators for rural water supply services and sustainability which are widely adopted across the sector but in particular in country-led monitoring	
Expected Outcomes by 2023 (end of strategy period)	▪ WB work on sustainability indicators is translated into RWSN working (for further inputs) and reference document ▪ Agreement on key rural water supply sustainability indicators (high level) ▪ Scale up of adoption and use of sustainability indicators within country-led monitoring IBNET style international benchmarking for rural water supply developed and adopted	
Expected Activity Intensity Level	**2. Active Debate**	
Activities 2018-20	Knowledge Sharing & Networking	Inspiring & Embedding
	▪ Publication of sustainability indicators bank as live RWSN document ▪ Awareness & Consensus building on key indicators ▪ Establish links to humanitarian mapping	▪ Dissemination of indicator bank and example of adoption and use in countries
Confirmed collaborations/ projects	Water Point Data Exchange (WPDx)	
Potential partners	IRC, UNICEF	

Topic	Innovative models in mapping & monitoring	
Description	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. This topic 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.	
Leader (theme/org)	Ellen Greggio, WaterAid + Antonio Rodriguez, World Bank	
Co-leaders (theme/org)	Sustainable Groundwater Development	
Aim by 2030 (end of SDG period)	Context suitable innovative technology & ICT supporting monitoring of rural water supply–such as mobile technology, sensors, use of remote satellites are adopted where context suitable – particularly to support drinking water monitoring and water resources monitoring. Institutional rural water monitoring is integrated by citizen's reporting models (w/wo ICT)	
Expected Outcomes by 2023 (end of strategy period)	▪ Identified documented and shared some successful models of citizen reporting and regular use of sensors which contribute to rural water monitoring and decision making. ▪ Guidance / Documentation on models and factors required for successful adoption of these has been disseminated and being used by RWSN members.	
Expected Activity Intensity Level	**1. Passive Information Dissemination:** may increase if need, interest and resources become available.	
Activities 2018-20	Knowledge Sharing & Networking	Inspiring & Embedding
	▪ Case studies documented ▪ Guidance/policy brief on key guidance	

Topic	Innovative models in mapping & monitoring
Confirmed collaborations/ projects	
Potential partners	IRC, SNV, NGOs, GSMA, Oxford University

Self-supply Lead

Topic	Monitoring , Regulation and Support of Self-supply	
Description	Currently there is little or no systematic monitoring of self-supply/private supplies despite it being the means by which tens, if not, hundreds of millions of people get daily access to water. If Self-supply is to be supported, or replaced by formal supplies, then the scale and nature of self-supply sources needs to be monitored.	
Leader (theme/org)	Matthias Saladin, Skat (Self-supply)	
Co-leaders (theme/org)	Ellen Greggio, WaterAid (Mapping & Monitoring) Sustainable Groundwater Development (on shallow groundwater use, particularly in peri-urban areas and small towns)	
Aim by 2030 (end of SDG period)	Scale up of self-supply monitoring integration in water services country-led monitoring	
Expected Outcomes by 2023 (end of strategy period)	Evidence and increased data on presence and contribution of self-supply in rural water services – building on existing work (focus countries: Nepal, Myanmar, Bangladesh, Ethiopia / Zambia Integrate discussion on water safety plan & household water treatment	
Expected Activity Intensity Level	**3. Driving the Debate:** Get this topic on the agenda because it is a huge gap in current national monitoring systems of water supply access	
Activities 2018-20	Knowledge Sharing & Networking	Inspiring & Embedding
	▪ Documentation 2-3 countries case studies and webinars ▪ Guidance / policy brief ▪ Blog posts from Self-supply projects and actors around the world	▪ Supporting governments and organisations to report and monitor existing private supplies/ self-supply ▪ Influence organisations which focus on improving self-supply to monitor investment and share data
Confirmed collaborations/ projects		
Potential partners	IRC, SNV, NGOs, GSMA, Oxford University	

Topic	Capacity building of providers and Vocational training
Description	Supporting 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 availability of training centres and training opportunities for rural water supply entrepreneurs.

