

From MDG7 to SDG6

From basic needs to human rights ...

Drinking water and sanitation at the
start of the 21st century

Robert Bos

Senior Advisor

International Water Association

Overview

- The MDG SDG transition
- SDG 6
- Targets and indicators
- The link to the human rights framework
- Affordability and cost-recovery
- What is in it for New Zealand?

PART 1

The 2030 Sustainable Development Agenda



17 Goals
169 targets
230 global indicators

<https://unstats.un.org/sdgs/iaeg-sdgs/>

MDG to SDG

MDGs 2000-2015

Goals of limited scope
Technically defined targets
For the developing world
Globally monitored
Developed by technocrats

Mostly adding an incremental improvement over what would anyway be achieved

No human rights dimension

SDGs 2016-2030

Aspirational goals
Comprehensive targets
Covers all countries
Shift from global to national monitoring
Result of a participatory process

Universal coverage

Human rights dimension

SDG6 TARGETS

6.1 By 2030, achieve universal and equitable access to **safe and affordable drinking water for all**

6.2 By 2030, achieve access to **adequate and equitable sanitation and hygiene** for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations

6.3 By 2030, improve **water quality** by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

SDG6 TARGETS

6.4 By 2030, substantially increase **water-use efficiency** across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity

6.5 By 2030, implement **integrated water resources management** at all levels, including through transboundary cooperation as appropriate

6.6 By 2020, **protect and restore water-related ecosystems**, including mountains, forests, wetlands, rivers, aquifers and lakes

SDG6 TARGETS

6.a By 2030, **expand international cooperation and capacity-building support** to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies

6.b Support and strengthen the **participation of local communities** in improving water and sanitation management

The SDGs – how do they relate ...



... and what should be our perspective?

Making a positive contribution

How mining companies can contribute to the Sustainable Development Goals

The mining and metals industry has extraordinary potential, to contribute to the SDGs. Metals and minerals are an essential component in almost every aspect of our lives; they enable farming, healthcare, communications, water and energy supply, transport and construction. And demand is increasing. Beyond this, when working as part of a broad alliance of people, governments and civil society, companies can directly deliver long-term mutual benefits that secure the futures we want for present and future generations.

International Council on Mining and Metals

ICMM is an international organisation dedicated to improving the social and environmental performance of the mining and metals industry. Bringing together 23 mining and metals companies and 34 regional and commodities associations, we serve as an agent for change: identifying common challenges and establishing a safer and more sustainable industry. Membership of ICMM requires a commitment to our 10 principles, a best-practice framework for sustainable development in the mining and metals industry. Our principles are strongly supportive of the global development agenda meaning that improvements in the performance of the mining and metals industry will make a positive contribution towards the universal objectives of the SDGs.



ICMM 10 Principles

Established in May 2003 the principles respond to the key challenges identified by the Mining, Minerals and Sustainable Development Project's agenda for change. We expect all member companies to implement the principles in full and to transparently report on performance. Our principles define member commitments in the following areas:





- Ethical business & sound governance
- Sustainable development in decision-making
- Respect for human rights
- Effective risk management
- Health & safety performance
- Environmental performance
- Conservation of biodiversity & land use planning
- Responsible use & supply of materials
- Social contribution
- Engagement & transparent reporting

For more information on our 10 principles visit www.icmm.com


The perspective of the International Council on Mining and Metals

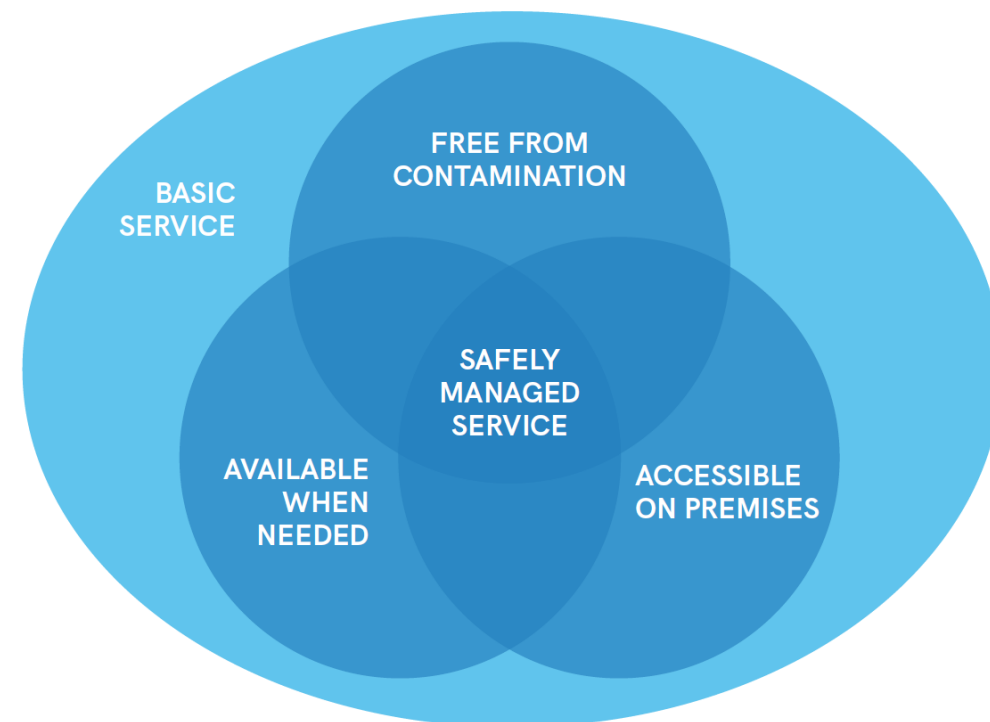


SDG global targets and indicators

WASH SECTOR GOAL	SDG GLOBAL TARGET	SDG GLOBAL INDICATOR	
Ending open defecation	6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation , paying special attention to the needs of women and girls and those in vulnerable situations	6.2.1 Population practising open defecation	SDG 6.2.1 
Achieving universal access to basic services	1.4 By 2030, ensure all men and women, in particular the poor and vulnerable, have equal rights to economic resources, as well as access to basic services...	1.4.1 Population living in households with access to basic services (including basic drinking water, sanitation and hygiene)	SDG 1.4.1 
Progress towards safely managed services	6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all	6.1.1 Population using safely managed drinking water services	SDG 6.1.1 
	6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	6.2.1 Population using safely managed sanitation services	
		6.2.1 Population with a basic handwashing facility with soap and water available on premises	SDG 6.2.1 

