

TA 4301-AZE: – Supporting River Basin and Flood Management Planning

Knowledge Summary

Azerbaijan is located between the Greater and Smaller Caucasus, on the west side of the Caspian Sea. A former Soviet Republic given independence in 1992, it immediately entered a period of economic decline, as its institutions and governance system adjusted to self-rule. Consequently, essential infrastructure for water management, irrigation, flood management and agricultural production was not maintained. In the late 1990's, development assistance was sought to halt the decline and rebuild the national economy.

Located in a seismically active zone, Azerbaijan has many microclimates, with high mountains (alpine), upland plateaux (temperate), floodplains (semi-arid) and lowland coastal hills (tropical). The country depends on trans-boundary rivers, from Turkey, Armenia and Georgia, and shares rivers with Iran and Russia. The climatic extremes include snow on the Caucasus Mountains that flows to the Kura-Araz River that divides the country as it traverses the fertile but dry floodplain in spring and summer. Monsoonal rains in the summer months then cause hill torrents in the foothills, and then combine with wet season trans-boundary inflows to cause flooding in the floodplain. Dry season trans-boundary river inflows can be heavily polluted due to industry, mining and urban waste drainage from the upstream countries.

With these extremes, repeated annually, Azerbaijan must adjust its water management practices and policy, to support optimal production from limited dry season flows, but protect the productive lands against recurrent floods. Certainty is needed for rural communities to secure their long-term future, with more reliable water supply for irrigation, and protection against hill torrents and large scale flooding from the Kura-Araz River. Azerbaijan faces complex risks – snowmelt, rainfall, erosion, floods, pollution, drought – and needs strengthened infrastructure and institutional capacity to manage them.

TA 4301-AZE “Supporting River Basin and Flood Management Planning” puts forward a development framework as a strategic plan to help the Government of Azerbaijan build agency capacity to regulate and manage water resources at the national level. Following international principles and practice, the report outlines the dialogue and workshops implemented to develop the planning framework, which defines action areas for the strategic plan. This framework highlights twenty action areas, with related matters and actions to be considered for implementation to address the prevailing water resources and flood management issues impacting on successful rural development in Azerbaijan.

The strategic plan covers: i) policy and principles; ii) institutional reform and working arrangements; iii) sector management; iv) strategic planning; v) capacity building; vi) international cooperation agreements in the water sector (shared boundary rivers and trans-boundary rivers); vii) basin/regional investigations; viii) local floodplain management plans; ix) information management and communication (monitoring, data management, communications and telemetry systems); x) standard analytical, planning and design methodologies and research; xi) food risk investigation and mapping; xii) land use planning and controls; xiii) early warning systems; xiv) emergency management arrangements (floods); xv) project, strategy and development funding (capital and recurrent costs); xvi) economic and financial management; xvii) structural measures construction and maintenance; xviii) public awareness and information strategy; xix) management of environmental aspects; and xx) complimentary strategies.