Topic	Capacity building of providers and Vocational training	
Expected Activity Intensity Level	**2. Active Debate**	
Activities 2018-20	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	
Potential partners	Water.org	

Topic	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)	▪ TBD	
Expected Activity Intensity Level	1 – Passive Dissemination – unless resources become available to do more	
Activities 2018-20	Knowledge Sharing & Networking	Inspiring & Embedding
	▪ Maintaining and recruiting to rainwater harvesting Dgroups ▪ Maintaining Rainwater knowledge products on RWSN websites	
Confirmed collaborations/ projects	(RAIN Foundation, subject to suitable funding)	
Potential partners	IRHA, ICRAF, MetaMeta, JustDiggit	

Topics - Sustainable Groundwater Development Lead

Topic	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

Topic	Professional Water Well Drilling	
	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 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, Skat	
Co-leaders (theme/org)	Jose Gesti-Canuto (UNICEF), Dotun Adekile (Independent) and Vincent Casey (WaterAid)	
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 2018-20	**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. • Production & distribution of materials in-country. • Synthesis of SGD e-discussion (2014 to 2017). • New initiative to improve integrity in procurements and contracting. • RWSN guideline "from drilling data to groundwater maps". • Evaluation on manual drilling. • 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 (2018) • Face-to-face training and remote support to UNICEF country offices in select countries. • Collaboration with vocational and academic training institutions and private sector in-country to: o raise in-country capacity and o improve institutional frameworks. • Dialogue with rural water supply funding organisations to raise investment in professional groundwater development. • Trigger in-depth multi-country study on manual drilling opportunities and risks.
Confirmed collaborations/ projects	PCA between UNICEF and Skat (2017-2018)	
Potential partners	Skat, WaterAid, NGWA, UNHCR, AGW-Net, UNDP Cap-Net and WIN.	

Topic	Groundwater Resources Management

<table>
<tr><th>Topic</th><th colspan="2">Groundwater Resources Management</th></tr>
<tr><td>Description</td><td colspan="2">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.

The gap between the professionals and institutions that build water services and those that manage the natural resources remains large. Vocabularies and time scales are different; responsibility is often within different ministries, and groundwater resources management tends to be under-financed. Arguably, the situation is exacerbated by a lack of understanding of groundwater by the population at large, starting with the education of schoolchildren right through to learning opportunities for the political leadership.

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 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. The focus is on bringing groundwater resources management and groundwater development understanding much closer to non-hydrogeologists, i.e. water supply practitioners in government and the private sector, those that manage projects, political leaders and even the general public.</td></tr>
<tr><td>Leader (theme/org)</td><td colspan="2">Sustainable Groundwater Development
Sean Furey, Kerstin Danert, Skat</td></tr>
<tr><td>Aim by 2030
(end of SDG period)</td><td colspan="2">Improved security and safety of groundwater-dependent rural water supplies.</td></tr>
<tr><td>Expected Outcomes by 2023 (end of strategy period)</td><td colspan="2">▪ 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.
▪ Research outputs from the UPGro programme on groundwater have been widely communicated and are being taken up in policy and practice across Africa.</td></tr>
<tr><td>Expected Activity Intensity Level</td><td colspan="2">3. Driving the debate: RWSN will continue to advocate for better understanding and appreciation of how important groundwater resources are; consideration of wider water resources issues (e.g. use of surface water and rainwater) will be considered where appropriate.</td></tr>
<tr><td rowspan="2">Activities 2018-20</td><td>Knowledge Sharing & Networking</td><td>Inspiring & Embedding</td></tr>
<tr><td>▪ 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.
▪ Publication on good practices for groundwater data management and storage.
▪ Produce country-level groundwater summaries/briefings.</td><td>▪ Encourage enhanced groundwater recharge methods (e.g. sand dams, enhanced road drainage, 3R -)
▪ Encourage the use and contributions the Africa Groundwater Atlas and Literature Archive (AGLA), the Groundwater Assessment Platform (GAP) and other information gateways, data hubs and knowledge tools.
▪ Encourage countries to develop guidelines for water source protection, local monitoring of rural groundwater supplies and policies for IWRM that include groundwater.
▪ Study of the extent to which groundwater resources management and use are included within the national Water</td></tr>
</table>

