



CASE STUDY

National Planning and the 2030 Agenda for Sustainable Development in Tajikistan

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A. The need for clarity on links and trade-offs

The two most important conditions for the transition of Tajikistan to sustainable development are preservation of its natural ecosystem and untouched/little-affected natural resources. Tajikistan has large reserves of hydropower resources and freshwater, a variety of minerals, favourable conditions for the cultivation of organic food and real opportunities for ecological tourism. The country's reserves of hydropower resources rank eighth in the world.¹

Since 1998, the National Commission for Sustainable Development has controlled decision-making processes on associated issues through the coordination of activities of ministries and departments. Tajikistan began as early as 2000 to achieve the parameters of the sustainable development concept, pledging to meet its obligations under Agenda 21 (Rio de Janeiro, 1992), the Millennium Development Goals, adopted at the Millennium Summit of United Nations (New York, 2000) and the Johannesburg Environment and Development Declaration (Rio+10, Johannesburg, 2002). Poverty reduction was also recognized as a priority for economic and social policy.

A Concept of Transition of the Republic of Tajikistan to Sustainable Development decree was adopted in 2007 to guide the achievement of the MDGs. This Concept positions sustainable development as a subsystem of global sustainable development. Its national objectives are the goals set forth in the international declarations and agreements. The goal of the country's transition to sustainable development is to achieve sustainable socioeconomic development while maintaining a favourable natural environment and rational use of natural resources to meet the needs of present and future generations, and to achieve a new quality of life for all people and ecosystems.

¹ Ministry for Energy and Industry of the Republic of Tajikistan, 2013. Tajikistan Towards Development of Sustainable Energy, Energy Charter, Regional Energy Cooperation in Central and South Asia, Astana 7 October 2013. http://www.energycharter.org/fileadmin/DocumentsMedia/Events/20131007-9RECA_S2_FBilolov.pdf



The priority is to solve the problem of ensuring environmental well-being through the protection and rational use of the natural resources as well as environment-friendly production, urban development and infrastructure.

Tajikistan is a member of the Economic Cooperation Organization, the Interstate Commission for Water Coordination, the International Aral Sea, the Interstate Commission on Sustainable Development and the party of the Environment for Europe and the Environment and Sustainable Development for Asia.

Tajikistan joined with the other four Central Asian States in the Invitation to Partnership on Implementation of the Central Asia Initiative for Sustainable Development, which notes the geopolitical importance of Central Asia for conservation, enhancement of security, the preservation of life, health protection and conservation of biodiversity.

Tajikistan supported the United Nations Secretary-General's Sustainable Energy for All initiative, particularly because its future depends on the efficient use of its hydropower potential. In recent years, some 300 small and medium-sized hydroelectric power plants were built, with high-voltage power lines and a unified energy network. More attention is still needed on the construction of hydropower facilities in the mountain regions.

To improve living standards and ensure sustainable development, a long-term National Development Strategy (NDS 2030) was initiated in 2015, based on the medium-term development programmes for 2016–2020.

Priorities of NDS 2030 for SDG 6

Health and longevity

- Improve the accessibility, quality and efficiency of health services.
- Introduce models of healthy lifestyles.

The environment

- Develop the public service system.
- Increase the availability of a safe drinking water supply and improved sanitation.
- Strengthen incentives for environmental protection from the population and economic entities.

The economy (agriculture)

- Promote more efficient use of land, water and human resources through better reclamation and irrigation.
- Promote reconstruction and rehabilitation of irrigation infrastructure and the introduction of energy-saving technologies for irrigation.

B. Major challenges and how systems thinking and the ESCAP framework helped address them

The formation of sustainable development in Tajikistan is closely connected with the tasks of building a socially oriented market economy, effective management, careful use of natural resources and the formation of a modern civil society.

National consultations on the 2030 Agenda and the SDGs revealed the following problematic areas:

- education
- health care
- employment
- non-equality
- the fight against corruption
- food security and nutrition



- good governance
- social protection
- prevention of conflicts and
- reliable energy, ecology and management of demographic processes.

