ABSTRACT

Environmental and Social Impact Assessment (ESIA) is a tool for an integrated assessment of multifaceted impacts of a proposed project. ESIA can identify areas of potential conflicts and prevent conflicts from occurring early through appropriate mitigation measures. This notwithstanding, conflicts and public opposition arising from implementation of proposed projects which have been subjected to ESIA have been observed in various sectors in different countries and jurisdictions. Kenya is one of the African countries endowed with substantial renewable energy resources including geothermal, wind and solar energy resources. The country is now scaling up the development and utilization of these resources to meet growing energy demand. However, implementation of environmental procedures mainstreamed in the development of renewable energy resources, if inappropriately applied, has the potential to slow down development and exploitation trajectory of these resources. While all proposed renewable energy projects are subjected to the ESIA process, in some instances challenges have emerged at implementation resulting in conflicts that could be avoided. There is a clear need to understand, empirically, which of the ESIA procedural steps is critical in underpinning conflict identification for appropriate application. To determine how each of the ESIA procedural steps is likely to influence conflict identification, a statistical analysis was carried out for ESIA procedures based on questionnaire survey responses from sampled ESIA practitioners in Kenya. This article presents findings on the effect of ESIA procedural steps in conflict identification using cumulative odds ordinal logistic regression with proportional odds. Results show that the overall effect (on the dependent variable conflict identification) of the variables, public participation and monitoring is statically significant, $\chi2(2) = 9.12$, $p = 0.01$ and $\chi2(2) = 6.29$, $p = 0.04$, respectively. Further, the exponential of the log odds of the slope coefficients indicate that the independent variables public participation, decision making, project implementation and monitoring are statistically significant [$\chi2(1) = 9.12$, $p = 0.00$; $\chi2(1) = 4.04$, $p = 0.04$; $\chi2(1) = 3.64$, $p = 0.05$ and $\chi2(1) = 3.31$, $p = 0.00$, respectively]. That is to say these independent variables have a statistically significant effect on the dependent variable conflict identification