Topic	Groundwater Resources Management	
	▪ Production & distribution of relevant printed materials and films in-country. ▪ Synthesis of groundwater management e-discussions.	Education for Teachers and the school curriculum in selected countries. ▪ Explore opportunities of water point mapping & apps to collect groundwater data. ▪ Find entry points for rural water supply and groundwater management in Integrated Water Resource Management (IWRM) processes.
Confirmed collaborations/ projects	Formal: UPGro, REACH, Eawag (GAP) Informal: GRIPP, IWMI, Africa Groundwater Network, CapNet, Swiss Water Partnership, SIWI Other RWSN themes and topics; Mapping and Monitoring – see "Innovative models in M&M Topic"; Self-supply: on enhanced groundwater recharge, catchment management and rainwater harvesting; No-one left behind on human rights and gender dimensions of water resource management; Sustainable Services: water resources management as part of rural water supply management models.	
Potential partners	BGR, Africa Groundwater Commission, IWMI, WMO, Africa Groundwater Commission, Future Climate for Africa (FCFA)	

Topic	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. Today, issues of financial and environmental sustainability of handpumps as well as the suitability and quality of handpump materials with respect to corrosion are pertinent. Worldwide, solar pumps are rapidly being installed by humanitarian and development agencies, for-profit industries, and private households. However, up-to-date guidelines and tools are lacking. 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 Furey (Skat Foundation)
Co-leaders (theme/org)	Sustainable Services (Marieke Adank) – service/life cycle cost issues Self-supply – issues around private boreholes ENDI – gender issues around change in access and governance compared to handpumps or other sources.
Aim by 2030 (end of SDG period)	1. National standardisation policies and practices ensure that corrosive handpump components are not installed. 2. Rural water supply professionals consider national standardisation policies and practices for handpumps when selecting technologies. 3. 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.

Topic	Groundwater Abstraction (solar pumps and handpumps)	
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. This will be revisited if the situation changes (see confirmed collaborations/projects below). **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 2018-20	Knowledge Sharing & Networking	Inspiring & Embedding
	• Facilitation of relevant DGroups. • Raise awareness of handpump corrosion problems and solutions. • Sharing progress on 3rd party handpump developments • Sharing emerging findings from UPGro Hidden Crisis project on handpump sustainability (see below) • Mapping exercise on existing knowledge, guidance and actors on solar pumps. • 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 • Develop toolkit on Solar Pumping.	• Face-to-face training and remote support on solar pumping to UNICEF country offices in select countries • Collaboration with national (or state) governments to improve institutional frameworks and provide training for solar pumping. • Engagement with governments and development originations to address material quality issues for handpumps, particularly with respect to corrosion.
Confirmed collaborations/ projects	**Water Mission** will lead the solar pumping aspect and contribute staff-time towards planned activities. Water Mission is collaborating with **UNICEF**, **UNHCR**, and **World Bank** in Uganda, Tanzania, and Malawi on various aspects of solar pumping. The **International Organisation for Migration** (IOM) has a project to collect evidence and reference materials on solar pumping. **UNHCR** is working to develop guidelines for solar pumping design, operation, and maintenance in refugee settings. The **World Bank** has compiled an online repository of existing solar pumping resources. **UPGro Hidden Crisis project** is examining the causes of borehole and handpump failure and due to publish results in 2018-2020. This may stimulate a push for improved standards or guidelines. Collaboration with other RWSN themes Sustainable Services (**IRC**) – service and life cycle cost issues; Self-supply (**Skat Foundation**) – issues around private boreholes and Leave no-one behind (**WaterAid**) – gender issues around change in access and governance	
Potential partners	WaterAid/Poldaw, UNICEF Supply Division, Design Outreach, WaterAid, Oxfam, Red Cross, The Water Institute at UNC, energy sector organisations, private sector manufacturers, distributors and maintenance service providers for handpumps and solar pumps, universities and professional training institutions.	

