Sea cucumber fishery in Tanzania: Identifying the gaps in resource inventory and management

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Abstract

In China there are about 20 species of edible sea cucumbers that have long been considered as a traditional medicine

and tonic food. Nutrient analyses show that either the body wall or the intestine of sea cucumber has a higher nutrient

value. The protein content of dried sea cucumber is more than 50 % in most edible species, while glucosaminoglycan

has been detected in sea cucumber providing evidence of the pharmaceutical value of the sea cucumber. The clinical

function of sea cucumber is reviewed in this paper. In order to meet the increasing demand and to protect the

natural resources, the highest priority for fisheries authorities has been given to seed production of sea cucumber

(Apostichopus japonicus) and to development of techniques for fanning and ranching. Sea cucumber fanning and

ranching is a key part of the aquaculture sector in northern China, including the Liaoning and Shandong Provinces.

The total landings from fanning reached over 5 800 tonnes (dry weight) in 2002, with the sea cucumber either directly

sold to restaurants or processed as dried edible and medicinal products. China has become the largest producer of

sea cucumber worldwide. Fanning methods and ranching techniques were introduced. The confusion of the quality

of and species used for processed products have become the main issues retarding market development, while overexploitation

of earthen ponds used for fanning sea cucumber could possibly induce a disaster similar to the shrimp

viral diseases experienced in the early 1990s. Suggestions for further development involves seed production, new

models of fanning and ranching, quality control of final products as well as proper resource management to protecting

these endangered species

Keywords: Apostichopus japonicus, nutrients, fanning and ranching, trade