PERANCANGAN *BIO AQUATIC CONSERVATION CENTER* DI KAWASAN PANTAI BIO, BANGKA DENGAN PENDEKATAN ARSITEKTUR BERWAWASAN LINGKUNGAN

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Abstrak

Latar belakang: Sebagai destinasi wisata favorit nasional, Bangka Belitung adalah Kepulauan yang memiliki daya tarik tersendiri terutama dibidang perairan seperti wisata pulau, danau dan juga pantai. Selain di sektor perairan, Bangka Belitung juga menyimpan kekayaan alam di sektor ekonomi yakni timah yang telah menghidupkan perekonomian masyarakatnya. Tambang timah sebagai sumber pendapatan terbesar daerah merupakan pusat perhatian dan permasalahan utama. Perekonomian yang hidup ternyata juga memberikan dampak yang buruk terhadap lingkungan. Maraknya penambang timah di laut Bangka menyebabkan rusaknya lingkungan alam, tercemarnya air laut, terjangkitnya penyakit bagi masyarakat pesisir, rusaknya ekosistem laut seperti terumbu karang dan menurunya produksi ikan yang berarti secara langsung akan berdampak pada penurunan pendapatan para nelayan. Kerusakan terumbu karang kini menjadi sorotan. Data menjelaskan bahwa terumbu karang di Pulau Bangka yang belum terdampak pengaruh tailing (sedimentasi) pertambangan yaitu 1 lokasi di Kabupaten Bangka, 6 lokasi di kabupaten Bangka Tengah, 3 lokasi di kabupaten Bangka Selatan, dan tak satupun lokasi yang kondisi ekosistem terumbu karangnya baik di Kabupaten Bangka Barat. Ironisnya lokasi yang kondisi ekosistem terumbu karang baik hampir semuanya terletak di pulau-pulau kecil yang letaknya berjauhan dari pulau utama.

Kondisi kawasan Pantai Bio masih belum tersentuh dan tersinkronisasi sehingga tidak terjadi keseimbangan antara potensi perikanan dan pariwisata. Data menyebutkan bahwa puluhan hektar ekosistem terumbu karang rusak akibat tertutup sedimen (tailing) di sekitar Kawasan Pantai Bio, Bangka. Selain daripada itu, minimnya fasilitas yang mengakomodasi kegiatan penelitian serta kemaritiman juga mempeparah dampak rusaknya ekosistem yang sudah terjadi.

Aquatic Conservation Center merupakan sebuah institusi yang bergerak dibidang konservasi dan restorasi wilayah perairan dan pesisir, serta peningkatan kualitas perairan dan pesisir di sebuah kawasan. Di Pulau Bangka sendiri belum terdapat lembaga atau institusi yang bergerak di bidang konservasi wilayah perairan. Kondisi geografis Pulau Bangka yang didominasi wilayah perairan tentu memiliki potensi produksi pangan kelautan dan pariwisata yang baik, sehingga pengadaan *Aquatic Conservation Center* berbasis *Eco Recreative Education* yang didalamnya terdiri dari kegiatan konservasi, kurasi, rekreasi dan edukasi tentu sangat bermanfaat sebagai sarana sinkronisasi antara perikanan, pariwisata, perairan, dan masyarakat.

Metode yang digunakan dalam perancangan ini adalah *rational approach* dengan pendekatan arsitektur berwawasan lingkungan, yang kemudian menghasilkan rancangan bangunan. Metode pendekatan desain bangunan mengacu pada karakteristik pengembangan kawasan jangka panjang. Arsitektur berwawasan lingkungan merupakan pendekatan desain yang lebih mengacu ke pembinaan kawasan terutama dalam hal lingkungan. Menggunakan analisis sebagai metode standar kebutuhan ruang dengan tujuan untuk mencapai *balance and contextuality,* yang memiliki kesinambungan antar fungsi ruang luar maupun ruang dalam.

Dengan adanya perancangan *Bio Aquatic Conservation Center* berbasis *Eco Recreatice Education* dengan pendekatan *Arsitektur Berwawasan Lingkungan* diharapkan mampu menjadi solusi atas gerakan restorasi alam dan pemulihan kualitas pariwisata di wilayah Bangka Belitung.

Kata Kunci: Perancangan *Bio Aquatic Consevation Center, Eco Creative Education,* Pendekatan Arsitektur Berwawasan Lingkungan, Pantai Bio, Bangka.

BIO AQUATIC CONSERVATION CENTER. DESIGN IN THE BIO BEACH AREA, BANGKA WITH AN ENVIRONMENTAL ARCHITECTURAL APPROACH

ABSTRACT

Background: As a national favorite tourist destination, Bangka Belitung is an archipelago that has its charm, especially in the field of waters such as island tourism, lakes, and beaches. In addition to the water sector, Bangka Belitung also has natural wealth in the economic sector, namely tin, which has revived the economy of its people. As the most significant source of regional income, Tin mining is the center of attention and the main problem. A vibrant economy also harms the environment. The rise of tin miners in the Bangka sea causes damage to the natural environment, contamination of seawater, outbreaks of disease for coastal communities, damage to marine ecosystems such as coral reefs, and decreased fish production, which means that it will directly have an impact on decreasing the income of fishers. Damage to coral reefs is now in the spotlight. The data explains that coral reefs on Bangka Island that have not been affected by the effects of mining tailings (sedimentation) are 1 location in Bangka Regency, 6 locations in Central Bangka Regency, 3 locations in South Bangka Regency, and none of the locations with good coral reef ecosystem conditions in Kabupaten Bangka. West Bangka. Ironically, almost all locations with good coral reef ecosystem conditions are located on small islands far from the main island.

The condition of the Bio Beach area is still untouched and synchronized so that there is no balance between the potential of fisheries and tourism. The data states that tens of hectares of coral reef ecosystems were damaged due to being covered in sediment (tailings) around the Bio Beach Area, Bangka. Additionally, the lack of facilities that accommodate research and maritime activities also exacerbates the damage to the ecosystem.

Aquatic Conservation Center is an institution engaged in conserving and restoring water and coastal areas and improving the quality of waters and coasts in an area. On the island of Bangka itself, there are no institutions engaged in conserving water areas. The geographical condition of Bangka Island, which is dominated by water areas, certainly has good potential for marine food production and tourism, so the procurement of an Eco-Recreative Education-based Aquatic Conservation Center which consists of conservation, curation, recreation, and education activities is undoubtedly very useful as a means of synchronization between fisheries, tourism, waters, and society.

The method used in this design is a rational approach with an environmentally sound architectural approach, which then produces a building design. The building design approach method refers to the long-term development characteristics of the area. Environmentally-minded architecture is a design approach that refers more to regional development, especially the environment—using analysis as a standard method of space requirements to achieve balance and contextuality, which has continuity between the functions of outdoor and indoor spaces.

With the design of a Bio Aquatic Conservation Center based on Eco Recreation Education with an Environmentally Friendly Architecture approach, it is hoped that it will be a solution for the natural restoration movement and the restoration of tourism quality in the Bangka Belitung region.

Keywords: Bio Aquatic Conservation Center, Eco Creative Education, Environmentally Friendly Architectural Approach, Bio Beach, Bangka.