The systems thinking model allowed for identifying the challenges to achieving sustainable, inclusive development while addressing the interlinkages between SDG 6 with other objectives of the 2030 Agenda. While developing the models and analysing interlinkages, a national team identified a critical relationship between SDG 6 and SDG 5 on gender equality. Their analysis considered the efforts of the Government to achieve gender equality while addressing critical needs of the female population in rural areas. This modelling created the opportunity for determining leverage points for application of an inclusive and effective multi-sector integrated approach based on human rights and access to resources for all.

The use of the modelling allowed the Committee on Women and Family Affairs to successfully advocate for synergies with the work of the Working Group on Water and Sanitation and the importance of gender aspects that influence SDG 6 activities. Recommendations for the improvement of cooperation mechanisms between the departments were formulated, based on the systems thinking modelling and the direct interlinkages between SDG 4 on education, SDG 5 on gender equality, SDG 6 on water and sanitation and SDG 16 on peace, justice and strong institutions.

The modelling also revealed gaps in information, which is important for decision-making. The available quantitative and qualitative data does not provide a full picture of the population's access to water or the existing access-related challenges, for example. Thus, the capabilities of those responsible for policy measures to respond appropriately are limited. The model further showed the need to improve data sources, including statistics, and indicators of production that will allow comparisons with regional and global data.

The model also reinforced the need for involvement from a range of stakeholders, including from academia, the private sector, the public sector, civil society and donors. The lack of coordination between them often leads to duplication and dilution of foreign aid-related impact.

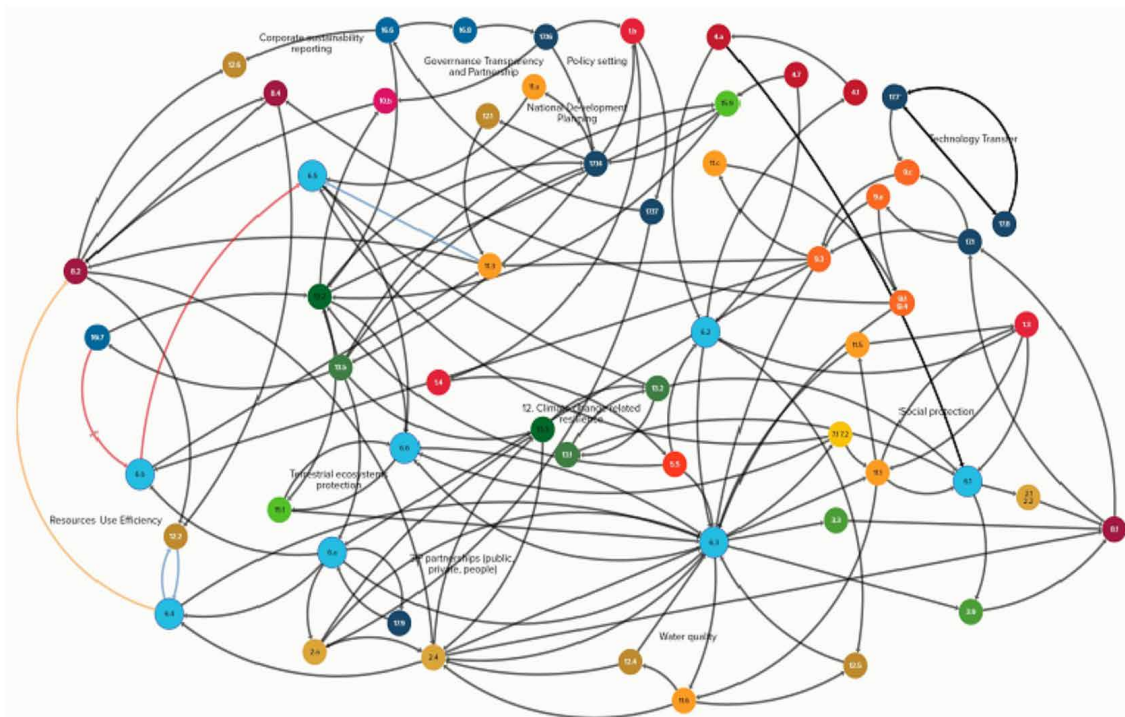
C. Developing systems thinking modelling for SDG 6 targets in an integrated manner

