



**WATER
FOREVER**

Digital Water Infrastructure
for Generations

THE FOUNDING DOCUMENT
JULY 2026

Building Digital Water Infrastructure

A vision for the next generation
of **water** infrastructure.



“ The next generation of water infrastructure
begins with **intelligence**. ”





The Opportunity Before Us

Humanity has always built the infrastructure its future demanded. **Water** is no exception.

From ancient civilizations to modern nations, access to reliable water has shaped our progress and our prosperity.

Today, more people, more cities and a changing climate are placing unprecedented pressure on our water systems.

This moment presents a rare opportunity—an opportunity to build the next generation of water infrastructure and secure a better future for **generations to come**.

ANCIENT

Wells, ponds and canals sustained early civilizations.

INDUSTRIAL

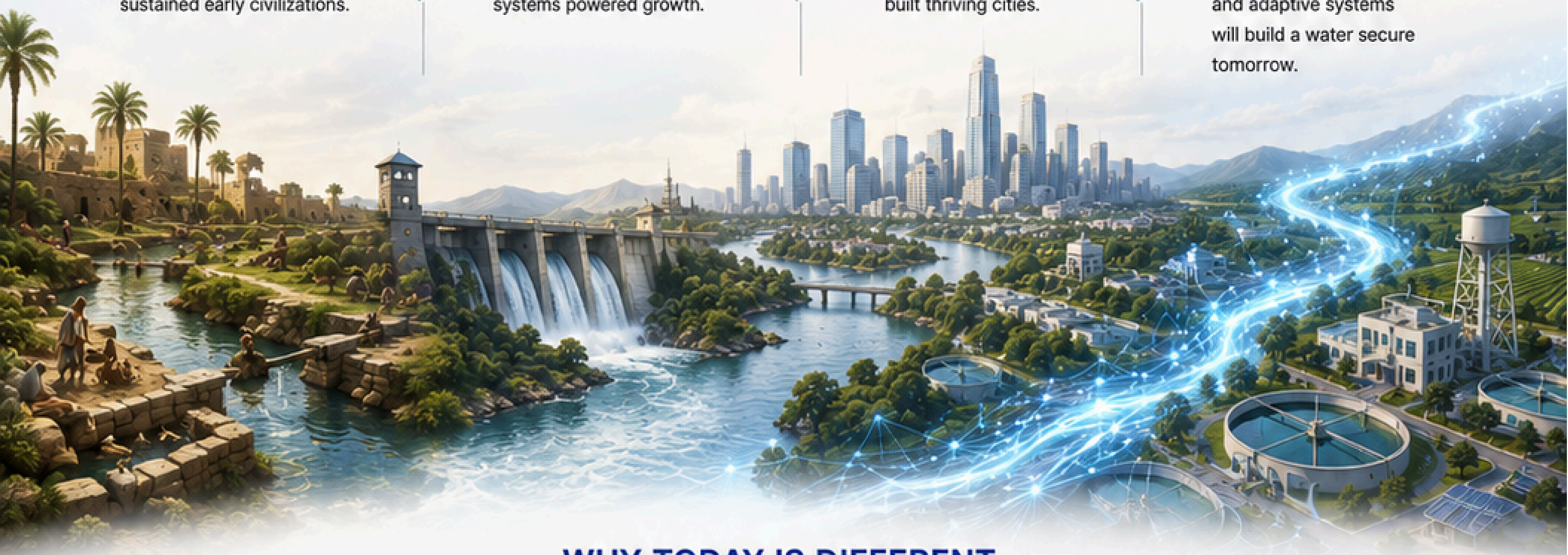
Dams, pipelines and treatment systems powered growth.

MODERN

Advanced infrastructure built thriving cities.

NEXT GENERATION

Intelligent, connected and adaptive systems will build a water secure tomorrow.



WHY TODAY IS DIFFERENT

Unprecedented pressures demand a new kind of infrastructure.



POPULATION

Rising population and growing demand for every drop.



URBANIZATION

Expanding cities straining limited water resources.



