

## Understanding and addressing fishers' behavior

### MultiTip Policy Brief #3

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The lack of compliance to fishing regulation is a major problem at Lake Victoria fisheries and enforcement can be challenging. One method of addressing this issue is through campaigns that promote sustainable low-risk behaviour, like compliance to net regulations. However, this too can have a limited impact. By conducting behavioural experiments with fishers, we are able to investigate the causes of non-compliant behavior and provide recommendations on how campaigns can be made more effective. We find that fishers are less likely to imitate low-risk behavior, but they are also less likely to behave in a risky manner if they are aware that their actions could harm others. Therefore, to effectively promote sustainable, low-risk behavior, we suggest informing fishers about how high-risk behaviour, like non-compliance, can negatively affect others' livelihoods.

### Key Insights

1. **Type of information matters - fishers imitate others high-risk behavior, but not low-risk behavior:** Our studies show that when fishers learn that other fishers are engaging in high-risk behavior, like illegal fishing, they take more risks than fishers who receive no information. However, when they learn that others engage in low-risk behavior, e.g. being compliant to net regulations, fishers do not behave any differently than if they did not have this information.
2. **Fishers care about how their risk decisions affect others:** When fishers are certain that taking a higher risk would have negative consequences for the other fishers, they take less risk than if it does not affect the other fishers. This implies

that fishers might comply more if they know that the risky, non-compliant-behavior, harms others.

- 3. Information campaigns to promote sustainable behavior should focus on how harmful unsustainable behavior can be:** Information campaigns targeting fishers' behavior should leverage key insights #1 and #2 described above. This implies that campaigns to promote sustainable, low-risk behavior should focus on informing fishers about how high-risk behavior affects others negatively - rather than using examples of low-risk behavior. For example, an effective campaign for promoting compliance to net regulation could focus on how the usage of illegal nets eventually reduces other fishers' income through the destruction of fish stocks.

## Methodology

We conducted economic lab-in-the-field experiments in the Lake Victoria region to analyze fishers' decisions in response to different conditions. In March 2020, we conducted an experiment in Tanzania with support from TAFIRI (Tanzania Fisheries Research Institute). This involved 648 fishers from 22 landing sites. In September 2022, we conducted two experiments in Uganda by collaborating with NaFIRRI (National Fisheries Resources Research Institute). Over 640 fishers from 24 landing sites participated in these two experiments. The experiments allowed us to better understand the behavioral mechanisms of fishers with regards to taking risks and cooperating. Therefore, we can provide advice on effective fisheries management.

## References

- Dannenberg, A., Diekert, F., & Händel, P. (2022). The effects of social information and luck on risk behavior of small-scale fishers at Lake Victoria. *Journal of Economic Psychology*, 90, 102493. <https://doi.org/10.1016/j.joep.2022.102493>