New JMP ladder for drinking water

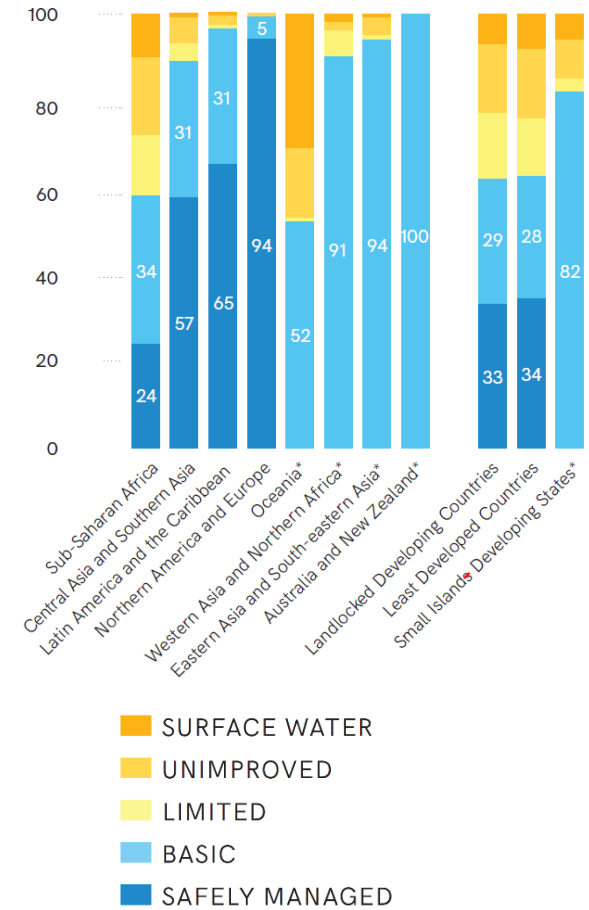
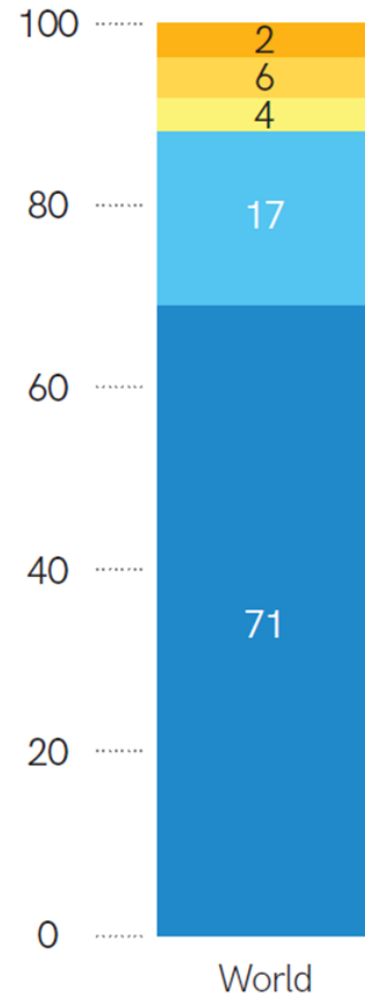
 SDG 6.1.1	Safely managed	Drinking water from an improved source which is located on premises, available when needed and free of faecal and priority chemical contamination
 SDG 1.4.1	Basic	Drinking water from an improved source provided collection time is not more than 30 minutes for a roundtrip including queuing
	Limited	Drinking water from an improved source where collection time exceeds 30 minutes for a roundtrip 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 channel



New estimates for drinking water (2000-2015)

In 2015

- 5.2 billion used a safely managed drinking water service
- Safely managed estimates available for 96 countries (4 out of 8 regions)
- 6.5 billion people used at least a basic service
- 844 million still lacked basic services
- 263 million used a limited service
- 159 million still used surface water sources



Accessibility

Water collection is a major burden in many countries, especially in sub-Saharan Africa