CLIMATE CHANGE

More extremes, more uncertainty, more risk.



FOOD SECURITY

More food needed with less water available.



WATER STRESS

Increasing pressure on every source, every season.

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Every generation built the infrastructure its time demanded. Our generation has the **opportunity** to build the digital layer.

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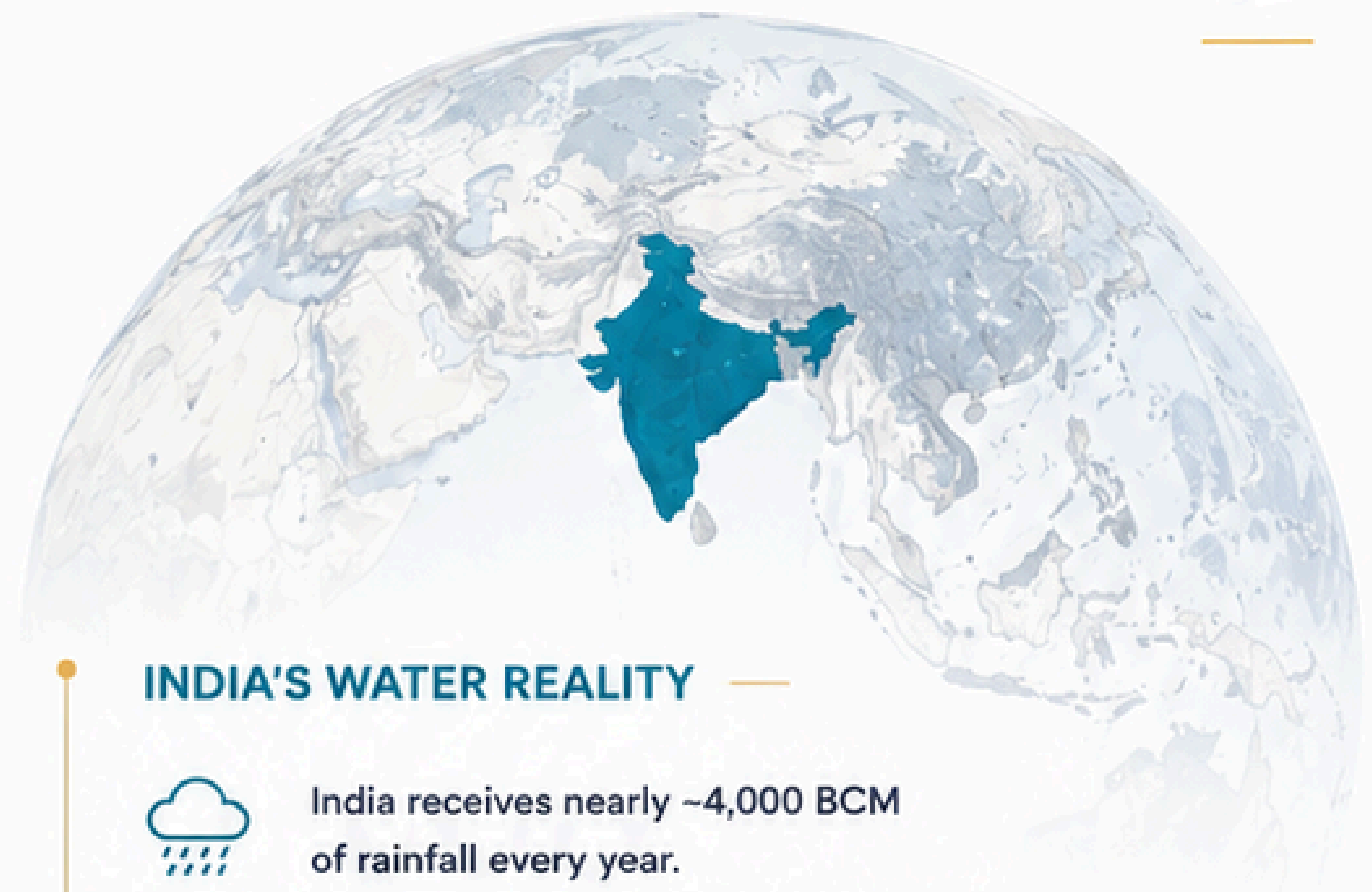




Why Now? The New Water Reality

Water is finite. Demand is rising.
Our ability to manage it—together—
has not kept pace.

