Drivers of conflict and resilience in shifting transboundary fisheries

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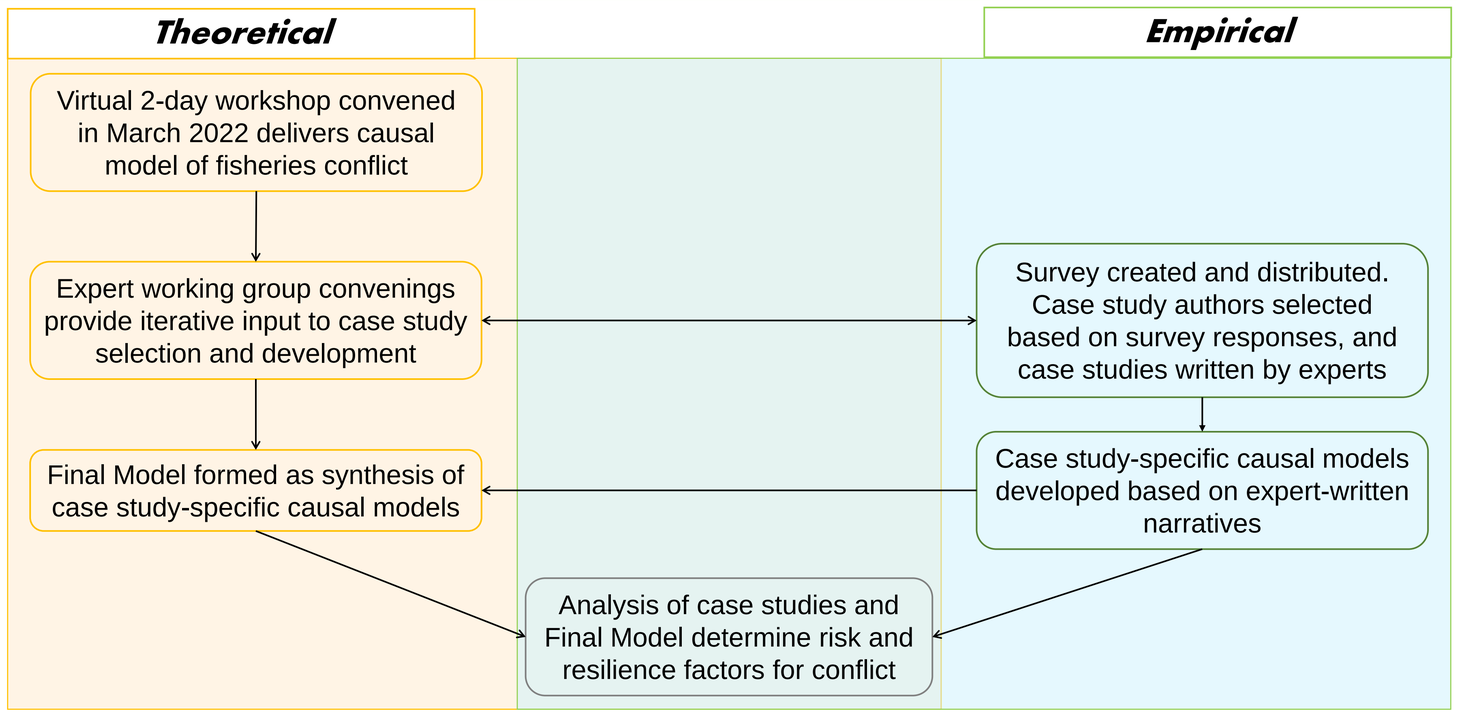
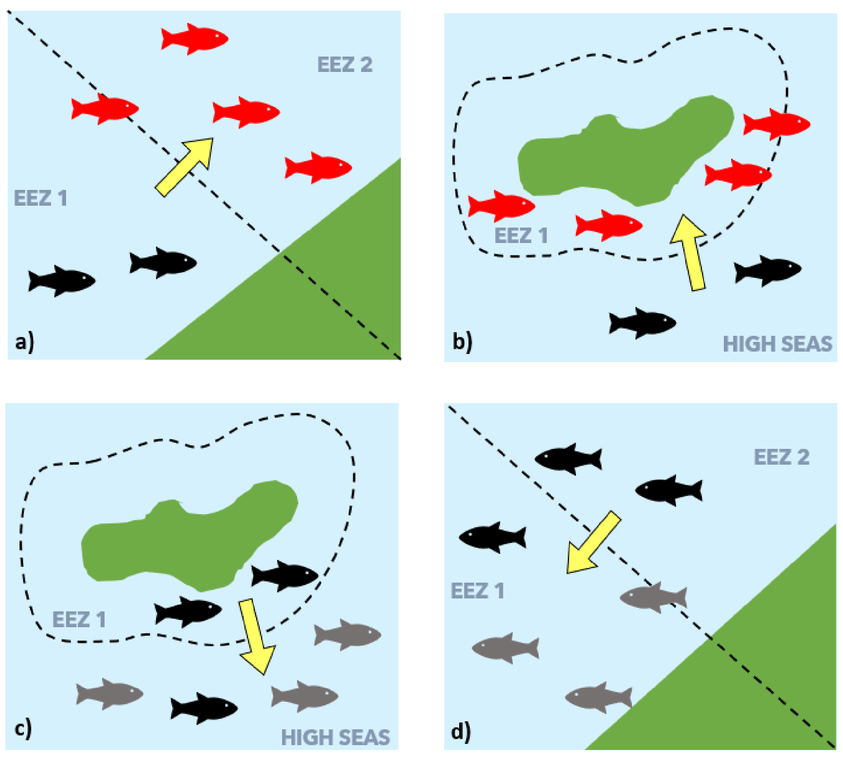
ABSTRACT

