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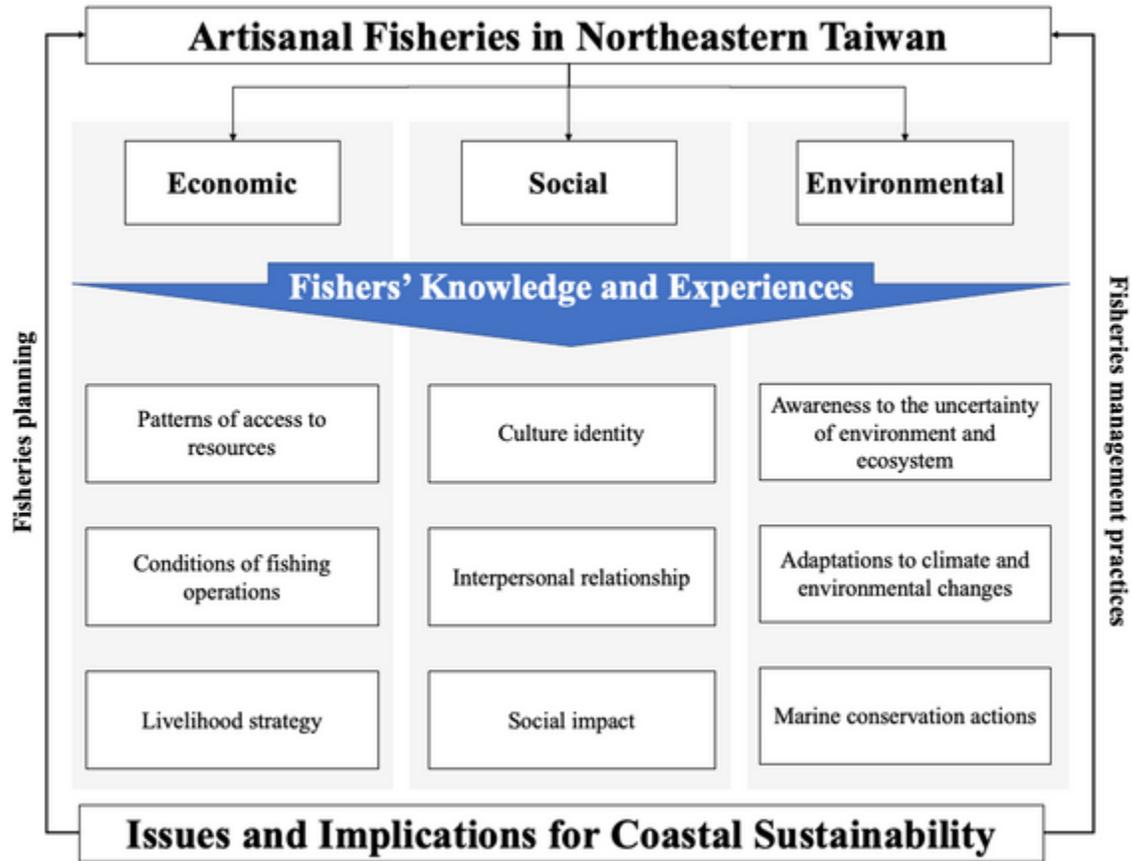
### **Adopting artisanal fishers' knowledge and experiences to illustrate the implications for coastal sustainability in Northeastern Taiwan**

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#### **Abstract**

The objective of the study is to obtain novel insights for scientific purposes by adopting local views from coastal artisanal fisheries in northeastern Taiwan. This study employed local fishers' knowledge and experiences to reveal issues and implications highly correlated between local context and fisheries sustainability. Through theory construction, a framework combined with social, economic, and environmental dimensions (with three elements in each dimension) was applied to construct the outline of semi-structured interviews. Nine artisanal fishers were involved in our interviews, then the data were coded to explore the implications for fisheries sustainability. Our findings showed that: (a) in the Economic dimension, fishers' knowledge and experiences play an indispensable role in operating the fishery among elements of *patterns of access to resources, conditions of fishing operations, and livelihood strategy*. (b) In the Social dimension, *cultural identity, interpersonal relationships, and social impact* could demonstrate the characteristic of fishers' society. (c) In the Environment dimension, *awareness of the uncertainty of environment and ecosystem, adaptations to climate and environmental changes, and marine conservation actions* could reflect the interactions between fishers and the environment. The interviews reflect the facts that artisanal fishers are expected to ensure economic stability (e.g., cost-effectiveness, regulation, production, and marketing) while confronting challenges of environmental changes (e.g., impacted by climate change and anthropogenic activities) and marine conservations which implicates issues in both economic and environmental sustainability and resilient society (e.g., cultural inheritance, cooperative behavior, and sense of cultural identity). This framework adopted for outlining the context of artisanal fisheries in northeastern Taiwan could provide valuable qualitative information from fishers' knowledge and experiences. Therefore, we suggest that there should be much more advocacy of mechanisms to combine fishers' knowledge and experiences into fisheries planning and management practices, which help us achieving Sustainable Development Goals (SDGs) 8, 11, 13, and 14.



**Keywords**

Fishers' Knowledge and Experiences, Artisanal Fishers, Coastal Fisheries, Sustainability