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Review

A review of the status and development of Kuwait's fisheries

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ABSTRACT

The status of Kuwait's fisheries landings and relative abundance for major species was reviewed using research data from Kuwait Institute for Scientific Research and landing data from the Kuwait's Central Statistical Bureau. Landing data showed significant decreases for major commercial species such as zobaidy (*Pampus argenteus*), suboor (*Tenualosa ilisha*), hamoor (*Epinephelus coioides*), newaiby (*Otolithes ruber*) and hamra (*Lutjanus malabaricus*) while abundance data for the shrimp *Penaeus semisulcatus* showed significant reduction in the recent years mainly because of overfishing. The catch-rate data showed continuous decline for major species such as zobaidy, newaiby and hamoor, which indicate that stock abundances of these species are low. The reduction in stock abundance in context with changes in habitat quality, particularly the effects of reduced discharge of the Shatt Al-Arab, is discussed.

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1. Introduction

Coastal communities of the Arabian Gulf have a long history of fish consumption. Fish was the most important source of protein of prehistoric coastal populations in the Arabian Gulf region (Beech, 2002). At several archaeological sites along the western Gulf, dating back 7000 years before present (ybp), fish bones account for the majority (up to 91%) of excavated faunal remains. At an archaeological settlement on Dubai Island just north of Kuwait Bay, also dating 7000 ybp, excavated fish remains accounted for 58% of the

total faunal assemblages. These assemblages include over 10 groups of fishes, with sharks, rays, groupers, seabreams, and jacks, being among the represented species (Beech, 2002). Fishing has always been a way of life in Kuwait, as fish represent one of the few naturally occurring renewable resources and a source of high-quality, fresh protein.

Occupying the western edge of the Mesopotamian shallow shelf of the northern Arabian Gulf, Kuwait lies within latitudes of 28 and 30°N, and longitudes of 47 and 49°E with a north-south coastline of 195 km. Being influence by the discharge of the Shatt Al-Arab River (Fig. 1), Kuwait's northern waters are somewhat estuarine and progressively increase in salinity toward the south. The Shatt Al-Arab estuary includes a submerged estuarine flat covering a shallow

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Fig. 1. Kuwait's sea area.

area not exceeding 10 m in depth, while the shelf slope extends along the coast south of Kuwait Bay to 20 m depth. The maximum depth of Kuwait's waters is less than 35 m. Tides are semi-diurnal and vary as much 3 m in amplitude. The prevailing climate is arid, with extremely harsh temperatures and high salinities. The highest and lowest mean seawater temperatures are 30.5 °C in July–August and 12 °C in January–February. Salinity fluctuates between 37 and

50 ppt due to the inflow of fresh water from the Shatt Al-Arab River caused by heavy rainfall during the winter, and melting of snow in Turkey, Syria, Iraq and Iran during the spring. The high salinity is due to the intensive evaporation of seawater during the hot summer months from May to October. The discharge of the Shatt Al-Arab River and topographical features, including extensive intertidal mud-flats, mud and/or sand bottoms, and coral reefs

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