

# **Infrastructure Development Strategy for Housing and Settlement in Sub-District Coastal Of “Kota Kendal”**

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**Abstract**—Kota Kendal is one of the small city that lay in the northern coast of java. This city passed by the north coast road connecting Surabaya, Semarang and Jakarta. This area as part of the coastal area, does not separated from environmental problems such as flooding and tidal wave. These conditions have been impact on the quality of infrastructure problems in housing and settlement area. This problem becoming more complicated when spatial planning and development planning have not been integrated in directing the construction of infrastructure. The strategy of housing and settlement's infrastructure development in the coastal city of Kendal were expected to give description efforts to solving a problem in the development of infrastructure in coastal urban areas. The author used research method of deductive phenomenology and a participatory planning for examining this problem. This was done to search actual problems in the field. From a series of observations in the field and problem analysis, researchers found various infrastructures problem were: housing facilities that are unsuitable, bad condition of the water system, waste water and sanitation, drainage, waste management and bad environment. In order to solve the problem some strategy that can be applied between is to build the house of milk, service improvement company and the utilization of the potential of clean water other, infrastructure development waste processing and m publictoiled, normalization of drainage and improve waste management services

**Keywords:**

**Strategy, development, Infrastructure, Settlement and Housing**

## **1. Introduction**

Sub-district Kota Kendal is the center of Kendal regency. The location of Kota Kendal is in the northern coast of java island. sub-district of Kota Kendal as the district capital, have a starring role as of service center for district with the function of designation for the area of government, education, trade and services as well as urban settlement.

Types of settlements in the district Kendal Town consists of residential and non-formal settlements. On the type of formal settlements developed by the developer, the environmental conditions are relatively more regular. Non formal housing as housing that built by the community, the opposite condition. Settlement areas, especially those closes to the beach has the worst conditions. Many problems in the region associated with stature land, the physical condition of the house and settlement infrastructure.

Problems above apart due to poor economic conditions are also due to the low participation in managing the housing environment. The majority of people who work as fishermen, most are still unaware of the importance of the quality of housing, environmental and settlement infrastructure. In addition to the above factors, environmental factors

geographical conditions kendal vulnerable coastal flooding and inundation exacerbating environmental conditions of the settlement.

This paper has the aim to formulate a housing problem-solving strategies, settlements and settlement infrastructure. This paper is the result of a series of activities Strategy for Housing Development and Infrastructure Kendal settlement by the author in 2012 and funded by the Ministry of Public Works. Several approaches are used in the implementation of this activity is the planning approach and the scientific approach. These two approaches are used in a way complementary, so the actual problems, needs and management strategies will be more applicable.

## 2. Data And Analysis

Urban settlements in sub district of Kota Kendal were identified as formal and non formal. Formal settlement have been created and developed by developer. And non formal have been created by the community. Non formal settlement had bad condition, because of some limited from communities. Majorities of communities in coastal area of Kota Kendal work as fisherman and most of them are poor families. The condition of settlement and housing in coastal area can be describe as:

- a) Growth settlements naturally converge and follow a linear pattern of road network and streams.
- b) The condition of the buildings in the area of fishing permanence dominant form of non-permanent home (board).
- c) The condition of the road infrastructure is quite good with a wide pavement paving the road between 1.5-3 m
- d) Infrastructure available at the roadside drainage and a permanent
- e) clean water services in the region are already accessible fishing settlement network taps.
- f) Disposal of waste water into the drainage channel.
- g) Garbage bins are available.

Those settlement also have many problem like:

- a) The use of government-owned land illegally by communities for settlement in north PPI Bandengan.
- b) The level of environmental health settlement low due to lack of awareness of communities to manage infrastructure and facilities
- c) Threats tide / tidal and flood prone
- d) Conditions drainage channel is blocked due to sedimentation and garbage that impede the flow of water
- e) The lack of modes of transporting waste and trash cans every home resulted in waste piles scattered

From the field survey also, we can describe that the building and environment condition are:

- a) Distance between building and road 0-5 m
- b) Distance between building 0-3 m
- c) Altitude of building 1-3 floors
- d) Building elevation 0-100 cm
- e) Building covered ratio 60-100%

- f) Green space coefficient 0,6-0
- g) The space width of the road 0.5m-6m.



Fig. 1. Road Condition  
 (source: SPPIP Doc., 2012)



Fig. 2. Solid Waste Condition  
 (source: SPPIP Doc., 2012)



Fig. 3. Water Condition  
 (source: SPPIP Doc., 2012)

Authors as a facilitator, in an effort to resolve problems in infrastructure, explore the opinion of some stakeholders. The excavation efforts synthetically focus group discussion. FGD is done several times. The first FGD conducted to identify policies related to development infrastructure. Second FGD done to refine the potential and problems of infrastructure development. Last FGD conducted to find solutions handling problems. The completion of a series of FDG infrastructure problems in the coastal sub-district "Kendal town" can not be solved simply by building, but also must be accompanied by efforts to increase public participation.

### 3. Conclusion

From a series of observations and problem analysis, researchers found various infrastructures problem were:

- a) Un-Synchronizations policy for housing and infrastructure
- b) Bad public awareness
- c) Housing facilities that are unsuitable,
- d) Bad condition of the water system,
- e) Bad waste water and sanitation, drainage , waste management and bad environment.

### 4. Recommendation

In order to solve the problem some strategy that can be applied:

- a) Increased public awareness of the housing, environment and infrastructure;
- b) Synchronizations policy for housing and infrastructure construction in the settlements, by reducing sectoral's egos;
- c) Construction of flats as a solution to the growing needs of the home;
- d) Improved water services by finding new sources of water;
- e) Construction and rehabilitation of drainage networks
- f) Construction of a communal sewage treatment plant
- g) Improvement of waste management services in settlements

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