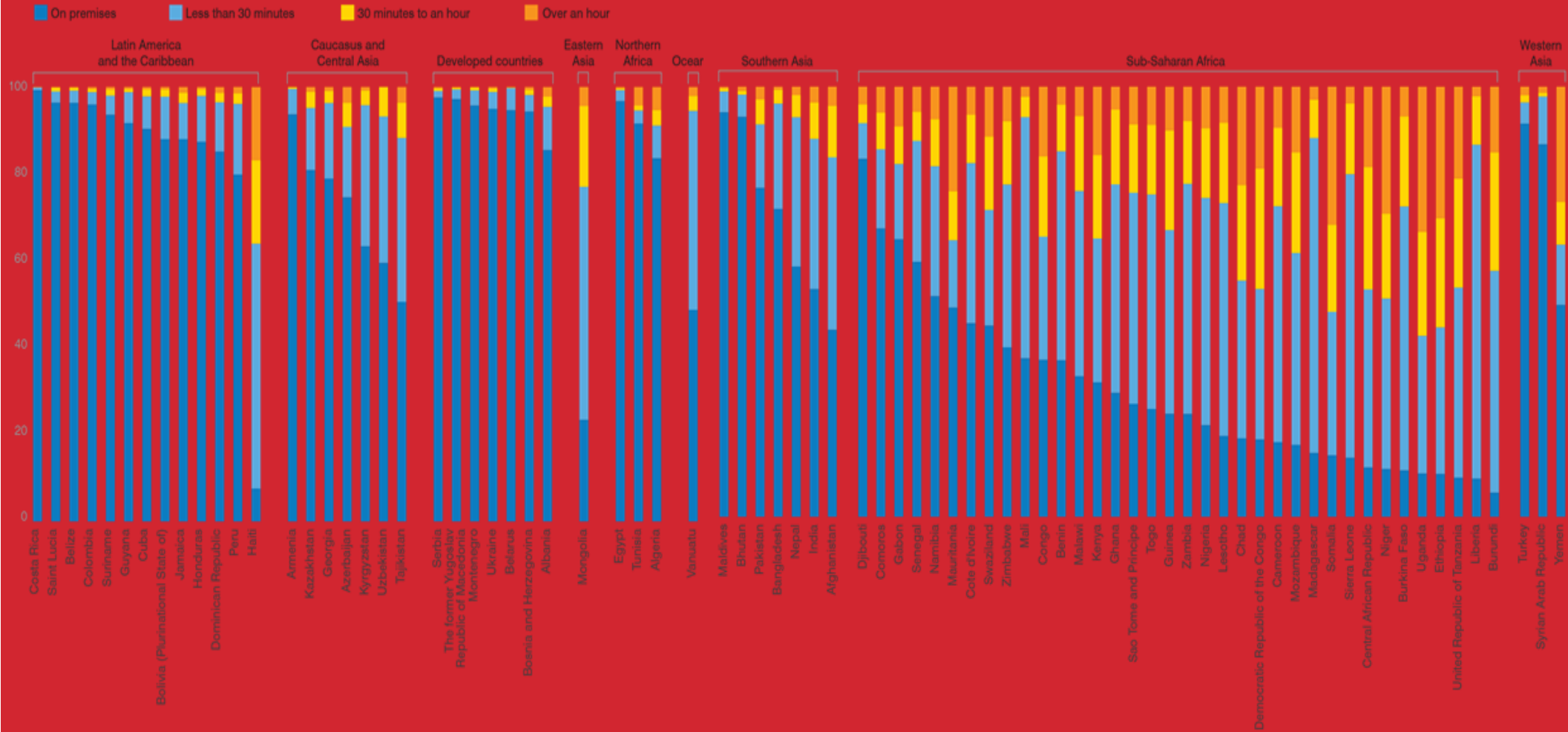
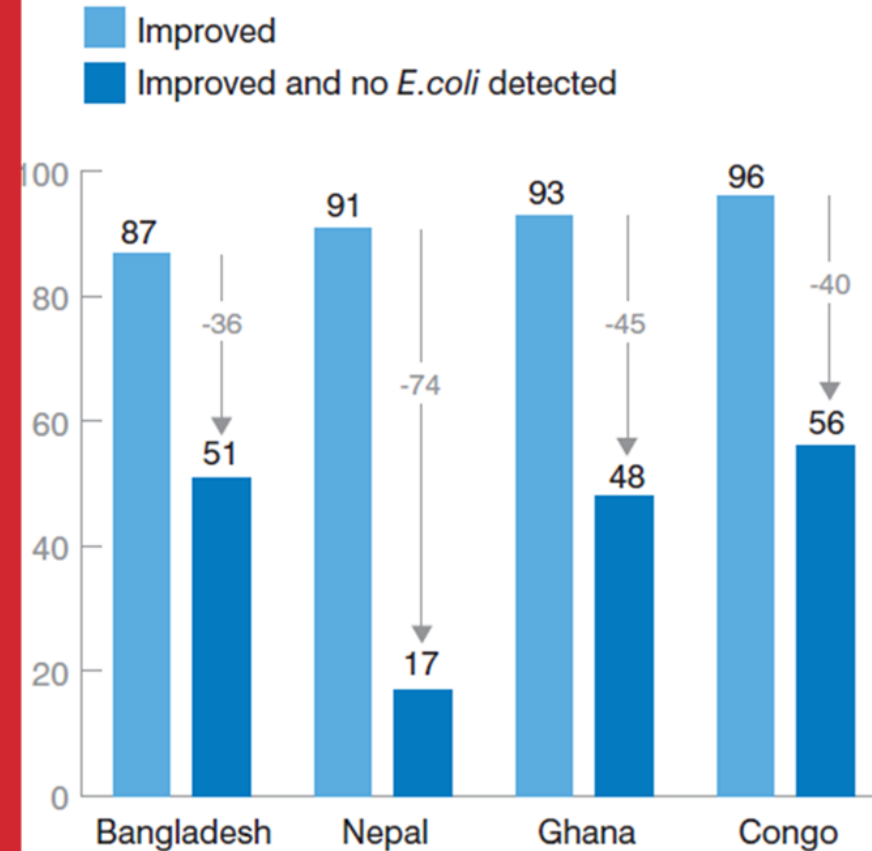
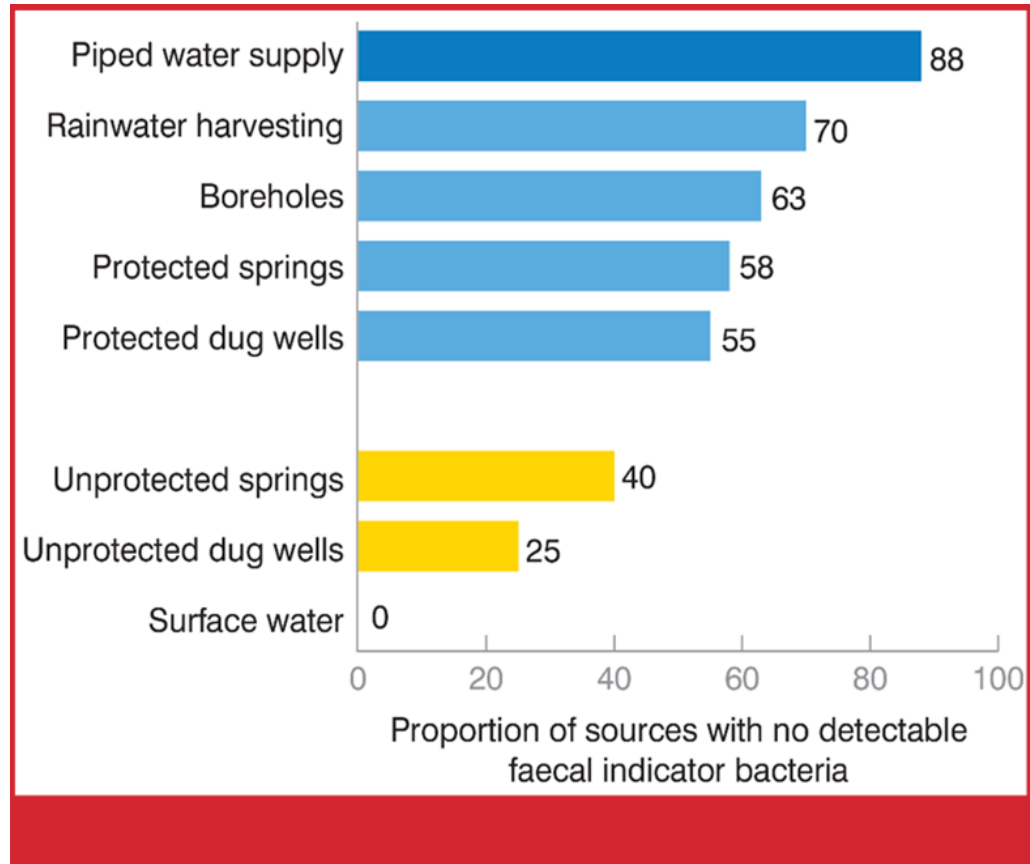


FIGURE 14 Time taken per trip to collect drinking water, by country (minutes)

Quality



Water quality testing in hh surveys

Bangladesh global MICS5 pilot 2012


Water quality module has now been tested and validated, included in 12 countries to-date with more planned for 2017

