

## **Illegal fishing and catch potentials among small scale fishers: Application of endogenous switching regression model**

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### **Abstract**

Fish stocks are facing increasing threat of extinction partly due to the use of illegal fishing methods. In developing coastal countries where fishing activities are the mainstay of the population along the coast, livelihoods are being directly threatened. Although a number of studies unearthing factors determining supply of violation of fishing regulations exist, literature on the relationship between intrinsic catch potentials or fishing skills and illegal fishing behavior is scarce. Using data on violation of light attraction regulation among small-scale fishers in Ghana, our results show that the risk of punishment, fishing experience, skipper's age and religious norms influence the decision to violate. Most importantly, we found that violators and non-violators have different fishing kills. Specifically, violators would have higher catches than non-violators if non-violators violate too. On the other hand, if the violators had not violated, they would have obtained lower catches than their counterparts who are not in violation. Consequently policies targeting illegal fishing must, in addition to traditional variables that influence violation decision, concentrate on improving the skills of the less efficient fishers.