The world has entered a new water reality.



INDIA'S WATER REALITY



India receives nearly ~4,000 BCM
of rainfall every year.



Yet only ~1,123 BCM (~28%) is utilizable
(surface + groundwater).



The challenge is not just availability.
It is access, efficiency and visibility.



18%

WORLD POPULATION

But only ~4% of the
world's freshwater
resources.



**~4,000
BCM**

AVERAGE ANNUAL RAINFALL IN INDIA

One of the highest
in the world.



**~1,123
BCM**

UTILIZABLE WATER (SURFACE + GW)

Only ~28% of total
rainfall is utilizable.



~80–85%

WATER WITHDRAWALS USED FOR IRRIGATION

Agriculture is the
largest consumer.



**~600
MILLION**

PEOPLE IN INDIA

Face high to extreme
water stress
(Projected)

Sources: NITI Aayog, MoJS, CWC, IMD, FAO AQUASTAT, World Resources Institute

1. MORE UNCERTAIN

Water is becoming less predictable.



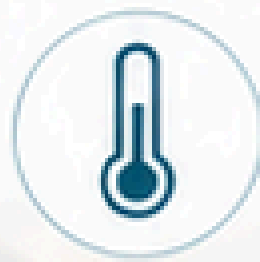
More Extremes

Floods and prolonged
droughts are now
more frequent.



Unpredictable Rainfall

Changing patterns
disrupt water availability
across seasons and regions.



Rising Temperatures

Higher evaporation and
heat stress reduce water
security.



2. RISING DEMAND

Water is under growing pressure



By 2050

1.7 BILLION

more people to feed,
house and support



Urban Population

~600 MILLION

Indians will live in cities
by 2050.