Topics - Sustainable Services Lead

Topic	Direct Support to Service Providers
Description	What does it take to organize and finance direct support to service providers (especially community-based ones)

Topic	Direct Support to Service Providers	
Leader (theme/org)	Sustainable Services	
Co-leaders (theme/org)		
Aim by 2030 (end of SDG period)	Countries have developed systematic structures for direct support to rural service providers with sustainable financing arrangements	
Expected Outcomes by 2023 (end of strategy period)	▪ High level awareness that unsupported community based management models are unsustainable ▪ Countries adopting various models for direct support services (aggregated models, recentralize support services, utility assistance) ▪ Countries start to monitor the performance of direct support provision and its costs	
Expected Activity Intensity Level	**2. Active Debate:** Best practice document on modalities and cost of direct support issued	
Activities 2018-20	Knowledge Sharing & Networking	Inspiring & Embedding
	▪ Webinars (English/French) ▪ E-discussion in RWSN community ▪ Publication ▪ Sharing Agenda for Change experiences	▪ Through in country partner engagement
Confirmed collaborations/ projects	IRC, World Bank, Agenda for Change (IRC, WaterAid, Aguaconsult, Water for People, Osprey Foundation), UNICEF	
Potential partners	AfDB, SNV, Oxford University	

Topic	Evolving Service Delivery Approaches	
Description	Service delivery approach and the evolving landscape of service delivery models	
Leader (theme/org)	Sustainable Services	
Co-leaders (theme/org)	Self-supply	
Aim by 2030 (end of SDG period)	Countries adopting comprehensive service delivery approach, with diversification of service delivery models including supporting institutions, policies and procedures at national, service	
Expected Outcomes by 2023 (end of strategy period)	▪ Awareness and consensus on systemic change needed through Active Debate (e.g. future of CB water supply) ▪ Sharing examples of how successful service delivery approach and models look like (supported/aggregated community-based model, private sector models, utility provision, Self-supply)	
Expected Activity Intensity Level	**2. Active Debate:**	
Activities 2018-20	Knowledge Sharing & Networking	Inspiring & Embedding
	▪ Helpdesk (email) for member requests or questions on the topic Webinars ▪ Sharing Agenda for Change experiences	
Confirmed collaborations/ projects	IRC, World Bank, Agenda for Change (IRC, WaterAid, Aguaconsult, Water for People, Osprey Foundation), UNICEF, REACH Programme (Oxford University/DFID)	
Potential partners		

RWSN Strategy 2018-2023

Topic	Innovation in Rural Water Supply Finance	
Description	Use of public/private (blended) finance for rural water supply (blended finance)	
Leader (theme/org)	Sustainable Services	
Co-leaders (theme/org)	Sustainable Ground Water Management (on PPPs for handpump management)	
Aim by 2030 (end of SDG period)	Increasing number of countries are able to leverage commercial finance to support rural water services (especially in small-town context under PPP arrangements)	
Expected Outcomes by 2023 (end of strategy period)	▪ Sharing of experiences and trajectory to create opportunities for blended finance in rural water	
Expected Activity Intensity Level		
Activities 2018-20	Knowledge Sharing & Networking	Inspiring & Embedding
	▪ Webinars (English/French)	
Confirmed collaborations/ projects	IRC, World Bank, REACH Programme (Oxford University/DFID)	
Potential partners	AFD, DGIS, Private sector actors, Water.org	

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 2016 to December 2018"** (Separate file)

