Resiliensi Ikan Demersal dengan Alat Tangkap Modifikasi Cantrang di Laut Jawa Bagian Barat = Resilience of the Demersal Fish Resource on Modified Danish Seine in Western Part of the Java Sea.

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Abstrak

Penelitian resiliensi ikan demersal dengan alat tangkap modifikasi cantrang di Laut Jawa bagian barat dilakukan selama kurun waktu Agustus 2014 - Juli 2015. Pengumpulan data dilakukan di Pelabuhan Perikanan Pantai kota Tegal, Jawa Tengah.Penelitian bertujuan untuk mendapatkan indikator resiliensi populasi ikan demersalterhadap gangguan akibat pemanfaatan oleh perikanan cantrang di laut Jawa bagian Barat. Resiliensi sumberdaya ikan diperlihatkan dalam bentuk indikator kemampuanikan untuk memulihkan populasinya. Kajian dilandasi oleh tiga kajian yaitu: (1) Keanekaragaman jenis, (2) Karakteristik biologi ikan swangi (Priacanthus tayenus,Richardson, 1846); coklatan (Scolopsis taenioptera Cuvier, 1830) dan kuniran (Upeneussulphureus Cuvier, 1829) serta (3) Sensitivitas biologi, kerentanan dan resiliensi ikandemersal. Hasil observasi mengindikasikan bahwa Indeks Keaneka-ragaman hayatiberada kondisi yang dikategorikan tidak sehat. Kelimpahan cenderung rendah (25--30%) dibandingkan tahun 1974--1975. Hasil tangkapan didominasi kelompok jenis berumur pendek dan pada ukuran belum berpijah. Indeks kerentanan pada jenis ikanyang berukuran besar menggambarkan tingginya gangguan perhadap pemulihan padasaat terjadi penipisan kelimpahan dan dugaan terjadinya modifikasi habitat akibataktivitas pemanfaatan oleh cantrang. Resiliensi ikan demersal pada status tertekan yangmengarah pada proses natural resilient. Status dicirikan oleh adanya periodepemanfaatan kelimpahan yang bersifat eksponensial pada kelompok jenis ikanberukuran kecil dan penipisan kelimpahan dan kerapuhan terjadi pada kelompok jenisikan besar dengan tingkat trofik tinggi. Penipisan mengarah pada periode runtuhnya(collaps) potensi kelimpahan dan keanekaragaman sumberdaya ikan demersal sehinggadiperlukan jeda waktu pemanenan bagi proses reorganisasi struktur populasi secaraalamiah untuk pemulihannya. Sistem pemanenan yang tidak terkendali menjadipenyebab utama status ikan demersal beresiko tinggi bagi kemampuan pemulihan secara alami.
.....Biodiversity globally recognized as a corner stone of healthy ecosystem.Biodiversity conservation is increasingly become one of important aim of environmental management. Ocean healthiness is declining since years, and the big impact that has been affecting is fisheries. Human removed too much and the abundance of the fish species tend to diminish. Fishing is shaping not only numbers and structure of the harvested populations, but also the life history and behavioural traits of targeted species. Widespread developments of fisheries become the major issues on ecological impact to marine biodiversity. In the Java Sea, target species of modified demersal Danish seine fisheries shifted from large to small size group of species. Purple-spotted big eye Priacan thus tayenus (Richardson, 1846), lattice monocle bream Scolopsis taenioptera (Cuvier, 1830) and goatfish Upeneus sulphureus (Cuvier, 1829) play significant role as the major spesies in demersal fish landing since years. This paper presents research findings concerning biodiversity of demersal ichthyofaunal, abundance, life history, habitat mofication, bio-exploitation status and its resilience to fishing pressure.
The result showed that diversity index at poor to moderate status particularly in coastal waters, fish sizes from juvenile to adult were landed, mostly at immature cohort sand medium low trophic level species.

Plotting vulnerability index of 15 major species indicates that most of large demersal demersal fish were at medium risk.The resilience of the demersal fish were characterized as 'natural resilient' indicated by exponential change for group small size of fishes and growing static and fragility of large size and high trophic level species. These phenomenon indicates that the harvest status of demersal fish tend to collaps or increasing fragile if no significant effort were initiated to reduce fishing pressures.Therefore, it is suggested to reevaluate the existing fisheries system in order to release creative destruction and shift to periods of reorganization for renewal its community structure. These would be increased the probability recovery of diversity index and abundance fish population including protecting sensitive habitat.