To illustrate relationships between all SDG 6's water and sanitation targets and the targets of the other 16 SDGs, a web-based software tool (www.kumu.io) was used. The eight water and sanitation targets of SDG 6 were first mapped; then, the targets with direct links with the other 16 goals were mapped, resulting in an overall systems diagram with causal loops.

The eight targets of SDG 6 were analysed through an interlinkage relationship matrix against each other and with all the other 169 targets. Direct and indirect linkages were determined, based on the degree of influence from the specific water target (the systems linkage map does not include indirect links).

The direction of influence was identified for each link. Direct links are those with 1–2 degrees of causal influence separating the two targets. All linked targets can be either a driver (causal influencer) of another target or be driven (be causally influenced) by the respective water target.

Each specific goal is assigned a colour. The eight water targets are situated in an elliptical pattern. Nodes found in the centre of the diagram are those that are most connected to multiple SDG 6 targets. Nodes with links to only one or two SDG 6 targets tended to be on the periphery.



The quantitative model is based on the analytical results of direct interlinkages and looked at cause-and-effect relationships between the SDG targets with direct interlinkages to SDG 6 targets. The previously-demonstrated quantitative model was further simplified to highlight possible feedback loops. The model eventually will be populated with indicators and data that are being collected.

The Government of Tajikistan is looking at developing its own indicators for monitoring the progress towards the SDGs—through their inclusion in the NDS 2030, mid-term development strategies, sector strategies and regional programmes.

Methodological support, guidance and localization of indicators, however, are needed to define what should be included in a sustainability report. It could include policies, laws and by-laws that encourage and enable sustainable practices and the integrating of sustainability information in companies' corporate reporting cycles for sustainable behaviour. Data were available for about 38 selected targets, according to the indicators, which were also generally understandable for the national context. The indicators need to be adjusted to the national context and would require clarification on the method of data collection.

In the process of the modelling and data collection, the national team, with support from the Ministry of Energy and Water Resources, gathered participation and inputs from the following ministries and agencies: the Ministry of Health and Social Protection of the Population, the Ministry of Education, the Ministry of Finance, the Ministry of Economy and Trade, the State Statistics Committee, the Environmental Protection Committee, the State agency Tajikglavgeology, the State enterprise Khojagii Manziliyu Communal, the Committee on Emergency Situations, the State Investment and State Property Management Committee, the Hydrometeorology Agency, the Forestry Agency and the Committee on Women and Family Affairs.

Significant challenges included difficulty in collecting data according to the proposed indicators, and a lack of understanding and knowledge of how to gather information, especially on water-related SDG indicators. There is need for training and guidelines (additionally, in the Russian language) on how to estimate or evaluate the extent of progress towards the achievement of SDG 6 and its related indicators.