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

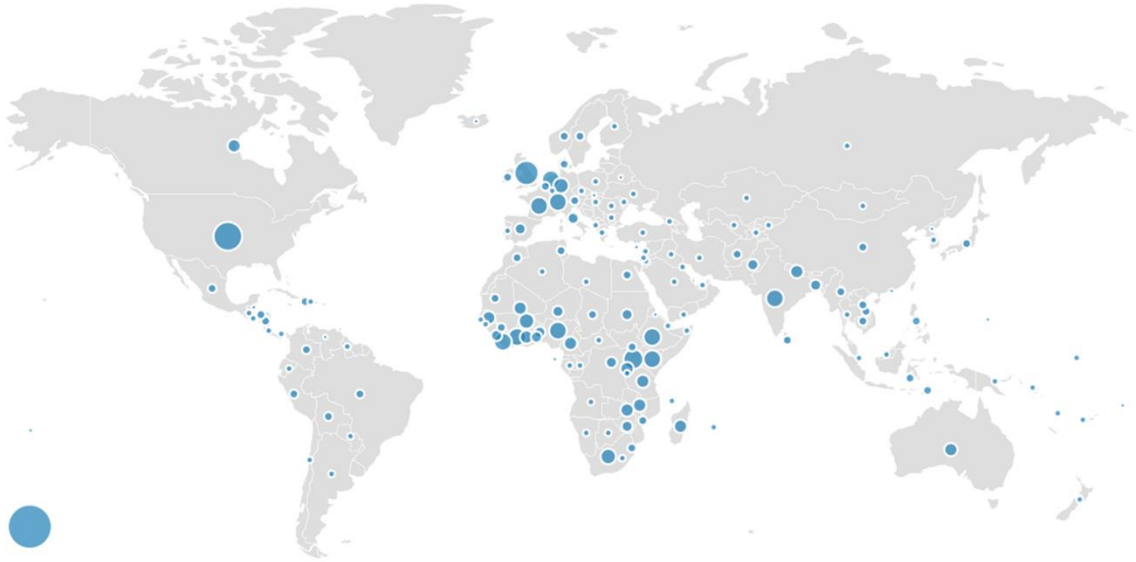
The current free, low-threshold member criteria will remain because a more formal membership process would create a high administrative burden for limited benefit.

The role of Young Professionals will be reviewed in 2018 to identify ways to encourage greater participation and benefit for younger members of the network. Any measures identified will be implemented thereafter.

Description

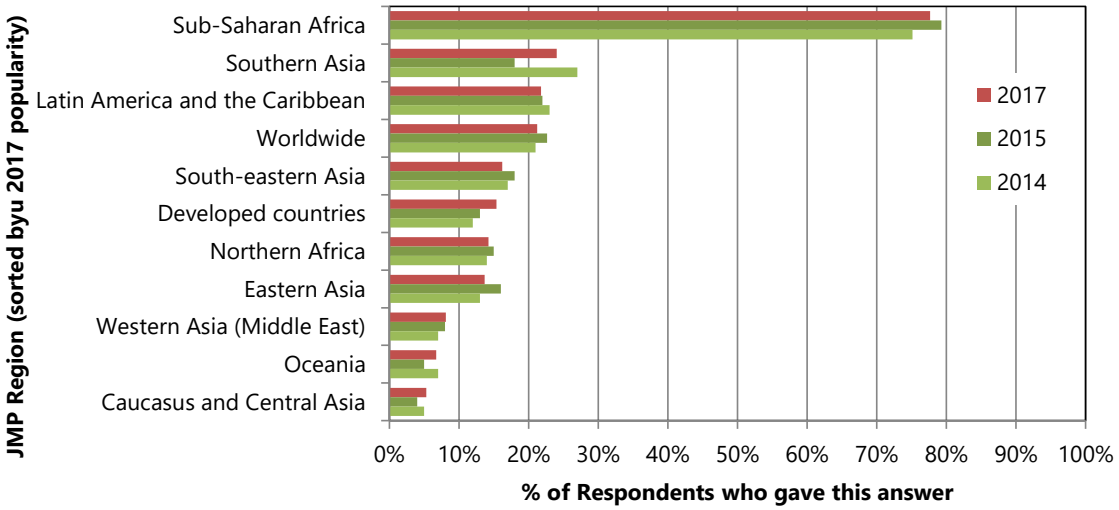
Individual members of RWSN are practitioners and professionals that are actively engaged in improving rural water supplies, or have a strong interest in the subject. Anyone can join and there is no membership fee. Members are from different stakeholder groups including national and local government,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

Figure 8: Distribution of Individual RWSN members (9814 in 151 countries[7])



[7] Registered on dgroups.org/rwsn/ as of 06.09.2017. From these 2,196 have no country assigned to their Dgroups profile.

