

Patima Chaikhead 2007: Annual Fish Catch in Lower Basin of Tapi River, Surat Thani Province. Master of Science (Fishery Management), Major Field: Fishery Management, Department of Fishery Management. Thesis Advisor Assistant Professor Methee Kaewnarn, M.Sc. 133 pages.

Study of annual fish catch in lower basin of Tapi river, Surat Thani province was conducted. The daily catch species composition and production were collected from 4 landing places during from September, 2005 to August, 2006. In dept interview was conducted to study fishing activities, fishing gear. Meanwhile water samples ware collected from 7 stations every 3 month during October, 2005 to July, 2006 to study water quality parameters. In addition, secondary data of landuse in Surat Thani province was also gathered from related agencies.

The result indicated a total annual catch of 105,789.21 kilograms with the value of 10,430,928 Baht. The result showed that catch composition composed of fish 25 species, shrimp 3 species and crab 1 species. The highest catch of 11,527.02 kilograms found in May, 2006, meanwhile the lowest catch of 4,445.15 kg found in November, 2005. The species that were catched with highest production of 23,512.65 kg was *Metapenaeus tenuipes*. The average catch of aquatic species during summer and rainy season were not significant different at 95% confidential level. The fishing gears used for fishing in lower Tapi river were dift gill net, gill net, push net, crab gill net, cast net, crab trabs , hook and line gun. The production of each gear accounted of 28.81% 26.25% 22.87% 11.01% 5.00% 3.46% 1.77% and 0.83% of total production, respectively.

The water samples analysis results showed that water temperature ranged from 28 to 33 °C, DO ranged from 3.2 to 6.2 mg/l, transparency ranged from 20 to 60 cm, pH ranged from 6.25-8.25, salinity ranged from 0 to 8 psu, Nitrite-nitrogen ranged from 0.001 to 0.026 mg/l, Nitrate-nitrogen ranged from 0.100 to 0.900 mg/l and Ammonia-nitrogen ranged from 0.160-0.978 mg/l.

Results from the study indicated that aquatic animals in lower basin of Tapi river were still abandon. Annual water qualities were in suitable conditions for living of aquatic animals. However, to conserve aquatic animals in this area, regulation control and implementation bodies should consider on measure to control the fishing gears that extremely destroys aquatic resources such as push net.

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