D. Outcomes of the modelling and analysis

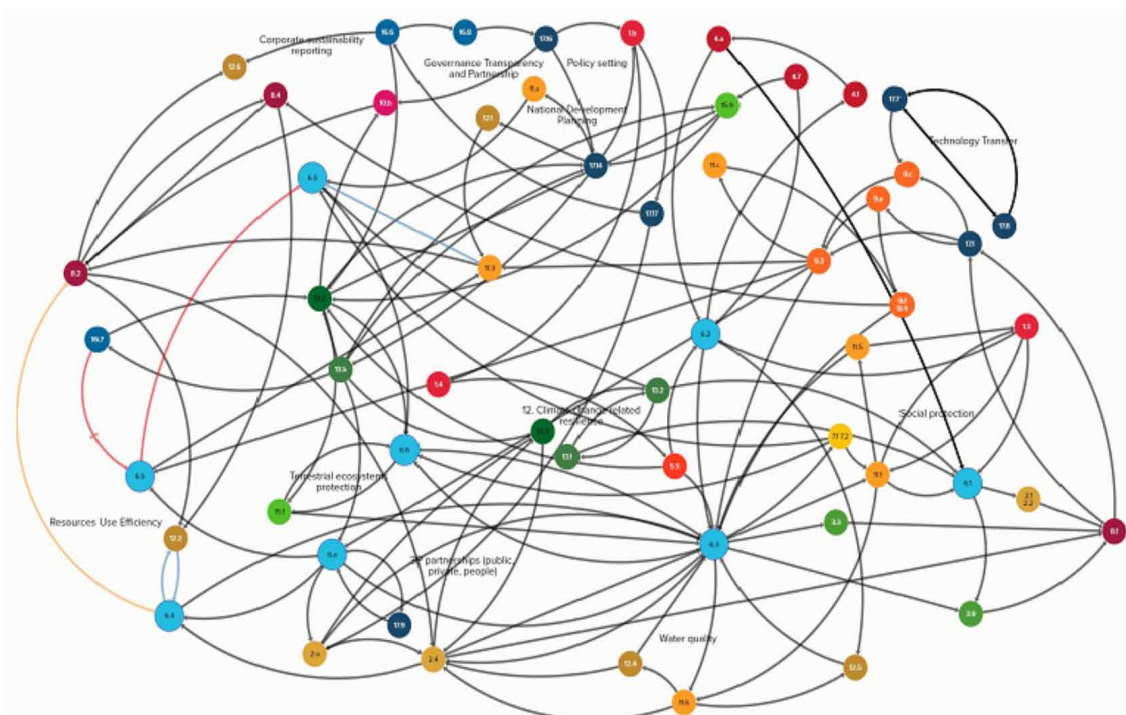
The development of good governance, transparency and partnerships were considered necessary for a sound policy framework for pro-poor and gender-sensitive strategies for poverty eradication planning (target 1.b).

Corporate sustainability reporting (target 12.6) can influence and is influenced by the prioritizing of higher levels of economic productivity (target 8.2) and global resource efficiency through sustainable consumption and production, which drives the decoupling of economic growth from environmental degradation (target 8.4). Especially in Tajikistan, where the natural resource base is declining, the 2030 Agenda emphasizes its conservation, for which conscientious reporting frameworks (target 12.6) can help monitor progress. Economic productivity (target 8.2) depends on freshwater-use efficiency (target 6.4), which is enhanced by capacity-building support for water harvesting, desalination, recycling and wastewater treatments (target 6.a). Improving water-use efficiency (target 6.4) also feeds back into reduced water pollution and sustainable wastewater management (SDG 6.3).

Water quality (target 6.3) is considered an important leverage point because it depends on multiple factors (target 12.5 on waste generation, target 15.1 on terrestrial ecosystem conservation and target 2.4 on food production systems) that can lead to multi-sector changes, including reduction of waterborne diseases (target 3.9) and resilient basic services in urban settlements (target 11.1). Good water governance, especially for transboundary Central Asia water quality (target 6.3), can reinforce the feedback loop between integrated water resources management (target 6.5) and water-related ecosystems (target 6.6).

