# Integrated Approaches for Sustainable Development Goals Planning: The case of Goal 6 on Water and Sanitation









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### Sustainable Development Goals



End poverty in all its forms everywhere



Reduce inequality within and among countries



End hunger, achieve food security and improved nutrition and promote sustainable agriculture



Make cities and human settlements inclusive, safe, resilient and sustainable



Ensure healthy lives and promote well-being for all at all ages



Ensure sustainable consumption and production patterns



Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



Take urgent action to combat climate change and its impacts



Achieve gender equality and empower all women and girls



Conserve and sustainably use the oceans, seas and marine resources for sustainable development



Ensure availability and sustainable management of water and sanitation for all



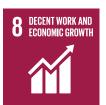
Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss



Ensure access to affordable, reliable, sustainable and modern energy for all



Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels



Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all



Strengthen the means of implementation and revitalize the global partnership for sustainable development



Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



## **Abbreviations**

CED Centre for Environment and Development

ESCAP United Nations Economic and Social Commission for Asia and the Pacific

FAO Food and Agriculture Organization of the United Nations

GEMI UN-Water's Integrated Monitoring of Water and Sanitation-Related SDG

Targets Initiative

ICSD Interstate Commission on Sustainable Development in Central Asia

ICSU International Council for Science

ICT Information and Communications Technology

ICWC Interstate Commission on Water Cooperation in Central Asia

IGES Institute of Global Environment Strategies

IUWM Integrated Urban Water Management

IWMI International Water Management Institute

MSDW Ministry of Sustainable Development and Wildlife

OECD Organisation for Economic Co-operation and Development

SDGs Sustainable Development Goals

SIC Scientific Information Centre-Tajikistan

UN DESA United Nations Department of Economic and Social Affairs

UNECE United Nations Economic Commission for Europe

UNEP United Nations Environment Programme

UNESCO United Nations Educational, Scientific and Cultural Organization

UN Habitat United Nations Human Settlements Programme

UNICEF United Nations International Children's Emergency Fund UNIDO United Nations Industrial Development Organization

WHO World Health Organization
WTO World Trade Organization

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# **Executive Summary**

Since the adoption of the 2030 Agenda for Sustainable Development in 2016, scientist have been studying its "indivisible whole" nature, with the objectives to propose viable methods and tools for integrated planning of the implementation of the 17 SDGs. The three dimensions of sustainable development as outlined by the 2030 Agenda—economic prosperity, social justice and environmental protection—are viewed as "intertwined", like three strands of the DNA. The 17 SDGs have a clear starting point in one of the three dimensions of sustainable development and embed all three dimensions within their targets. Furthermore, their 169 targets were developed through an inclusive and comprehensive process that considered diverse sector-based specializations and perspectives. As such the 17 SDGs and their targets are closely interlinked and require innovative and unconventional policy approaches, such as those focusing on the intersections (meeting points), interlinkages and complex causal relationships, which require multidisciplinary methods for developing implementation strategies to achieve the complex but aspirational 2030 Agenda.

This publication introduces methods available to describe, understand and measure relationships and interconnectivity among the SDGs and options for their application. The core of the publication explains how the systems thinking approach was applied by the ESCAP team of experts from the Environment and Development Division of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) to analyse the interlinkages and dependencies among the 17 SDGs and their 169 targets. To simplify the explanation, the ESCAP team of experts singled out SDG 6 on water and sanitation to demonstrate how its targets are interlinked with each other and with other SDG targets. Lessons learned through piloting modelling in Sri Lanka, Tajikistan and Fiji are shared and further analyses with other SDGs at the focus are provided.

The systems thinking approach is most suitable to complex problems; it enables a bird's-eye view of the whole system by applying systems dynamics to the connections between the components of the system—in this situation, the environmental, social and economic or policy-related components—and understanding the behaviour or interests these connections generate. It also allows better engagement of stakeholders and their active participation in imagining plural and

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