Food Demand

~70%

more food required
by 2050

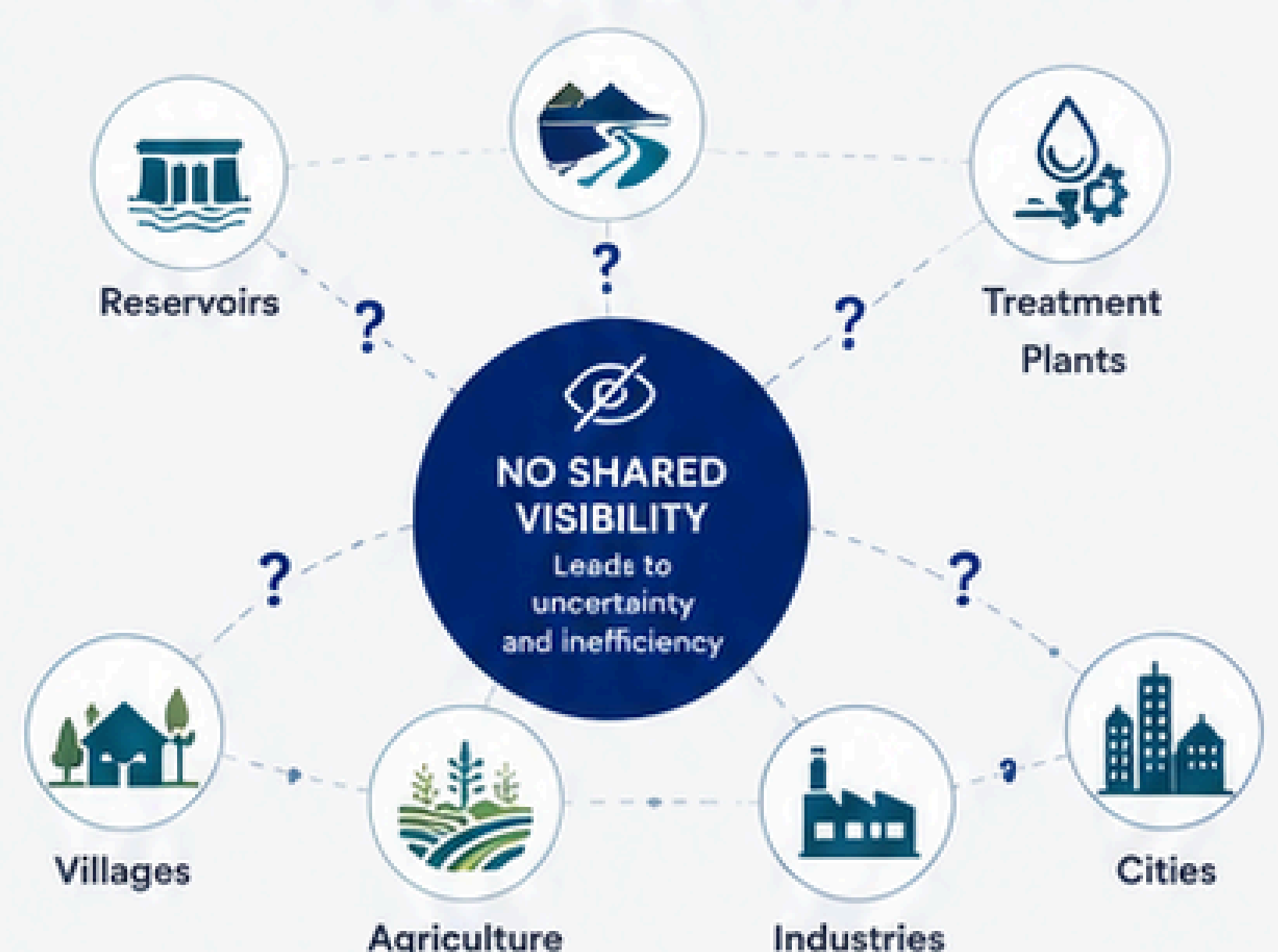


Industrial Growth

Expanding industries
need reliable and
quality water

3. INVISIBLE WATER

Our water systems are physically connected,
but our information is not.



Decisions on allocation, releases and investments are
still made with partial data, delayed data or no data at all.
This is the biggest risk to our water future.

“ Abundant water. Rising demand. Limited visibility.
The time for intelligent, connected and adaptive
water management is now. ”





Digital Water Infrastructure

The intelligence layer that connects our water ecosystem.

Just as digital navigation made road networks intelligent, Digital Water Infrastructure does the same for water.



CORE FUNCTIONS

- Monitoring
- Insights
- Forecasting
- Decision Support

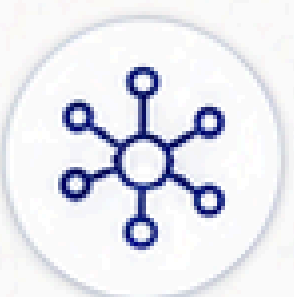
DIGITAL WATER INFRASTRUCTURE

A shared intelligence layer that continuously observes, connects and coordinates the entire water ecosystem.

PHYSICAL WATER INFRASTRUCTURE

- Reservoirs & Dams
- Rivers & Canals
- Pipelines
- Treatment Plants
- Farms, Communities & Cities

One digital layer. Infinite connections.



CONNECT EVERYTHING
From sensors to systems, people to processes.



UNIFY INFORMATION
Break silos and create a single source of truth.



GENERATE INSIGHT
Turn data into insights with advanced analytics and AI.



TRUSTED INFORMATION
Secure, reliable and interoperable by design.



ENABLE ACTION
Deliver the right insights to the right people at the right time.