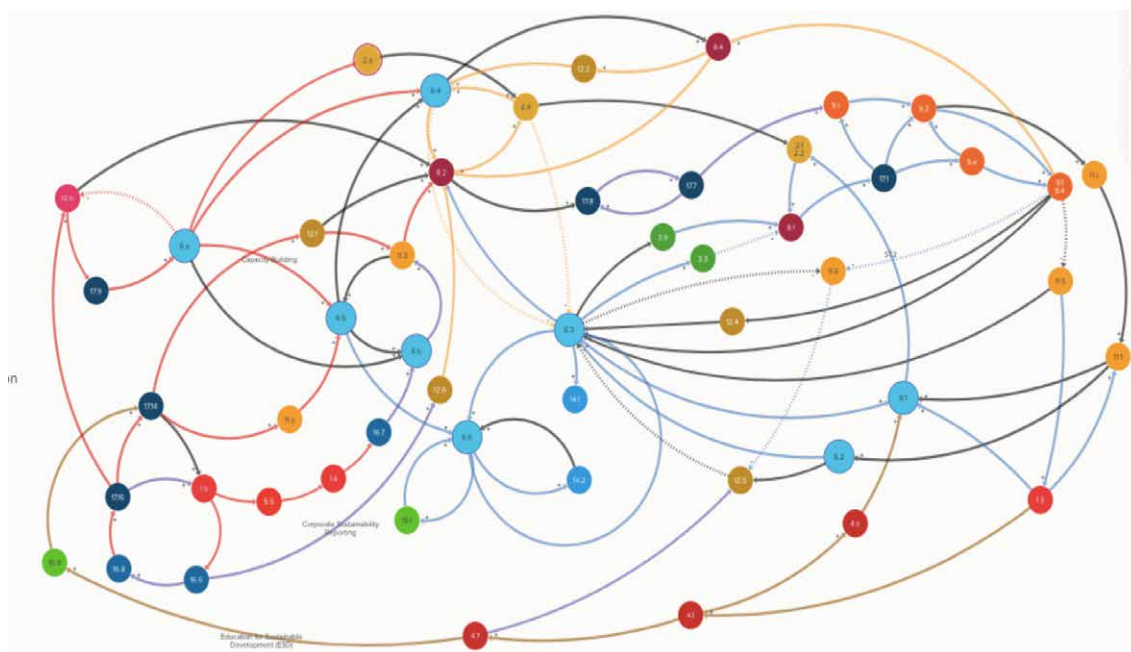
Water governance (target 6.a) through public-private partnerships (target 17.9) can also improve climate change resilience (target 13.1), mitigation efforts (target 13.3) and integration of climate change into Tajikistan's national planning (target 13.2), thereby improving social protection systems (target 1.3) and universal access to safe drinking water (target 6.1) as well as education facilities (target 4.a). And it can influence the situation of hunger and malnutrition (targets 2.1 and 2.2). Tajikistan's sustainable development is tightly wound around its thorough management of water resources, as evidenced by its deep integration across all 17 SDGs.

Critical interlinkages and impacts on the overall implementation of the model (feedback loops)





Important cross-sections for short- and long-term interventions (key leverage points)



E. Recommendations

In a national workshop, participants took a two-step approach for finding interlinkages between SDG 5 and the other SDGs and for finding leverage points to achieve SDG 5, which allowed them to consider multiple variables of equal importance to better anchor system dynamics within the model. For most of the participants, it was the first application of the analytical framework, and the workshop sessions were short. However, they could appreciate the evolution of the systems thinking approach and observe its benefits to define interlinkages, causal loop relationships and even leverage points for policy interventions in the context of SDG 5 (as an example).

The national workshop generated several recommended follow-up actions:

- Include stakeholders from among the international NGOs that are active in the water and sanitation sector in the discussions of the model. The Committee on Women and Family Affairs is leading the Working Group on Women and Water, which could be an important stakeholder for further exploring the SDG 6 and SDG 5 interlinkages and for activities based on those interrelationships.
- Provide access to the updated model through an online channel to see how stakeholders' respective part of the model would look like and what are the leverage points and actions.
- Conduct an introductory course for stakeholders involved in water supply and sanitation work on the model as well and its application and use.
- Enhance the outreach and boost the effect by translating the training modules into Russian or Tajik languages, and make them available both online and offline, with the latter being particularly important for local-level authorities.
- Provide relevant training, guidelines and instructions for government officials, starting with line agencies and ministries, related to SDG 6 activities.
- Improve the monitoring and evaluation of SDG-related activities through a systems approach that integrates the various facets of water resources management.