



## ABSTRACT

### STUDY OF COMMUNITY WILLINGNESS-ABILITY TO PAY THE POLDER OPERATIONS AND MAINTENANCE IN BANGER RIVER SEMARANG CITY

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East Semarang District face a very serious problem for flood and rob threat. Rob is caused by high tide in the sea, while flooding caused by heavy rainfall. Banger river serve to drain rainwater from East Semarang District towards the sea. To make the Banger Polder System, structure construction that will be built such as levee on the boundaries of Banger Polder which have function to protect the Banger Polder from the rob, dam in Banger River which have function to protect Banger Polder from the rob, Pump Station which have function to drain the rainwater to the sea (flood protection) and to control the water level in the area of Bnager Polder, and Water Catchments Zones shaped Retention Pond used as fishpond and as a buffer when rainfall is high that can cause flooding. In order to develop and maintain the urban polder hydrology management system and flood protection systems it would require community participation in the operation and maintenance of polder system.

The purpose of this research was to determine the willingness and ability of communities to pay the operation and maintenance of polder system. Research locations focused on Banger Polder Area located at 10 Subdistrict in East Semarang District with the scope of discussion is to assess the community willingness-ability to pay the operation and maintenance of polder system. Primary data were collected by Contingent Valuation (CV) sample survey method with the format of questions in questionnaires is Closed ended referendum elicitation format (Bidding game format), or closed questions by providing an alternative of answers choice. Community willingness to pay the operational and maintenance polder can be described by maximal cost that have been paid by community in handling flood. Community ability to pay in Polder operational and maintenance can be showed as a relation between total income and maximal ability of community to finance the Polder operational and maintenance.

Result of data analysis showed that 87% community is categorized as community that is able to paid, and 12.67% community that is categorized as community that isn't able to pay the operational maintenance of polder. Result of data analysis showed that 81.33% communities are categorized as community that is willing to pay, and 18.67% communities are categorized as community that isn't willing to pay the operational and maintenance of polder. Result of data analysis showed that 72% communities are categorized as community that is willing and able to pay. Income levels, ownership of estate, and ownership of building that is the representation of communities ability can be used as decision variable in estimate the amount of community willingness to pay in operational and maintenance of Banger polder as the participatory rates , fair, equitable, and independent which is expected sustainable.

***Kata kunci*** : *willingness to pay, ability to pay, the operation and maintenance of polder*