## Gender analyses on the relationship between household income categories and water system among the vulnerable respondent in fisheries community

## **ABSTRACT**

This paper aims to explore the types of vulnerability through the Sustainable Livelihood Approach (SLA), identify the relationship between types of vulnerability and sex of the respondents, and measure the relationship between household income categories and types of the water system by sex disaggregation. Two data sets were used in this study (brackish water community and freshwater community) which covered the backgrounds of the vulnerable respondents and household income from the respective questionnaires. The respondents in both datasets are vulnerable respondents selected through multi-stage random sampling with the help of government agencies and community leaders in the sampled villages in Padang Terap, Kedah; Hulu Perak, Perak; Pulau Langkawi, Kedah; and Kota Setar, Kedah (Northern Peninsular Malaysia). A total of 415 vulnerable respondents were reported in this paper. Three hypotheses were tested. Seven vulnerability types obtained through SLA that the respondents are poor marginalised, and vulnerable – handicapped, single parents, the elderly, child labour, living alone, caretaker, and suffering serious diseases. The Ho1 had been rejected because there is a significant (p<0.05) relationship between types of vulnerability and sex of the respondents. The Ho2 and Ho3 were also rejected because there is a significant (p<0.05) relationship between household income levels and types of water systems among male and female respondents, respectively. The vulnerable women are mainly single mothers and older people, and the vulnerable men are mainly handicapped individuals. The vulnerable men and women in the brackish water community are poorer than the vulnerable men and women, respectively, in the freshwater community.

**Keyword:** Gender; Poverty; Elderly; Fisheries; Household income