Figure 9 : 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)[8]

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 space[9]. 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.

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

[9] https://dgroups.org/rwsn

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, e-discussions 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

1	Handpump Services (sub-community of Sustainable Groundwater Development)
2	Hydrogeology (sub-community of Sustainable Groundwater Development)
3	RWSN Accelerating Self Supply
4	RWSN Bulletin – Francais (mailing list for Francophones, occasionally used for discussions)
5	RWSN Complex Systems and Rural Water Supply (member request: currently not tied to a theme or topic
6	RWSN Equality, Non-discrimination and Inclusion
7	RWSN Manual Drilling (sub-community of Sustainable Groundwater Development)
8	RWSN Mapping and Monitoring
9	RWSN Rainwater Harvesting
10	RWSN Solar Pumps (sub-community of Sustainable Groundwater Development)
11	RWSN Sustainable Groundwater Development
12	RWSN Sustainable Services

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

UPGro – Unlocking the Potential of Groundwater the Poor - to assist with communications across the programme;

WASH Monitoring Ethiopia

Affiliated Sub-Networks (ASNs) (open access)

CEE Countries and CIS

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

Multiple Use Services of Water group of the MUS Group network;

Rural Water Supply and Sanitation Initiative (RWSSI) mailing list of the African Development Bank;

Rwanda WASH Media Net

Rwanda WASH Working Group

Sierra Leone WASH

A rainwater harvesting sub-network was established in collaboration with RAIN Foundation but has been incorporated as an RWSN community.

ANNEX 3

List of RWSN Member Organisations

Name	Type	Country (HQ)	Year Joined
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	2013
National Water and Sewerage Drainage Board	National Government	Sri Lanka	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
Welthungerhilfe	iNGO	Germany	2014
Yobe State Rural Water & Sanitation Authority	Local Government	Nigeria	2014
Water Mission	iNGO	USA	2015
Whave	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 Association(Kabhuda)	National NGO	Nigeria	2017
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 Development (GWEFODE)	National NGO	Uganda	2017
Simavi	iNGO	Netherlands	2017

ANNEX 4

Partner networks and associations

Network/Association/Partnership	Issues they lead on:
GRIPP - Groundwater Solutions Initiative for Policy and Practice	Global groundwater policy and data issues
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
SCWSN - Small Community Water Supply Network	WHO Guidelines for small water systems
SuSanA - Sustainable Sanitation Alliance	Sanitation and hygiene
SWA - Sanitation and Water for All partnership	High level political engagement
UNDP CapNet	Training and capacity development; Virtual Campus
WIN - Water Integrity Network	Integrity and tackling corruption
WPDx – Water Point Data Exchange	Water point mapping data and open standard

ANNEX 5

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).

Topics will be managed by the Theme Leaders and Secretariat through Annual Work Plans. These plans will set out the following for each theme under two headings:

(1) Knowledge-Sharing and Networking

Activity Type	Topic(s)	Date(s)	Target Audience(s)	Notes/Description
E-discussion				
Webinars				
Publications				
Face-to-Face Events				

(2) Embedding Good Policies and Practice

Activity Type	Topic(s)	Date(s)	Target Audience(s)	Notes/Description
Fundraising				
Agree partners				
Meetings/Workshops				
Fieldwork				
Desk Studies				
Support				

Not all themes will be involved in (2) Embedding Good Policies and Practices (see Theory of Change)