“ Digital Water Infrastructure is the intelligence layer that enables existing water infrastructure to function as one connected system. ”

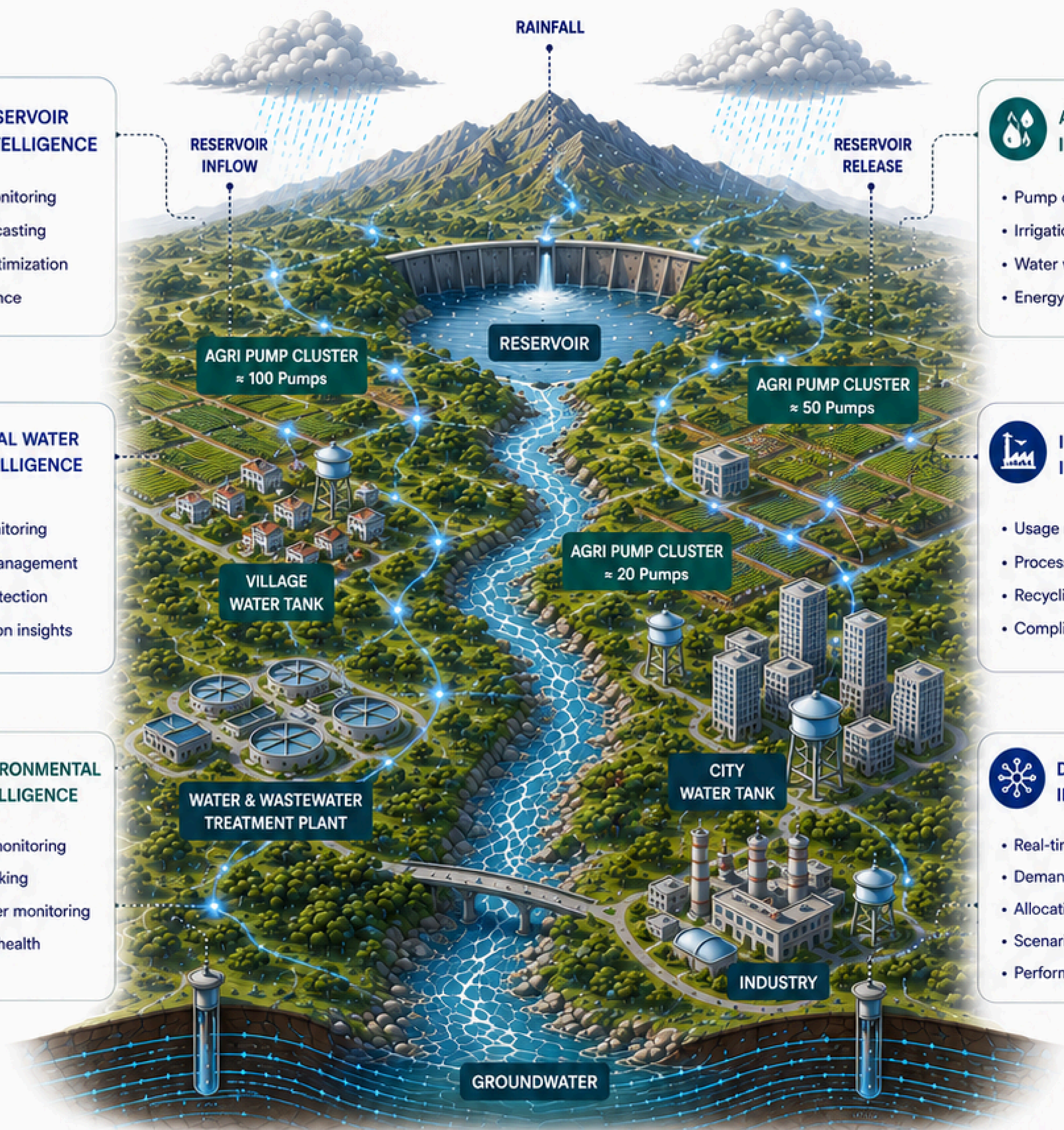




One Watershed. One Connected System.

One watershed. Many assets.
Continuous intelligence.

Digital Water Infrastructure connects every part of a watershed, enabling water to be observed, coordinated and managed as one living system.



📍 Illustrative Demonstration Cluster | Mandala Talab Watershed, Maharashtra

“

A water ecosystem is not a collection of assets.
It is one living system. Digital Water Infrastructure enables it
to be observed, understood and managed as one.