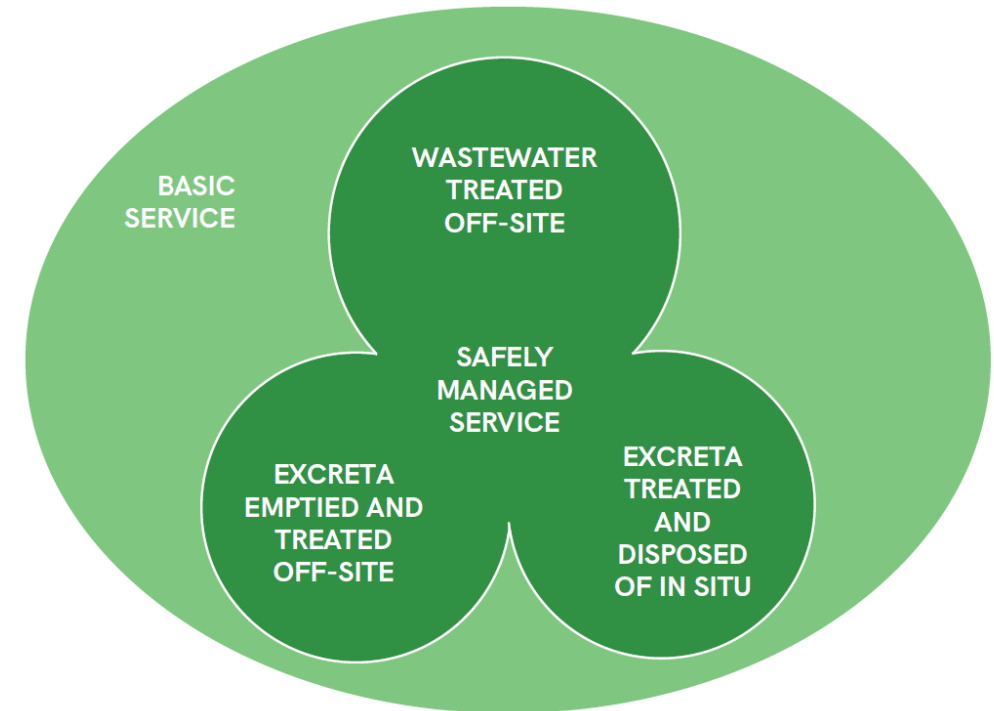
Congo (MICS)	Lebanon (MICS)	+ Togo (MICS)
Cote d'Ivoire (MICS)	Nepal (MICS)	+ DRC (MICS)
Ethiopia (ESS)	Pakistan (MICS)	+ CAR (MICS)
Ghana (LSS)	Paraguay (MICS)	+ Lao PDR (MICS)
Nigeria (MICS)	Mongolia (MICS)	+ Afghanistan (ALCS)
Bangladesh (MICS)	+ Sierra Leone (MICS)	+ Philippines (APIS)
Ecuador (ENEMDU)	+ DPRK (MICS)	+ Vietnam (LSMS)
		+ Senegal
		+ Cambodia

Belize field test 2016

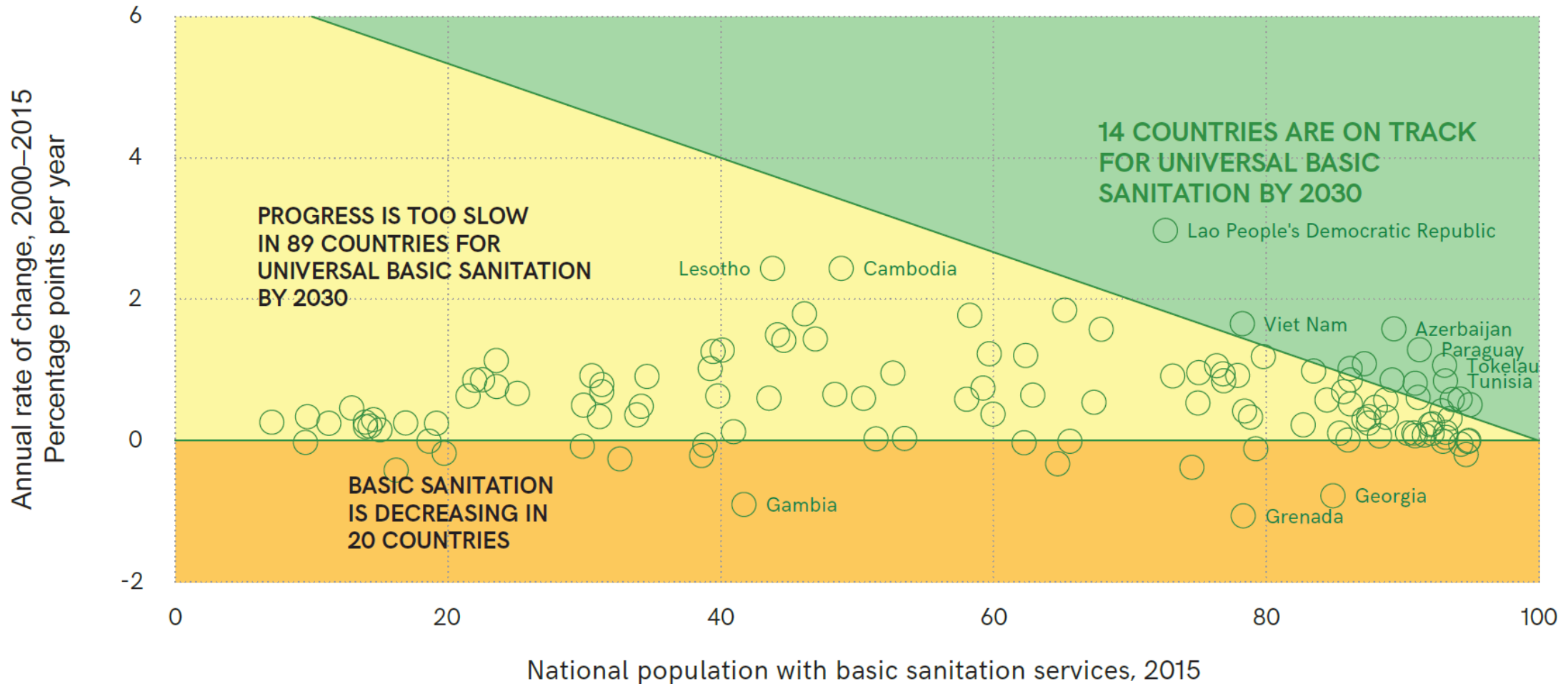


New JMP ladder for sanitation

SDG 6.2.1 	Safely managed	Use of improved facilities which are not shared with other households and where excreta are safely disposed in situ or transported and treated offsite
SDG 1.4.1 	Basic	Use of improved facilities which are not shared with other households
	Limited	Use of improved facilities shared between two or more households
	Unimproved	Use of pit latrines without a slab or platform, hanging latrines or bucket latrines
SDG 6.2.1 	Open defecation	Disposal of human faeces in fields, forests, bushes, open bodies of water, beaches and other open spaces or with solid waste



