The Fisheries Improvement Project, **Biological and Socioeconomic Findings**

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ABSTRACT

The Fisheries Improvement Project began in May 1989. A Canadian International Development Agency (CIDA) funded project associated with the University of West Indies Laboratory at Discovery Bay, Jamaica is an ongoing investigation of the biological and socioeconomic dynamics of the local artisanal

fishery. Results of the survey work are presented in this paper.

Fishermen in Discovery Bay work from two separate fishing beaches, Top Beach and Old Folly, with the former having the greater number of fishermen. Four types of fishing gear are customarily used: hooks and lines, nets, traps, and spears. Trapping and spearing generate the most income. Estimates of effort have been made for each gear type at both beaches and catch composition has been evaluated. Collection of length frequency data has also recommenced, and its use in the generation of growth rate and recruitment equations is being examined.

Future management strategies and the crucial role of the community in the realization of a balanced exploitation of this renewable resource are being developed. Problems with the concept of participatory community management includé:

- 1. Competitiveness and mistrust among the users of different fishing gear and beaches, and
- 2. The requirement of a higher level of organization and management skills among the fishermen.

Benefits include greater levels of return for effort invested in the fishery.

KEYWORDS: artisanal, catch per unit effort, participatory management