”



What Becomes Possible

**Intelligence turns
infrastructure into impact.**

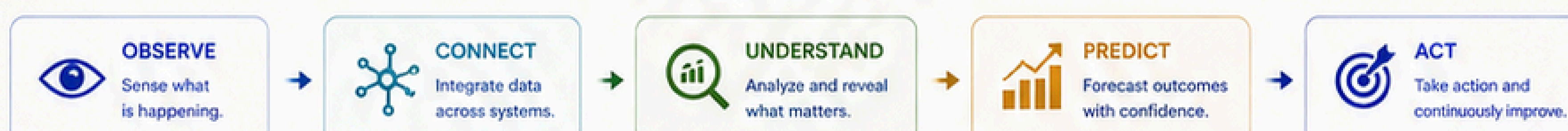
When every drop of information flows as seamlessly as water,
better decisions emerge—across every sector, every community
and every generation.



One platform.
Many capabilities.
Infinite impact.



THE INTELLIGENCE CYCLE



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When every part of the water ecosystem can share intelligence with every other part, better decisions become possible.

One connected foundation. Infinite possibilities.

”

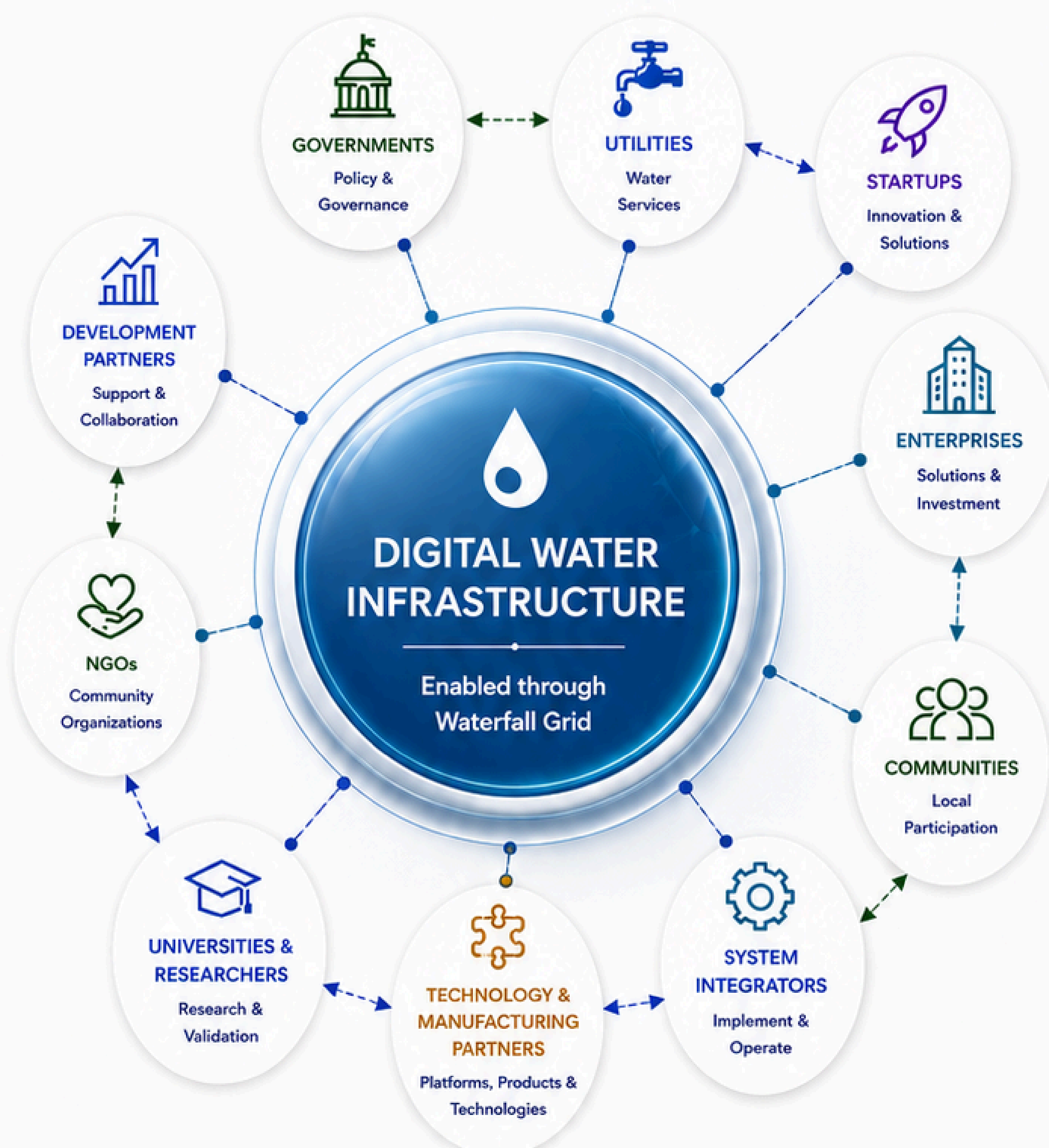
Open by Design

Many organizations.
Shared intelligence.
One common purpose.

Digital Water Infrastructure is designed to grow through open collaboration. Governments, utilities, researchers, industry, startups and communities each contributes unique capabilities while strengthening the ecosystem as a whole.

“Every contributor strengthens the ecosystem while continuing to create value in its own domain.”

Enduring public infrastructure grows stronger when many organizations are free to contribute, innovate and learn together.

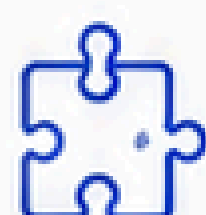


Five principles guide everything we build.



OPEN PARTICIPATION

Anyone can participate, contribute and innovate. Built on transparency, trust and inclusion.



INTEROPERABILITY

Works across devices, systems and standards. No lock-in. Designed to connect.



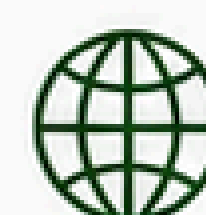
BUILD THROUGH EVIDENCE

Grounded in data, research and real-world practice. Evidence guides every decision.



SHARED LEARNING

Every implementation creates knowledge that strengthens the whole ecosystem.



BUILT FOR GENERATIONS

Designed for resilience, long-term impact and the well-being of future generations.



