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Department					
Architecture and Civil		Student ID Number	D145506		Junichiro ASANO
Engineering				Supervisors	Shiro MATSUSHIMA
Applicant's name	MEIDWINNA VANIA MICHIANI				Hiroyuki SHIBUSAWA

## Abstract (Doctor)

Title of Thesis

Study on Physical Improvement Strategy for Deteriorated Riverside Settlement in Developing Country

## Approx. 800 words

This study aims to formulate scenario for managing deteriorated urban riverside residential areas in the Third World. Using case studies in our target locations in an Indonesian river city, called Banjarmasin, this research is carried out to answer our biggest question: How to manage or revive deteriorated riverside areas which are currently under the occupation of informal and slum settlement. We hypothesize that the enhancement of traditional vernacular houses and the improvement of physical setting can reinforce the quality and the identity of a place, in this case, riverside area, without victimizing poor dwellers, but on the other hand can achieve ecological balance as well as urban spatial order.

Introduction part (Chapter 1) states the background problems and the motives of performing this study. This chapter begins with introducing some issues on deteriorating conditions of riversides and the occupancy of human settlement. To solve those problems, many governments in the developing countries initiate relocation or resettlement programs that often ended up in victimizing the current dwellers. Considering these matters, this study is conducted to figure out proper strategies that may offer more benefits for all aspects: human, environment, and city.

Chapter 2 consists of theoretical backgrounds related to riverside settlement and marginal societies. This chapter also intends to gain a deeper understanding on the historical values and cultural activities in terms of dwelling through study literatures, including international and local researches, as a preliminary study. The fact, condition, problems, as well as results from the prior studies were summarized and analyzed to find out some core issues and the originality of our study. This part also clarifies two methodological strategies adopted by this study, which are *historical* and *cultural* approaches. However, this study will only cover solutions related to architecture and urban design, thus, proposing guidelines limited to physical treatment or enhancement.

The possibilities of utilizing our approaches will be verified through case studies. The introduction of our study location will also be covered in Chapter 2. In this chapter, we argue reasons why we select our study area in Banjarmasin city, more specifically at the traditional settlement of Kuin Utara riverside. General conditions of riverside settlement in the target will be explained as well.

A discussion on the historical approach through enhancement of vernacular houses will be covered in Chapter 3. This chapter aims to understand the historical value in terms of dwellings and how they can contribute to today's urban development. We expect that preserving the physical structure of old houses may reinforce the identity of a place. This chapter begins with the explanation on the traditional vernacular architecture in general and in our target location. Field surveys collected data on the condition of remaining architectural features of the target houses, including material, form and shape, façade, space, and ornaments, as well as the inhabitants' socio-economic characteristics and their influence on the houses' current states.

The results are evaluated, scored, and classified through architectural assessment to determine their visual value and what kind of protection action fits to each group. This section formulates that there are three basic factors to determine the architectural value of a vernacular house: construction and form, design, and space. The result also shows that even vernacular houses with cultural insignificance play a supportive role to enliven a traditional area and will be a good example if many survive. This study also suggests that houses that are regarded as irrelevant for preservation should not be simply thrown out from the city planning. Decayed vernacular houses resided by low income inhabitants when ignored may turn into scattered roofs and lead into another problem: slum housing.

Chapter 4 presents a discussion on the second case study regarding traditional riverside dwellings, which occupy most part of the Kuin Utara riverside as slum housings. This study urges to seek an understanding on the livelihood, social activities, and the conditions of existence of slum riparian settlement. The research attempts to formulate what kind of physical improvement can be applied in such settlements. The data was collected by a field survey, observing on the inhabitants and their living situation, dwelling and utility, as well as community activities and environment. This study also analyzes and evaluates existing riverside upgrading pilot projects by the local government, as a reference when proposing an improvement plan. This chapter discloses that the basic concept for physical upgrading in a slum settlement consists of three elements: (1) arranging street networks as the fundamental system that structures the settlement, (2) constructing public utility systems that are essential for livelihoods, and (3) providing common space and amenities as 'external organs' that form identities and reveal the visual charm of the location. The proposed infrastructures shall be directed to protect the local cultures and the socio-cultural activities of the inhabitants. The plan should also be adjusted with respect to the economic constraints in the developing countries. Moreover, the improvement strategy for poor housings shall not orientate to modernization nor merely to that of beautification without considering the basic aspect: to maintain the dweller's livelihood.

The conclusion of this study is covered in Chapter 5, emphasizing on the importance of performing riverside improvement plans that consider local wisdom and livelihood aspects of current dwellers. This part argues that slum riverside management cannot be generalized because each area has different needs and characteristics. However, we can create universal or basic standards, while details should be adjusted to each area. Thus, outcomes provided by this study are of a general concept, which is also applicable as a basis for managing riverside settlement in other developing countries. Our contribution of both historical and cultural approaches can be implemented in any riparian neighborhood using locally-based physical improvements.