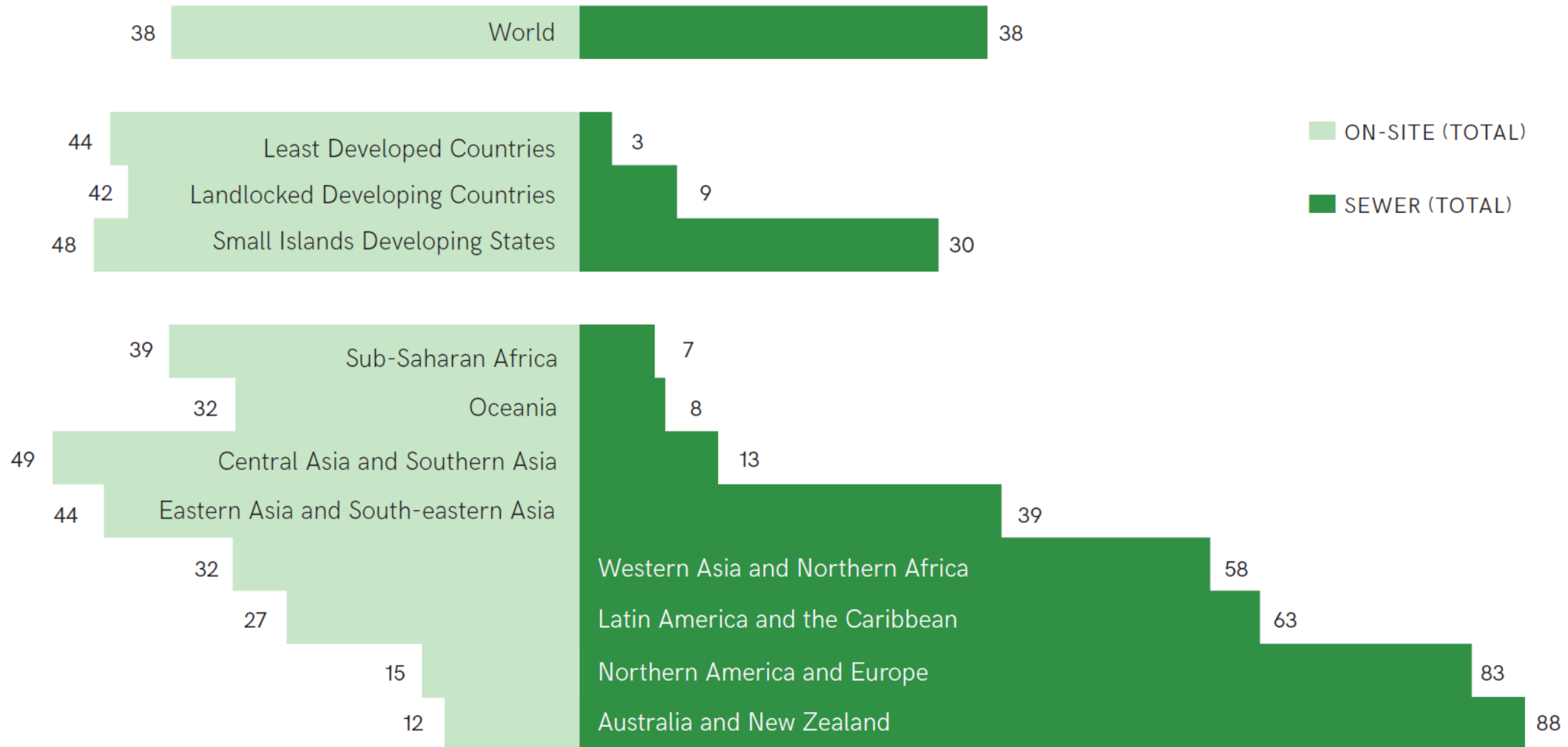
Just 1 in 10 countries below 95% coverage is on track to achieve universal basic sanitation by 2030