Every contribution strengthens humanity's
Digital Water Infrastructure.
Built together. Sustained for generations.

BUILT ON REAL-WORLD EXPERIENCE

Our work is grounded in real-world implementations, research collaborations and innovation programs.



And many more partners across India and the world.

Now, Let's Build It Together.

Previous generations built the reservoirs, canals, pipelines and treatment systems that sustain our lives today. Our generation has the opportunity—and responsibility—to build the digital layer that will help future generations manage water wisely, equitably and sustainably.

The future of water
is something we choose to build.

“

We do not inherit
water from our
ancestors.

We borrow it from
our children.

Let us return it
better.

”



Who can build this together?



GOVERNMENTS

Policy, governance
and public outcomes.



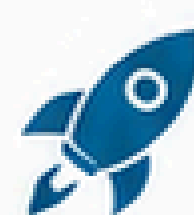
UTILITIES

Reliable services
and operations.



RESEARCHERS

Knowledge, evidence
and innovation.



STARTUPS & INNOVATORS

Solutions, technology
and scale.



ENTERPRISES

Investment, collaboration
and shared value.



COMMUNITIES

Local knowledge,
participation and impact.



Water Forever is an **open movement** to accelerate the creation of Digital Water Infrastructure across the world—bringing together governments, communities, researchers, innovators and enterprises around one shared mission.



Join the Water Forever Initiative

If this vision resonates with you, we invite you to collaborate, contribute, pilot, research, innovate, or help build the Digital Water Infrastructure of the future.



waterforever.org



jasveer@wfmil.in



+91-9421058160



JOIN THE INITIATIVE

Jasveer Singh

Founder, Water Forever Initiative

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Built together. Sustained for generations.

