

A Study on Ecological Planning for the Resilience Management of Metropolitan Manila

その他のタイトル	マニラ首都圏のレジリエンス・マネジメントのためのエコロジカル・プランニングに関する研究
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論文の内容の要旨

論文題目 **A Study on Ecological Planning for the Resilience Management
of Metropolitan Manila**
(マニラ首都圏のレジリエンス・マネジメントのための
エコロジカル・プランニングに関する研究)

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The purpose of the research is to develop a framework to create an ecological planning methodology for the resilience management of Metropolitan Manila. It aims to address the issues of biodiversity, flooding, poverty, and cultural heritage loss. The research methodology involves several levels of analysis and evaluation to come up with proposals for the ecological planning. The methodology uses two major aspects of methods: Ecological Structure and Ecological Management to develop Ecological Planning for Resilience Management of Metro Manila.

Ecological Structure uses biotope in defining the ecological units and structure of Metropolitan Manila. The study found 29 different biotope types, 21 of which are classified as natural biotopes, while eight (8) are built-up biotope types. The natural and built-up biotope types are analyzed based on their environmental and urban characteristics. Both biotope types are also evaluated based on their function that is comprised of Biodiversity, Flood, Culture, Poverty, Amenity, and Productivity. The evaluation is based on how each biotope type is influenced by the different functions and is given valuation, in which strategies are proposed as reflected in the Ecological Structure Planning. The ecological structure is defined, serving as the basis in the creation of the green structure, which are: core, corridor, edge, and patch network.

Ecological Management employs watershed as planning method in which the four pillars are evaluated and assigned with values to determine the influence of the four different issues to the watershed. The evaluation of the ecological management is represented with values that reflect the evaluation of the four pillars; biodiversity, flood,

poverty, and culture . Based on the valuation of the watershed, strategy for the watershed is reflected in the Ecological Management Planning.

In Ecological Planning, the two major planning methods are merged to form the ecological planning for resilience management. The ecological planning reflects the strategies and management interventions from both planning methods to provide comprehensive proposal to make an integrated network of green spaces and area management that serve the purpose of creating a more resilient Metropolitan Manila. Each of the different components of the ecological structure is proposed with different strategies to improve connectivity and linkages. The ecological planning for resilience management addresses the optimization of the landscape by reducing risk to the most vulnerable sector, preserving spaces with biodiversity and at the same time has high cultural heritage value, and creating space for the integration of biological and cultural processes.