- Climate-driven fish stock shifts create and exacerbate fisheries conflicts. Distribution changes between Exclusive Economic Zones (EEZs) or between EEZs and the high seas are especially concerning as they bring into play a variety of geopolitical factors and equity issues.
- Based on four case studies of transboundary stock shifts, we have developed a causal model of fishery conflict, highlighting the initial response stages where inclusion of proactive and cooperative measures can greatly improve a system's resilience to conflict.
- Cooperation and equitable decision-making processes are recognized as vital components of internationally shared stock management which can promote lasting, effective, and conflict-resilient fisheries.

METHODS



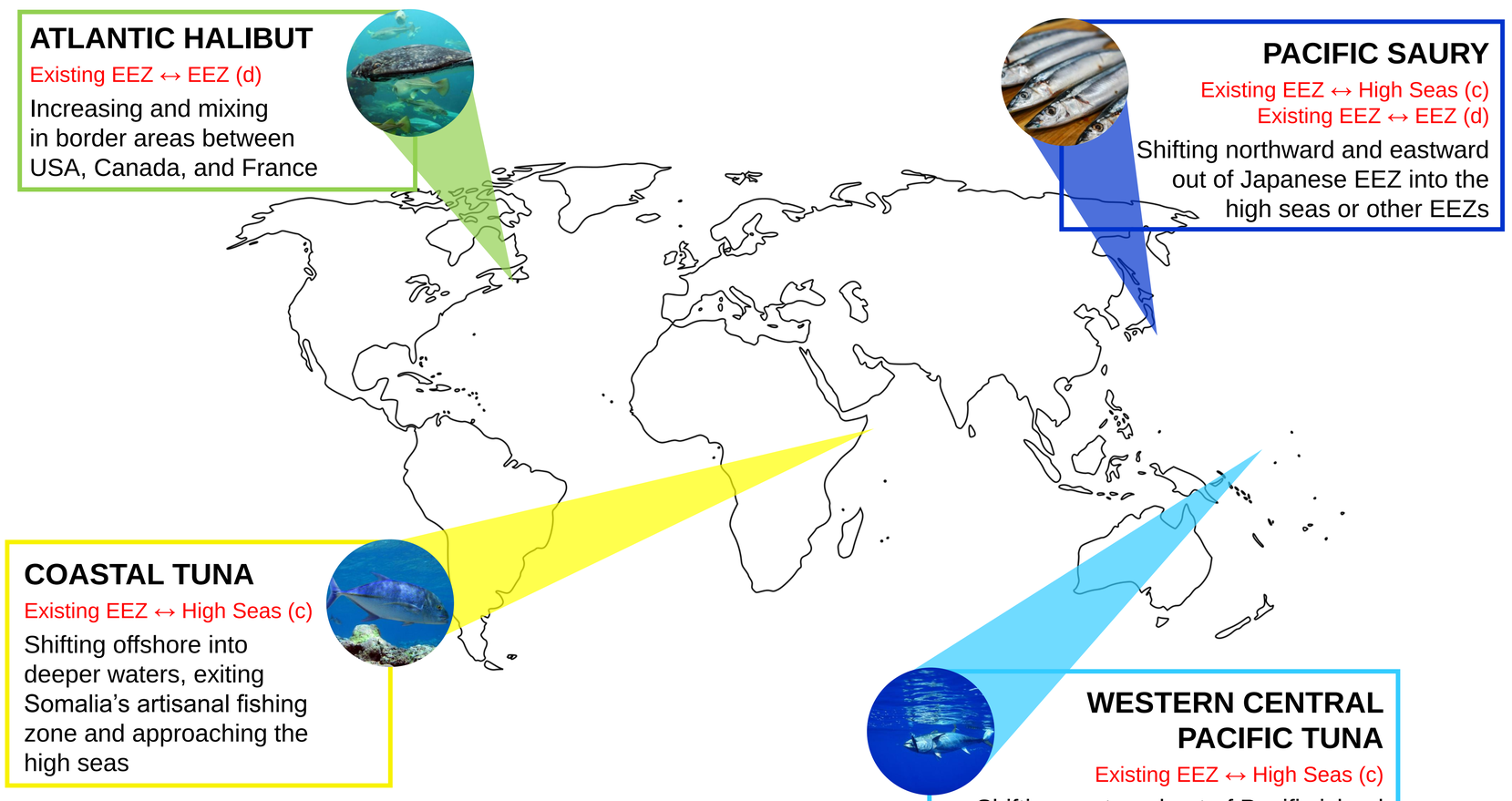
STOCK SHIFT ARCHETYPES



