INTRODUCTION

Crustaceans are important fisheries resources for food and valuable economic contributions for the country. The fishery is concentrated in shallow waters between 5m and 20m. SWIOFP Component 2 (crustacean), through a gap analysis studies identified a number of shallow-water prawn species that were relevant resource in the SWIO region.

This study was part of SWIOFP which focused on assessment of prawns stock in Tanzania. Two surveys were conducted; one in February 2011 and the second in June 2011.

OBJECTIVES

Determination of species composition, distribution and abundance of prawns in three fishing zones along the coast of Tanzania.

METHODS

Fig. 3: Study area and Survey stations

RESULTS

Fig. 4 A&B: Species composition Feb vs June 2011

Two species P. indicus and M. monoceros observed to dominate in both surveys although more species of observed in June compared to Feb

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DISCUSSION AND CONCLUSION

- Two species P. indicus and M. monoceros were dominant in both surveys Fig. 4.
- The catch rates and total biomass of prawns were higher in June compared February (Fig. 5 & 6).
- The consensus results suggest that the peak season for prawn abundance was in June. June is a period after rain season which brings high nutrient, high productivity and hence high recruitment.
- The biomass estimated in the current surveys (2011) was lower compared to estimates observed during 2009 (particularly in zone 2) which suggest higher exploitation rate on the prawn resource.
- The contrasting biomass values between zone I and zone II suggest that the start of prawns recruitment in these two zones was different. It is hypothesized that the effect of environmental variability and difference in stocks could explain the pattern. It is expected that the on going PhD study will come up with the answer to this hypothesis.