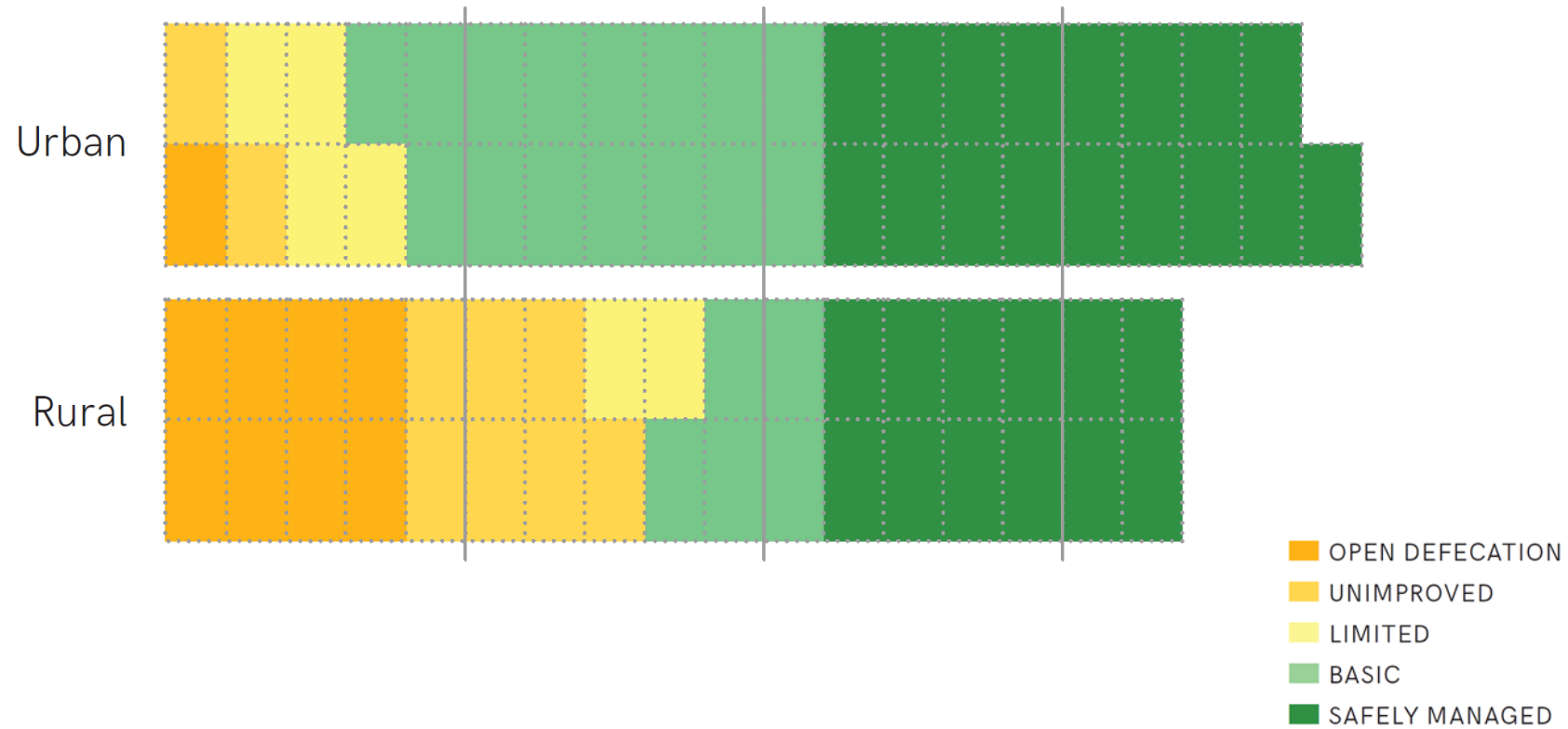
Emptying on site sanitation systems

<p>WS12. Has your (<i>answer from WS11</i>) ever been emptied?</p>	<p>YES, EMPTIED</p> <p>WITHIN THE LAST 5 YEARS 1</p> <p>MORE THAN 5 YEARS AGO 2</p> <p>DON'T KNOW WHEN..... 3</p> <p>NO, NEVER EMPTIED 4</p> <p>DK..... 8</p>
<p>WS13. The last time it was emptied, where were the contents emptied to?</p> <p><i>Probe:</i> Was it removed by a service provider?</p>	<p>REMOVED BY SERVICE PROVIDER</p> <p>TO A TREATMENT PLANT 1</p> <p>BURIED IN A COVERED PIT..... 2</p> <p>TO DON'T KNOW WHERE 3</p> <p>EMPTIED BY HOUSEHOLD</p> <p>BURIED IN A COVERED PIT..... 4</p> <p>TO UNCOVERED PIT, OPEN GROUND, WATER BODY OR ELSEWHERE 5</p> <p>OTHER (<i>specify</i>) 6</p> <p>DK..... 8</p>

New disaggregations of on-site sanitation and sewer connections



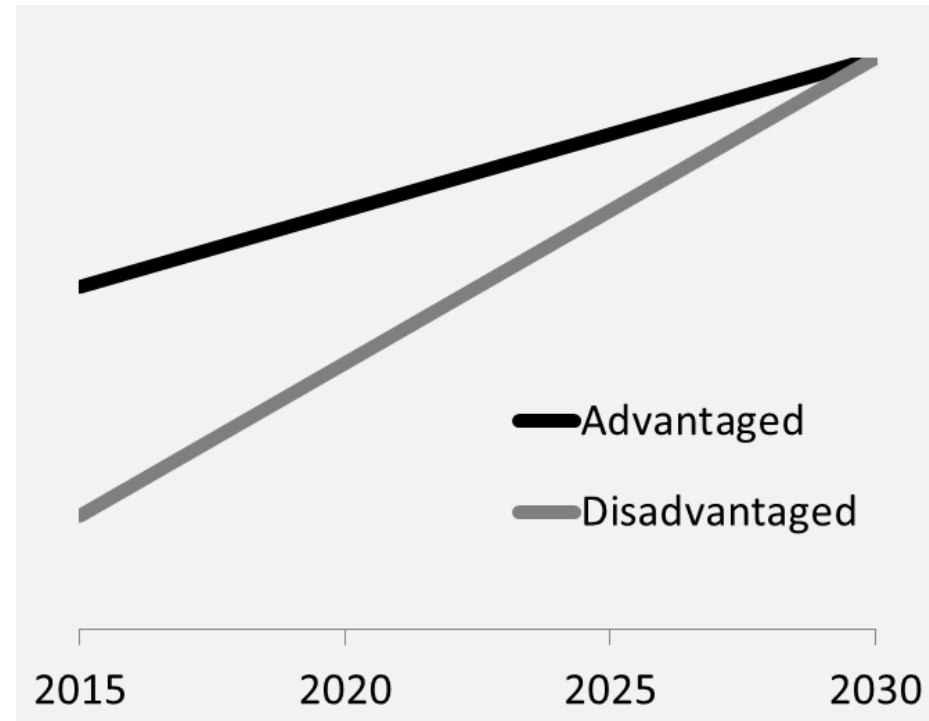
4.5 billion lack safely managed sanitation services



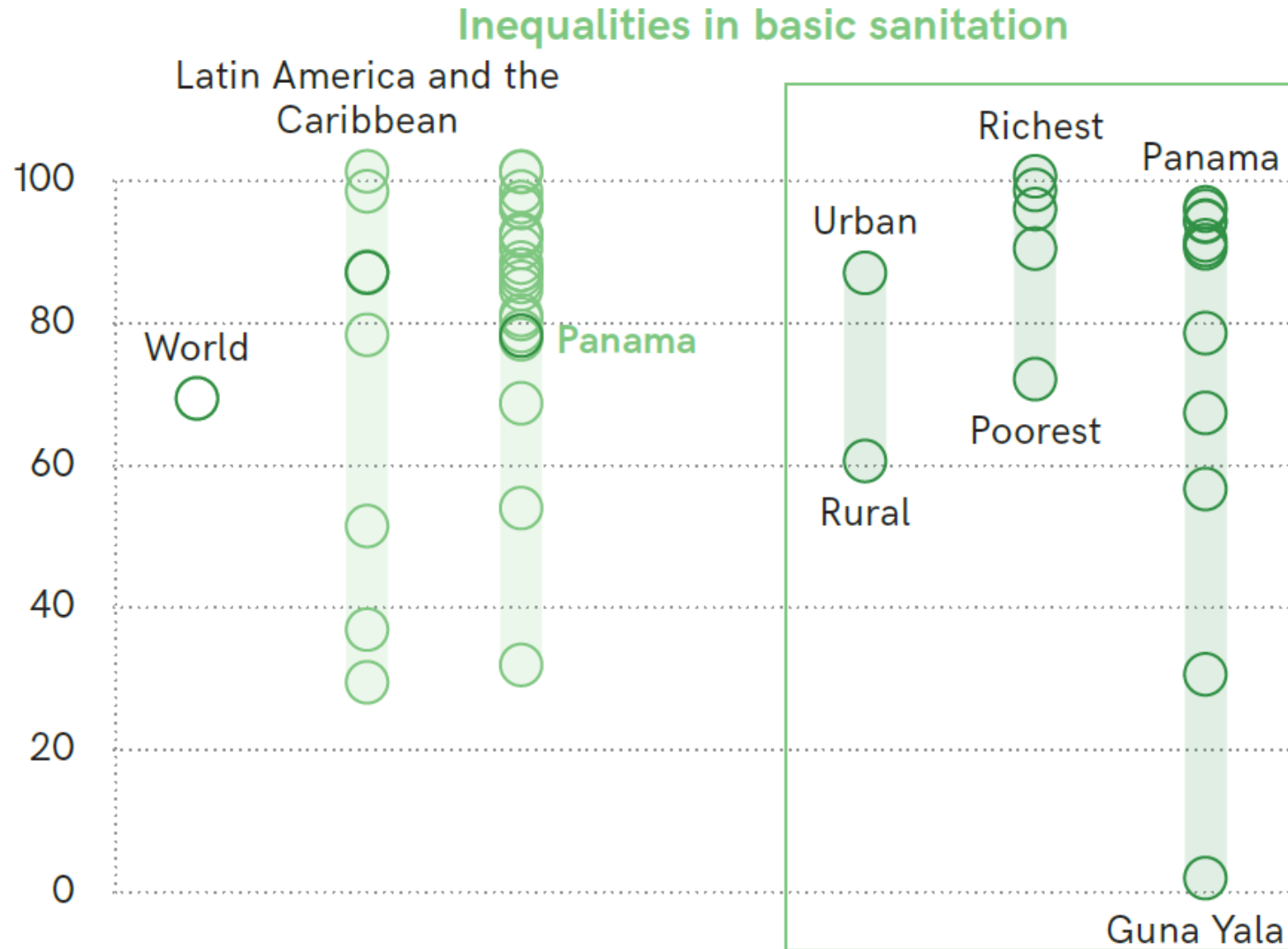
Number of people using different levels of service in rural and urban areas in 2015 (each unit represents 100 million people)