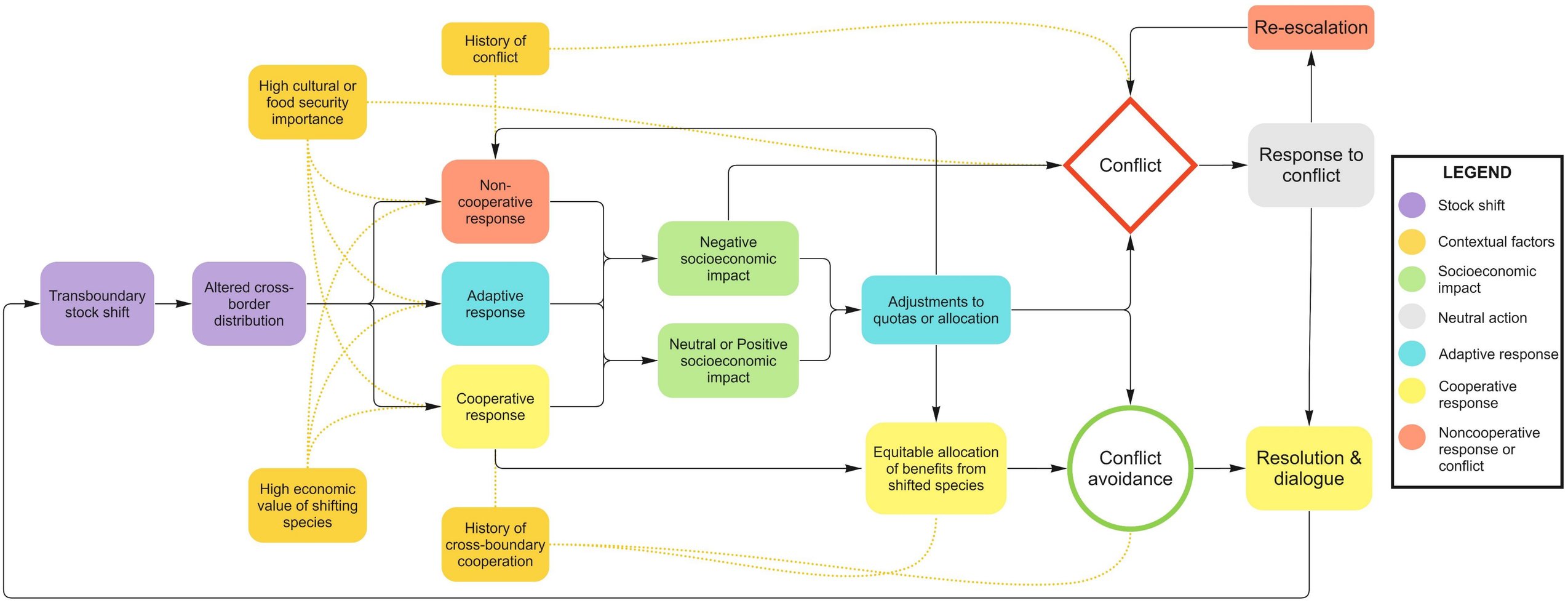
Novel stocks shifting across jurisdictional boundaries for the first time

Existing stocks shifting across jurisdictional boundaries and altering historic distributions

CASE STUDIES



CAUSAL MODEL OF FISHERIES CONFLICT



KEY FINDINGS

Shifts between an EEZ and the high seas increase **management complexity** and exacerbate **power imbalances** by increasing foreign fleet access to the fishery.

One-sided **stock assessments and allocations** contribute to ineffective multilateral governance.

Future **conflict potential** is heavily modulated by the quality of fisheries management, flexibility in the face of change, and the magnitude or abruptness of stock change.

Enhanced **cross-border data sharing** and **conflict mediation policies** are key for conflict-resilient fisheries.