

REGIONAL AFFAIRS

Middle East

Loss of Mesopotamian Marshlands

In August, the United Nations Environment Programme (UNEP) released a study entitled "Mesopotamian Marshlands Report: A Call for Action."

The Report states that around 85 per cent of the marshlands, the largest wetland in the Middle East and one of the most outstanding freshwater ecosystems in the world, have been lost mainly as a result of drainage and damming. The study draws on historical and new satellite imagery to document graphically the scale and speed of their disappearance. It explains that despite warnings about the imminent decline of the Mesopotamian marshlands, there has been little immediate action to counteract this loss.

The marshlands comprise an integral part of the Tigris-Euphrates river system, and are located at the confluence of the two rivers in southern Iraq, and partially extend into Iran. The Report shows that these vast wetlands – which once covered between 15,000 and 20,000 square kilometres – now cover less than 1,300 square kilometres.

The cause of the decline is mainly a result of damming upstream as well as drainage schemes dating from the 1970s. The Tigris and the Euphrates are among the most intensively dammed rivers in the world. During the past 40 years, the two rivers have been fragmented by the construction of more than 30 large dams, whose storage capacity is several times greater than the volume of both rivers. By turning off the tap, dams have substantially reduced the water available for downstream ecosystems and eliminated the floodwaters that nourished the marshlands.

The immediate cause of marshland loss, however, has been the massive drainage works implemented in southern Iraq in the early 1990s, following the Gulf War. Although some of these engineering works were meant to deal with chronic salinisation in the inter-fluvial region, historically Mesopotamia's main environmental problem, they were expanded into a fully-fledged scheme to drain the marshlands. This has taken away the basis for existence of the population and meant a forced withdrawal from the area.

Recent satellite images provide hard evidence that the once extensive marshlands have dried up and regressed into desert, with vast stretches salt-encrusted. In addition, satellite imagery shows that only a limited area of the marshlands has been reclaimed for agricultural purposes.

A small northern fringe of the Al-Hawizeh marsh, straddling the Iran-Iraq border (known as Hawr Al-Azim in Iran) is all that remains. However, even this last vestige is rapidly dwindling as its water supply is impounded by new dams and diverted for irrigation purposes.

The collapse of the Marsh Arab society, a distinct in-

igenous people that has inhabited the marshlands for millennia, adds a human dimension to this environmental disaster. Around 40,000 of the estimated half-million Marsh Arabs are now living in refugee camps in Iran, while the rest are internally displaced within Iraq. A 5,000-year-old culture, heir to the ancient Sumerians and Babylonians, is in serious danger of disappearing.

The impact of marshland desiccation on the area's wildlife has been equally devastating, with significant implications to global biodiversity from Siberia to southern Africa. A key site for migratory bird species, the marshlands' disappearance has placed an estimated 40 species of waterfowl at risk and caused serious reductions in their numbers. Mammals and fish that existed only in the marshlands are now considered to be extinct. Coastal fisheries in the northern Gulf, dependent on the marshlands for nursery and spawning grounds, have also experienced a sharp decline.

Despite this tragic human and environmental catastrophe, UNEP believes that there is still hope. The Report states that bold measures need to be taken by the custodians of this natural treasure for the conservation of the remaining transboundary Al-Hawizeh/Al-Azim marshes before it is too late.

UNEP is therefore calling on Iraq and other riparian countries and international donors to give the Mesopotamian marshlands a new lease of life by re-evaluating the role of water engineering works and modifying them where necessary, with a long-term view to reinstating managed flooding.

UNEP proposes an integrated river basin approach involving the three main riparian countries (Iraq, Syria and Turkey as well as Iran for the Tigris tributaries) to manage decreasing water resources sustainably and reverse negative environmental trends in the region. To continue as at present would spell the wholesale ecological demise of lower Mesopotamia, and ultimately undermine the foundation of life for future generations.

The United Nations Environment Programme therefore urges riparian countries to re-initiate dialogue and adopt an international agreement on sharing the waters of the Tigris and Euphrates for the benefit of people and nature, and to ensure an adequate water supply to the marshes. To help stimulate and better advise this process, UNEP, in collaboration with regional organisations, is carrying out a comprehensive scientific assessment of the Tigris-Euphrates basin, which should provide the scientific foundation for the improved management of the twin rivers. (MJ)

