

Final Architectural Design Studio
International Undergraduate Program
Department of Architecture
2024

Laboratorium
Pemodelan
Arsitektur &
Perkotaan

Design of
MicroPublicFarms
As Urban Acupuncture in Batam City

Designed & Arranged By:

Ahmad Nurfaizi | 18512058

Supervised By:

Prof. Dr.-Ing. Ir. Ar. Ilya Fadjar Maharika, MA., IAI.



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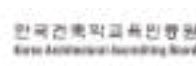
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AUTHENTICATION SHEET

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Design of MicroPublicFarms As Urban Acupuncture in Batam City

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Design of MicroPublicFarms As Urban Acupuncture in Batam City

is a work of its own except the work mentioned in the references and there was no help or assistance from any other parties either in whole or in part in the process of making it. The final result of this work was handed over to the Department of Architecture, Universitas Islam Indonesia for use for educational and publication purposes, but the intellectual property rights are still owned by the author.

Yogyakarta, 25 August 2024



Ahmad Nurfaizi

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“abstract”

Geographically located on international shipping and trade routes, Batam City is a strategic place in the development of industry in Indonesia. Seeing this, Presidential Decree Number 41 of 1973 was issued which stated that the entire Batam Island was designated as an industrial area. Since then, the central and regional governments have continued to intensively promote Batam City as a place to invest in the industrial sector. The type of industry that is used as the main support for the economy is the manufacturing industry.

The development of the manufacturing industry dominates up to 61.80% of the economic sector. As of 2022, there are 26 industrial areas, both local and foreign, spread across Batam City. Industry that continues to develop creates job opportunities that grow in line with the growth in housing or residential needs for new residents. However, the development of these two sectors, industrial and residential, does not go hand in hand with careful use of land already owned by land owners. The final impact that arises as a result of this phenomenon is the birth of open empty lands or "idle lands" whose status in terms of land use is unclear.

To regenerate the 'idle lands' is to use an urban design concept known as 'Urban Acupuncture'. Metaphorically, the term "acupuncture" suggests that these small actions can impact the overall health and vitality of a city in the same way that acupuncture needles target specific points to improve the body's health. With the help of the Geographical Information System (GIS) method, it is easy to see the source points of disease spread across urban areas. This method also helps in diagnosing the character of the distribution pattern of buildings, greenfields, brownfields, and roads which play a major role in the city.

The MicroPublicFarms design is offered with the aim of utilising idle land by providing space as a plantation and livestock facility that can meet basic human needs, namely food. With the hope of not only regenerating idle land, but also bringing greenery to the city and opening up new avenues for the local agriculture/plantation sector that can serve as a reminder that the community can provide, fulfil and sustain these food needs independently as well as supporting the economy and welfare of the people in Batam City.

Keywords: Idle Land, Urban Acupuncture, Plantation, Livestock, MicroPublic

“abstrak”

Secara geografis terletak di jalur pelayaran dan perdagangan internasional, Kota Batam merupakan tempat yang strategis dalam pengembangan industri di Indonesia. Melihat hal ini, dikeluarkanlah Keputusan Presiden Nomor 41 Tahun 1973 yang menyatakan bahwa seluruh Pulau Batam ditetapkan sebagai kawasan industri. Sejak saat itu, pemerintah pusat dan daerah terus gencar mempromosikan Kota Batam sebagai tempat berinvestasi di sektor industri. Jenis industri yang dijadikan penopang utama perekonomian adalah industri manufaktur.

Perkembangan industri manufaktur mendominasi hingga 61,80% dari sektor ekonomi. Hingga tahun 2022, terdapat 26 kawasan industri baik lokal maupun asing yang tersebar di Kota Batam. Industri yang terus berkembang menciptakan lapangan pekerjaan yang tumbuh seiring dengan pertumbuhan kebutuhan perumahan atau hunian bagi penduduk baru. Namun, perkembangan kedua sektor ini, industri dan hunian, tidak berjalan beriringan dengan pemanfaatan lahan yang sudah dimiliki oleh pemilik lahan secara hati-hati. Dampak akhir yang muncul akibat fenomena ini adalah lahirnya lahan-lahan kosong terbuka atau “lahan tidur” yang tidak jelas statusnya dalam hal penggunaan lahan.

Untuk meregenerasi 'lahan tidur' adalah dengan menggunakan konsep desain perkotaan yang dikenal sebagai 'Akupunktur Perkotaan'. Secara metaforis, istilah “akupunktur” menunjukkan bahwa tindakan-tindakan kecil ini dapat berdampak pada kesehatan dan vitalitas kota secara keseluruhan seperti halnya jarum-jarum akupunktur yang menyasar titik-titik tertentu untuk meningkatkan kesehatan tubuh. Dengan bantuan metode Sistem Informasi Geografis (GIS), mudah untuk melihat titik-titik sumber penyakit yang tersebar di daerah perkotaan. Metode ini juga membantu dalam mendiagnosa karakter pola persebaran bangunan, lahan hijau, lahan merah, dan jalan yang berperan besar dalam sebuah kota.

Desain MicroPublicFarms ditawarkan dengan tujuan untuk memanfaatkan lahan tidur dengan menyediakan ruang sebagai fasilitas perkebunan dan peternakan yang dapat memenuhi kebutuhan dasar manusia, yaitu pangan. Dengan harapan tidak hanya meregenerasi lahan tidur, tetapi juga menghadirkan penghijauan di kota dan membuka jalan baru bagi sektor pertanian/perkebunan lokal yang dapat menjadi pengingat bahwa masyarakat dapat menyediakan, memenuhi, dan menopang kebutuhan pangan tersebut secara mandiri serta mendukung perekonomian dan kesejahteraan masyarakat di Kota Batam.

Kata Kunci: Lahan Tidur, Urban Akupunktur, Perkebunan, Peternakan, MicroPublic