SDG targets 'leave no one behind'

- SDG indicators to be disaggregated where relevant
 - income,
 - age,
 - sex
 - race,
 - ethnicity,
 - migratory status,
 - disability and
 - geographic location,
 - or other characteristics



New disaggregations reveal sub-national inequalities



PART 2

AFFORDABILITY IN THE FRAMEWORK FOR THE HUMAN RIGHTS TO SAFE DRINKING WATER AND SANITATION



@WaterAid Ernest Randriarimalala

AFFORDABILITY

AFFORDABILITY IN THE FRAMEWORK FOR THE HUMAN RIGHTS TO SAFE DRINKING WATER AND SANITATION

The criteria for progressive realization:

- Accessibility
- Safety and quality
- Availability
- Acceptability
- **Affordability**

AFFORDABILITY

WHAT IS AFFORDABILITY?

... THE COST OF A PRODUCT OR SERVICE RELATIVE
TO THE AMOUNT THE PURCHASER IS ABLE TO PAY
AS PART OF TOTAL HOUSEHOLD INCOME ...

Unaffordable services lead to the use of unsafe sources of drinking water (Madagascar)



AFFORDABILITY

WHAT IS AFFORDABILITY?

IN DAILY LIFE: Can my household afford this expenditure on drinking water supply, or on sanitation services?

This is not the same as willingness-to-pay (WTP):

WTP adds the concept of value for money.

AFFORDABILITY

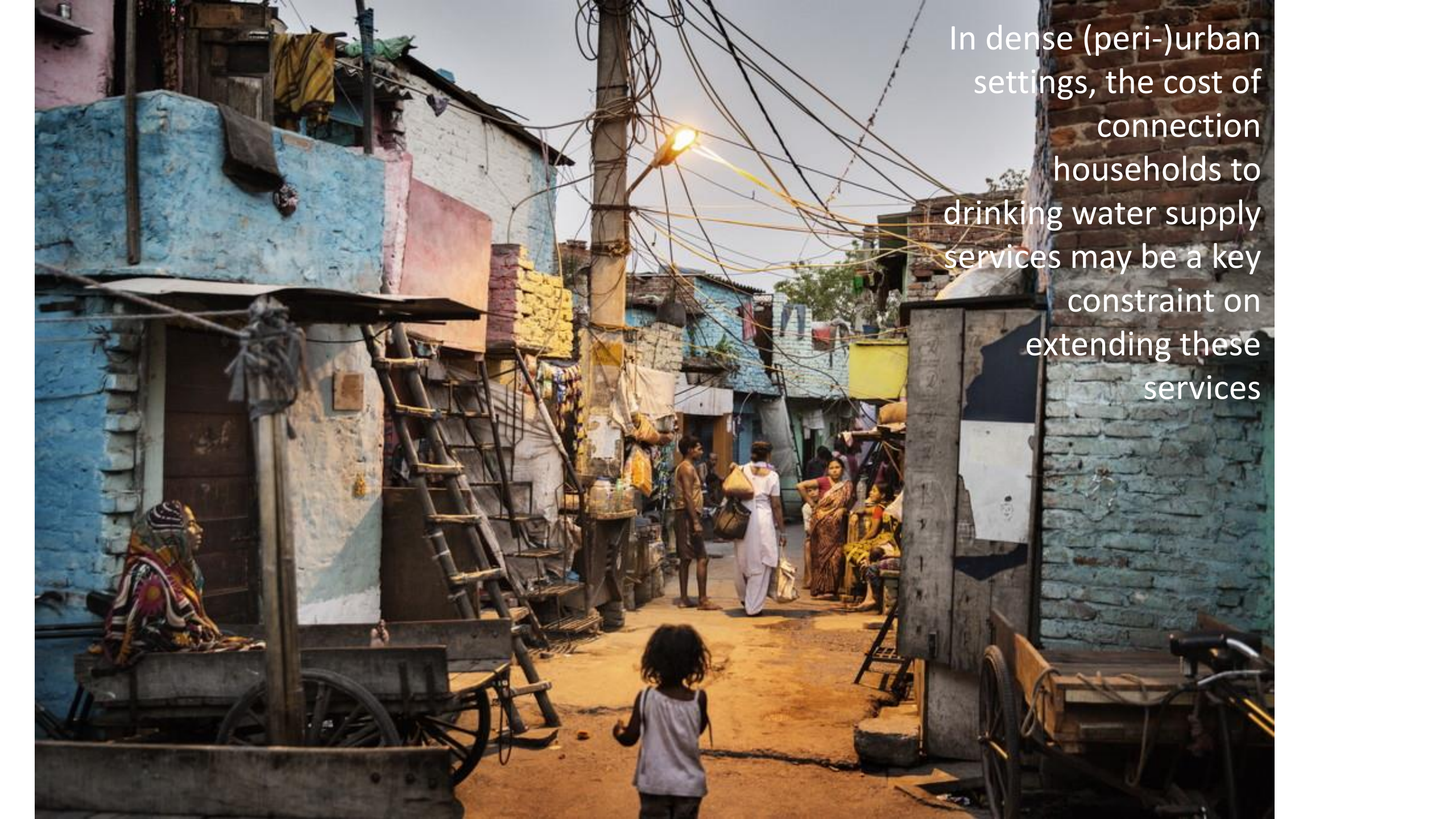
WHAT IS AFFORDABILITY?