ANNEX 6

RWSN Secretariat – overview of activities

	Activity	Details
Governance & Management	Governance	RWSN Executive Steering Committee
		RWSN Policies
	Planning	RWSN Strategy Annual Work Plans RWSN Calendar
	Reporting	Six-month report
		Annual Report
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.
	Group facilitation	Facilitation of working groups/task forces or interest groups
	RWSN Forum	6th Forum in Kampala 2011; 7th Forum in 2016
	Small Events	Sessions, side events and stands at WEDC Conference, Regional Water Weeks, Stockholm World Water Week
	RWSN Website TAF Website	http://www.rural-water-supply.net http://www.washtechnologies.net
	RWSN Communities	Dgroups - https://dgroups.org/rwsn
	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 policies & practices	Advocacy	Raising awareness of good policies & practices, or promising 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. 5th RWSN Forum held in Accra Ghana in 2006 and 6th 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 Inclusion10 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: *Unlocking the Potential of Groundwater for the Poor* (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 *REACH: improving water security for the poor* programme
2016:	7th RWSN Forum held in Abidjan, Côte d'Ivoire.

Equity and Inclusion[10] 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

[10] From Oct 2014 the theme is called: *Equality, Non-discrimination and Inclusion*

report, support and monitoring of Country Level Processes in Nigeria and Sri Lanka and 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 supplies[11]; in-country studies, reflections and capacity strengthening efforts for drilling professionalism in over 15 countries[12];

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:

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

[12] 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: CONSULTATION RESPONSES

During a 6 week open consultation the Secretariat received five written responses and these were taken into consideration when producing the final strategy, and planning its implementation.

Response #1: Chief Operating Officer, social enterprise

First of all, great work on producing a very coherent draft strategy. I think it looks great, and just have a couple of comments to share.

It's good to see the focus placed on building the community and knowledge sharing. We are not able to contribute financially, and our staff time is very constrained, but I do believe we could contribute by linking our users back to RWSN knowledge bases on various topics. We will reach 20,000 users by the end of this year, and we expect that there is a lot of overlap with RSWN members. One easy place to begin might be linking to RWSN resources on measurement and monitoring from our Indicator Library articles, and vice versa. This could be done by a trained staff person, even an intern. We are also interested in ways to link to your discussion forums, but this would be a more complex technical task that would require a source of funding.

My only advice on the themes is that you be careful not to become stuck in a mode of thinking where rural water supply means self supply. I don't see any attention placed on the professionalization of services through rural water districts, small piped community systems, and private operators / concessions. In fact, the Self Supply section on pg 27 starts with a very pessimistic view that essentially states there will never be high quality rural services. All the evidence from the literature on reliable and service delivery indicates that poor customers are willing to pay more for high quality services, and keeping to a mindset of unreliable services maintains the "spiral of decline" that keeps revenues low and unable to accommodate operations, maintenance, and capital investment. I would be very wary of getting stuck in this self supply mindset, which many believe needs to give way to a professional management paradigm.

Response #2: Senior Technical Advisor, bi-lateral development partner

Hi RWSN colleagues - thanks for the opportunity to contribute to, and now review the draft new strategy for RWSN. Its mission and vision are so relevant, and more so every day.

USAID does not have the capacity to easily directly support RWSN, but several of our implementing partners are more actively involved. I just want to flag the issue of water quality, in particular as one of several aspects of a drinking water service (along with quantity, reliability, etc.). We at USAID are struggling with this, and trying to develop guidance that protects human health, while also not focusing so heavily on water quality and all of the potential contaminants that might be tested for initially or routinely that we doom our efforts towards sustainability on the financial and governance aspects.

I think RWSN and members could help provide information on how we can build capacity and demand for improved water quality in an incremental fashion as we work towards the SDGs. For the moment, USAID is requiring microbiological and arsenic testing and meeting USA or host country regulations for these two contaminants for new water supplies, whichever is more stringent, and also requiring our implementing partner to research local water quality issues and also test for nitrate and/or fluoride if the geology or past water sampling have identified these as issues.

We are starting to also require quarterly testing for the duration of USAID project support, while building capacity and advocating for budget at the appropriate level (usually local government) to

continue water quality surveillance after the end of USAID support. Other physical parameters that are more aspirational as part of a water quality surveillance program include turbidity, pH etc. But there are lots of gray areas, especially for rural water supplies which have even less access to qualified staff and facilities and budgets than urban supplies, so would love to learn from the entire RWSN community on this!

