Konsep Budidaya Kepiting Bakau (Scylla Serata) Berkelanjutan pada Media Wanamina (Studi di Pulau Setunak Provinsi Kepulauan Riau) = Sustainable Mud Crab (Scylla serrata) Cultivation Concept Using Silvofishery Method (A Study on Setunak Island, Riau Islands Province)

Nugroho Budi Susilo, author

Abstrak

Provinsi Kepulauan Riau memiliki sumberdaya pesisir dan laut melimpah dengan indeks ekonomi biru tertinggi di Indonesia. Pulau Setunak merupakan bagian dari Provinsi Kepulauan Riau dengan mata pencaharian masyarakat adalah nelayan. Ketergantungan terhadap sumberdaya pesisir dan laut, dengan mekanisme penangkapan ikan konvensional dan intensifikasi cuaca buruk membuat proses pemenuhan penghidupan menjadi rentan secara ekonomi yang membuat semakin terjebak dalam kemiskinan. Disisi lain, keberadaan ekosistem mangrove di sekitar mereka belum dimanfaatkan secara optimal. Penelitian ini bertujuan: (1) menilai faktor fisik-kimiawi lingkungan, distribusi mangrove, kelimpahan Kepiting Bakau; (2) menganalisis hubungan faktor fisik-kimiawi lingkungan terhadap distribusi mangrove dan kelimpahan Kepiting Bakau; (3) mengukur persepsi masyarakat terhadap budidaya Kepiting Bakau di ekosistem mangrove; dan (4) mengembangkan konsep budidaya Kepiting Bakau (Scylla serrata) berkelanjutan pada media wanamina. Dengan metode Line-Transect Plot, Principal Component Analysis, Correcpondence Analysis dan Social Return on Invesment (SROI), penelitian ini diharapkan mampu membangun konsep budidaya Kepiting Bakau (Scylla serrata) berkelanjutan. Hasil pengolahan data didapatkan keragaman mangrove sesuai tingkat pertumbuhannya yaitu 11 spesies tingkat pohon, 14 tingkat anakan dan 8 spesies tingkat anakan yang terlingkup kedalam 8 spesies mangrove sejati dan 6 spesies mangrove asosiasi, serta spesies Rizhopora apiculata memiliki kerapatan tertinggi. Stasiun 2 merupakan titik paling ideal terhadap kehidupan KepitingBakau terkait distribusi mangrove maupun faktor fisik-kimiawi lingkungan. Tingkat persepsi masyarakat terhadap ekosistem mangrove di Pulau Setunak dominan netral, sehingga perlu dilakukan intervensi terhadap persepsi tersebut. Melalui program pemberdayaan masyarakat dengan pendekatan konsep pentahelix antar pemangku kepentingan dan analisis simulasi SROI (yaitu membandingkan input atau investasi terhadap outcome program) Konsep Budidaya Kepiting Bakau (Scylla serrata) Berkelanjutan pada Media Wanamina didapatkan indeks 1,65 yang berarti untuk investsi Rp. 1,- akan menghasilkan outcome Rp. 1,65,- yang artinya program tersebut layak untuk diimplementasikan.

.....The Riau Islands Province has abundant coastal and marine resources with the highest blue economy index in Indonesia. Setunak Island is part of the Riau Islands Province, where the livelihood of the community is fishing. Dependence on coastal and marine resources, coupled with conventional fishing mechanisms and intensified bad weather, makes the livelihood process economically vulnerable, leading to further entrapment in poverty. At the same time, the presence of mangrove ecosystems around them has not been optimally utilized. This study aims to: (1) assess the physical-chemical environmental factors, mangrove distribution, and Mud Crab abundance; (2) analyze the relationship between physicalchemical environmental factors and mangrove distribution and mangrove crab abundance; (3) measure community perceptions of mangrove crab cultivation in mangrove ecosystems; and (4) develop a sustainable Mud Crab

(Scylla serrata) cultivation concept using silvofishery method. Using Line-Transect Plot, Principal Component Analysis, Correspondence Analysis, and Social Return on Investment (SROI) methods, this study is expected to develop a sustainable Mud Crab (Scylla serrata) cultivation concept using silvofishery method. Data processing results in the diversity of mangroves according to their growth levels, namely 11 species of tree level, 14 saplings level, and 8 species of seedling level, encompassing 8 true mangrove species and 6 associate mangrove species, with Rizhopora apiculata having the highest density. Station 2 is the most ideal point for Mud Crab life regarding mangrove distribution and physical-chemical environmental factors. The level of community perception of mangrove ecosystems on Setunak Island is predominantly neutral, so interventionis needed to address this perception. Through community empowerment programs with a pentahelix concept approach between stakeholders and SROI simulation analysis (comparing input or investment to program outcomes), The Sustainable Mud Crab (Scylla serrata) Cultivation Concept using Silvofishery Method obtained an index of 1.65, meaning that for an investment of IDR 1, it will produce an outcome of IDR 1.65, which means that the program is feasible for implementation.