FROM A BASIC NEEDS PERSPECTIVE:

Unaffordability means an infringement on the capacity to fulfill other basic needs

IN THE CONTEXT OF THE HUMAN RIGHTS

FRAMEWORK: Unaffordability means one or more human rights cannot be enjoyed by individuals and progressive realization is hampered.

A photograph of a narrow, cluttered street in a peri-urban area. The street is paved with dirt and is flanked by colorful, multi-story buildings. On the left, a wooden cart with a large wheel is parked, and a ladder leans against the wall. A child is walking away from the camera in the foreground. In the background, several people are walking, and a street lamp is visible. The sky is overcast, and the overall atmosphere is one of a densely populated, informal settlement.

In dense (peri-)urban settings, the cost of connection households to drinking water supply services may be a key constraint on extending these services

AFFORDABILITY

ADDRESSING AFFORDABILITY CHALLENGES

Making connection costs more affordable:

- Subsidies for those who cannot afford a connection (such subsidies are better targetable than those supporting the costs of consumption).
- Payment of connections in affordable instalments (an example of this practice is found in Chile)
 - In areas where coverage is already substantial: cross subsidizing is a realistic option
 - Another option is to choose for cheaper technical solutions, but this may have O&M implications

AFFORDABILITY

ADDRESSING AFFORDABILITY CHALLENGES

Tariff setting is crucial in meeting the affordability criterion, but it is politically sensitive.

The human rights principles include the need for transparency and effective information exchange.

The decision making process for tariff setting needs to be assessed by an independent regulator with reference to affordability for all clients served, cost recovery and sustainable operations.

The dialogue between service providers and regulators must be guided by human rights principles

Kampala,
Uganda: water
kiosk paid for by
mobile phone or
by token.



AFFORDABILITY

ADDRESSING AFFORDABILITY CHALLENGES

Methods of payment for the poor or marginalized:

- No monthly payments
- Pay as you go (kiosks, e.g. 20L/day)
- Pre-paid cards
- Lifeline tariffs
- Maintain transaction costs low (both monetary and opportunity costs)

AFFORDABILITY

ADDRESSING AFFORDABILITY CHALLENGES

Non-payment, credit control, debt collection and cut-offs

The impact of non-payment on the capacity for O&M and on service extension represents an infringement on the progressive realization of the human rights to safe drinking water and sanitation

Service providers must apply reliable assessment methods to distinguish true problems related to affordability and unwillingness to pay

Due diligence has to be applied in the procedures to impose a cut-off in cases of unjustified non-compliance with payment obligations (where cut-off is legal)



The needs of handicapped and other vulnerable groups must be reflected in tariff setting and enhancement of affordability
(Dhaka, Bangladesh)

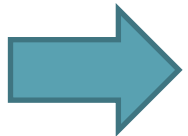
AFFORDABILITY

What does the Special Rapporteur say?

In brief:



- affordability is a matter of life and death
- sustainable access to safe drinking water cannot be a free service
- re-design of economic instruments will help reconcile economic and human rights perspectives
- at times of economic crises and austerity, tariffs need reconsideration
- targeting households needing support in relation to affordability is challenging

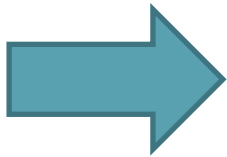


AFFORDABILITY

What does the Special Rapporteur say?

In brief:

- time = money consider opportunity costs
- look beyond tariffs when assessing cases of inability to pay
- cost-recovery must be based on lifecycle costs
- tackle the cost of corruption (bribes, kick backs, irregularities in tendering and procurement processes)
- consider the price of inaction
- consider the price of poor governance



AFFORDABILITY

What does the Special Rapporteur say?

In brief:

- avoid promoting economic & environmental sustainability at the expense of social sustainability
- take note of the fact that overly high costs for sanitation services will reduce rates of use, and lead to environmental damage and poor health, which represent hidden costs



AFFORDABILITY

What does the Special Rapporteur say?

And on monitoring:

- monitoring affordability is not a straightforward process
- affordability is complex and difficult to measure:
e.g. income levels are hard to assess
- measuring the impacts of poor affordability is challenging



Manual of the Human Rights to Safe Drinking Water and Sanitation for Practitioners

Lead Author: Robert Bos

Contributing Authors: David Alves, Carolina Latorre, Neil McCleod, Gérard Payen, Virginia Roaf & Michael Rouse

The *Manual of the Human Rights to Safe Drinking Water and Sanitation for Practitioners* aims:

- To introduce the principles and concepts contained in the United Nations resolutions recognizing the Human Right to Safe Drinking Water and Sanitation (HRWS)
- To clarify the language and terminology used in the promotion of human rights, and
- To provide guidance on the roles and responsibilities for everyone who contributes to the progressive realization of the HRWS, and on how the human rights principles and actions can be incorporated into their essential functions.

The Manual highlights the human rights principles and criteria in relation to drinking water and sanitation. It explains the international legal obligations in terms of operational policies and practice that will support the progressive realisation of universal access.

The Manual introduces a human rights perspective that will add value to informed decision making in the daily routine of operators, managers and regulators. It also encourages its readership to engage actively in national dialogues where the human rights to safe drinking water and sanitation are translated into national and local policies, laws and regulations. Creating such an enabling environment is, in fact, only the first step in the process towards progressive realisation. Allocation of roles and responsibilities is the next step, in an updated institutional and operational set up that helps apply a human rights lens to the process of reviewing and revising the essential functions of operators, service providers and regulators.



iwapublishing.com

@IWAPublishing

ISBN: 9781780407432 (Paperback)

ISBN: 9781780407449 (eBook)



8.50 x 11.00
280 mm x 216 mm

.249
6.324mm

Manual of the Human Rights to Safe Drinking Water and Sanitation for Practitioners

Robert Bos



Manual of the Human Rights to Safe Drinking Water and Sanitation for Practitioners

Lead Author: Robert Bos

Contributing Authors: David Alves, Carolina Latorre, Neil McCleod, Gérard Payen, Virginia Roaf & Michael Rouse



8.50 x 11.00
280 mm x 216 mm

Thanks to friends and colleagues at

WHO and UNICEF

(Rick Johnston, Tom Slaymaker)

and at IWA

(Carolina Latorre and Diana Guio)