

The United Nations Conference on the Midterm Comprehensive Review  
Implementation of the Objectives of the International Decade for Action,  
“Water for Sustainable Development”, 2018–2028

**National Contribution to the Concept Papers**

**Israel**

**I. Introduction**

It is our duty as well as professional obligation to contribute to the global efforts to achieve SDG 6, ensuring clean water and sanitation for all.

With regards to SDG 6, our mission is clear: to solve our global, regional and national water scarcity challenges through technology and innovation, people-centered capacity building, knowledge sharing, and humanitarian aid where needed.

**II. Overview of the challenge, current status and interlinkages**

Israel is an arid land that has been experiencing water stress and droughts for centuries. Only in the past two decades Israel has faced three major waves of water crises, but managed to transform and supply our water needs and ensure we will be able to do so for decades to come.

From our experience, SDG 6 is clearly linked to other sustainable development goals, such as Zero Hunger, due to the need for clean water in agricultural use and throughout the food system. Water has also been an important driver to advance SDG 16 and promote regional cooperation and stability in the Middle East. Another interlinkage from our experience is the value promoting clean reusable water has for our environment, and specifically to support SDGs 14 and 15 and preserve our ecosystem.

**III. Overview of opportunities for progress and transformative solutions**

Israel’s water scarcity led us to focus on innovation. We understood that what we need is a holistic, integrative and professional solution that promotes actions that contribute to both water savings and water production. Israel’s success in ensuring efficient water

management and security was accomplished through a reform that comprises all the principles that stand at the center of the International Decade for Action and the Water Conference:

- Governance and regulation
- Water production capacity and infrastructure development
- Data and information, monitoring and advanced assessment
- Promoting innovation
- Developing a stable and independent financing system

In the regional level, water is the basis for our cooperation with our neighboring countries and all countries facing the increasing challenges of climate change. In accordance with current agreements, Israel supplies water to the Kingdom of Jordan and the Palestinian Authority in the amount of about 100 cubic meters each.

Following the Abraham Accords, various cooperation frameworks were signed with the United Arab Emirates and the Kingdom of Jordan. Israel's national water company – Mekorot, has signed several frameworks with the United Emirates and Morocco. In COP27 Israel continued the efforts to promote regional cooperation and signed two additional initiatives with the Kingdom of Jordan.

## **1. Data and information**

**Reducing water loss (NRW)** - leakage monitoring technologies and technologies for repairing pipelines from the pipeline itself and smart regulation that encourages compliance with low water depreciation goals allow Israel to detect leaks in almost real time and to quickly repair them. This results in a minimal water loss of between 5-8 percent. In addition, covering more surface water reservoirs with solar panels will not only advance renewable energy production, but also further reduce water loss through evaporation.

**Monitoring of water sources - quality and quantity** - sampling, measurement and monitoring are one of the cornerstones in the management of the Israeli water sector. Monitoring all water sources, at every stage, allows Israel to maintain a high quality of water sources and avoid overexploitation and loss;

## **2. Capacity development**

Globally, in addition to large scale private business activities, Israel operates more and more in cooperation with developing countries. Most of the cooperation activities are coordinated by:

- The Israeli Water and Sewerage Authority
- MSHB - a training, capacity building and aid facility
- The Export Institute - connecting partners on a commercial basis
- Wateredge – a water innovation community
- The Israel Meteorological Institute.

The highlights of the activity in 2023 include:

- Establishment of centers of excellence for water management, desalination and wastewater reclamation in India;
- Continued cooperation with Kazakhstan and Uzbekistan in cooperation with UNEP;
- Research and practical cooperation between the Israeli Water Authority and the Mekong Institute;
- Triangular, research and practical cooperation with Morocco;
- Continued humanitarian aid to Ukraine in the water sector;
- Training in the field of research data between Israeli experts and experts from several countries in Africa, Asia, Eurasia and the Pacific;
- Water management courses in four languages at the MSHB center in Israel.

MASHAV, Israel's agency for international development cooperation is active in many regions of the world with a focus on developing countries, inviting professionals to Israel, assisting in the projects of our alumni, forming dialogue with governments and international organizations, and much more. We recently sent the first-ever MASHAV water expert to India for a period of two years, to conduct consultations and training. MASHAV also works closely with the different UN bodies and through triangular cooperation activities to advance water cooperation, capacity building and knowledge sharing.

### **3. Innovation**

**Creating suitable water from new water sources and reclaiming water for reuse** - seawater desalination facilities in Israel supply almost all private and municipal water use in Israel. Wastewater treatment and the recovery of sewage water enables their reuse in agriculture and provides 85 percent of the water used for agriculture. On a smaller scale, technologies for condensing water from the atmosphere are becoming more and more efficient, including capture of condensing dew. All of the above allow Israel to turn surface and underground water reservoirs into emergency water reservoirs – returning rainwater as well as purified water into aquifers and maintaining surface reservoirs. The peak will come soon, when it will be possible to flow desalinated water into the Sea of Galilee, which until recently was Israel's main source of water.

**Prevention of pollution** - a branched system of pipes for the collection of sewage, together with strict monitoring and pollution regulation systems allows Israel to purify 95 percent of its sewage water.

**Purification of lakes and streams** – sewage capture prevents sewage discharge into streams and other water sources and enables their restoration. The surplus of produced water makes it possible to increase the allocation of fresh water for the restoration and preservation of nature.

**Precision agriculture** – smart irrigation, drip or otherwise, together with monitoring technologies for precise irrigation and fertilization enables Israeli farmers to obtain larger crop yields and of higher quality using less water.

### **4. Governance**

**Life-long education and awareness** – in face of the constant gap between water supply and demand, water-efficiency education is necessary. After consecutive years of drought, Israel embarked on a large-scale campaign to mobilize the public and raise awareness to the need for sustainable water use. The campaign greatly contributed to dealing with the water crisis and to significantly reduce water consumption.

**Regulation** – major reforms in water related laws and regulations to insure IWRM approach and sustainable development.

#### **IV. Recommendations**

Building a strong infrastructure helps us in building a solid base from which it was easier for us to get closer to achieving the goals to be discussed in the Conference. It is easier to reach a good level of sanitation and hygiene when the water management approach looks at the whole water chain – from water source through sewage treatment and reuse. It is easier to strive for regional cooperation when you can share your experience of facing similar challenges. It is easier to make a plan for climate change adaptation when you have a proven water management system. It is easier to boost the sustainable agriculture and provide greater food security when you can grow more food with fewer resources – including water, fertilizer and land – because you have the latest proven agricultural technologies and the skills to use them. And it is easier to transfer knowledge and build capacity when partners can come and see for themselves that SDG6 is achievable.

The international community has come a long and impressive way in the last five years. We wish to highlight the importance of sharing experiences in water management to develop a global strategy that optimizes the utilization of resources and assists in adapting solutions to the relevant challenges.