Response #3: Vice-President, water association

Consultation sur la nouvelle stratégie RWSN 2018-2023

Processus de développement et opportunité de collaboration

La nouvelle stratégie RWSN est une initiative intéressante et cette consultation est une occasion pour informer les membres du réseau sur la vision et les missions du réseau RWSN. Mes sincères félicitations pour le Comité de pilotage. Je vous fais part ci-après de ma petite contribution en tant que membre du réseau :

1- Traduction en français :

Quelques termes sont restés non traduits dans la version française. De même, quelques termes ne sont pas traduits de façon appropriée : *Capture* d'eau de pluie : c'est plutôt « **Captage** des eaux pluviales» ; *Abstraction* des eaux souterraines : c'est plutôt « **Extraction** des eaux souterraines.

2- Commentaires sur le contenu de la stratégie:

Au niveau des thèmes 2018-2023 :

- **Dans le tableau collaboration sur des sujets**

«Captage des eaux de pluie» serait à mettre dans la case « auto-approvisionnement » croisée avec «auto-approvisionnement» et à enlever de la case « auto-approvisionnement » croisée avec « Développement durable des eaux souterraines » : dans cette case il y a lieu de mettre « Sensibilisation et renforcement des capacités » afin d'éviter l'approvisionnement excessif à partir des eaux souterraines et la surexploitation des nappes.

- **Thème 2 : Auto-approvisionnement (page 14).**

J'ai quelques réserves concernant le concept «d'auto-approvisionnement en tant qu'approche de prestation de service. Les prestataires de services sont rémunérés pour les services rendus (à l'Administration, à une association d'usagers ou de villageois ou même à titre individuel et privé). La création de forages doit être professionnalisée et c'est bien dit. Le «Soutien direct aux prestataires de service » serait leur renforcement des capacités.

Les bénéficiaires peuvent avoir des encouragements financiers mais doivent être autorisés pour réaliser un forage et surtout bien contrôlés afin que l'exploitation des eaux souterraines soit durable et que les nappes soient préservées pour les générations futures. Je propose d'ajouter « et autogestion » au thème « Auto-approvisionnement » vu que la durabilité résulte principalement d'une bonne gestion quel que soit son modèle. Dans le même thème : Au niveau du sujet « captage des eaux de pluie » je propose d'ajouter : innovations et usage sécurisé de l'eau**.**

Response #4 Executive Director, social enterprise

Hello – thanks for the opportunity to review the strategy. Your work is complex and covers a variety of themes/topics. Overall I think it is strong.

This topic is really critical: Embedding social accountability as a key intervention for sustainable services. I wonder if it would be useful to have as a sub-aim to also hold NGOs and donors to account

for the quality of their interventions, or contributions to the government WASH plans.

In particular I think these activities are really valuable:

- Innovation/Research Uptake & Scaling up: RWSN will provide an 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

There do not seem to be many platforms for “solutions” / technology / “innovations” that are both neutral and rigorous, so it’s a good gap for RWSN to fill. Also, I’ve noticed that organizations don’t have or make the time to document what they’re doing in a way that can be replicated or adapted by others. To have a coach and a place to share such information again is very useful.

I look forward to working with RWSN to achieve our mutual visions.

Response #5, Executive Director, international non-governmental organization

I enjoyed reading the strategy document and just wanted to offer some quick thoughts.

Our organization is very much focused on innovative new models for empowering rural communities to sustain their access to clean water. As we look around the sector, there are a number of similarly-motivated initiatives. Some of these approaches are i) complementary to our work (e.g., Agenda for Change), some are ii) "competitors", and some are iii) irrelevant to our particular context (e.g. urban initiatives.)

I think there is value to be added in third-party "mapping" of these different initiatives, both to raise their visibility, as well as to clarify how pieces can fit together (or not.) Likewise there is value in RWSN leveraging its convening power to foster new connections across initiatives between NGOs as well as government.