

ATTRIBUTES RELEVANT TO DESCRIBING THE CO-MANAGEMENT CONTEXT (TASK 2.1)

Biological, physical and technical attributes

1. Type of ecosystem (marine, inland, coast, coral reef, seagrass, mangrove, estuary, lake, river, floodplain, etc.)
2. Boundaries (physical, administrative, restrictions in access to fish resources)
3. Health status of fish habitats (spawning areas, nursing areas, fishing grounds)
4. Characteristics of target fish species and stocks (migratory or sedentary; status of stocks)
5. Characteristics of fisheries (industrial, artisanal, fishing technologies used, physical range of fishing operations, seasonal variations in fishing activities, level of exploitation)
6. Post-harvest utilization of catches (fresh, salted, dried, smoked, fermented, frozen, canned, etc.)
7. Terrestrial uses (residential, retail, industrial, tourism, etc.)
8. Other relevant coexisting fishing activities (external to the co-management arrangement)
9. Other human uses of the ecosystem

Market attributes

1. Market orientation of the fisheries (local, regional, national, international markets)
2. Value of fish products (high or low value market)
3. Market structure (many or few suppliers/ buyers, market dominance, power relations between suppliers and buyers, interdependencies)
4. Market functions (processing, storage, transportation)
5. Market infrastructure (ice, landing site, wholesale/retail market, etc.)
6. Length of supply chain from fisher to final consumer
7. Product certification schemes (if applicable)
8. Nature of first sale (compulsory centralized auction, direct selling to end consumers by fishers, etc.)
9. Mean annual landings
10. Mean value of landings/kg

Socio-economic and socio-cultural attributes

1. Demographics (residency status, ethnicity, religion, gender, age, education, family size, migrants)
2. Homogeneity /heterogeneity of fishers, fish traders, fish processors and other stakeholders (ethnicity, religion, fishing gear use, gender, ownership of boats and fishing gear)

3. Dependency on fisheries/fish trade/fish processing for livelihood; other sources of income/subsistence.
4. Livelihoods (occupations, sources of income)
5. Economic status (assets, wealth ranking, poverty)
6. Local and indigenous knowledge relevant to fisheries management (ecological and biological knowledge of resources and habitats, knowledge of catchability and fishing technologies)
7. Cultural factors affecting community or group attitude to fisheries/fish trade/fish processing
and determining behaviour of individuals/groups
8. Resource use patterns (land and water-based activities such as fishing, location of activity)
9. Community infrastructure and services
10. Level of knowledge, attitudes and practices relevant to fishery
11. Political affiliations

Institutional and organizational arrangements attributes

1. Power structures and leadership (role, functioning and importance of traditional leadership structures in decision making inside/outside the fisheries sector, gender)
2. Organizations established/appointed to serve as co-management partner (legal basis, mandate, representation, decision-making system/procedures, mechanisms for implementation of management decisions/enforcement)
3. Tenure arrangements
4. Local regulation of access to fish resources (principles for allocation of fishing rights or for exclusion of groups or individuals)
5. Operational and collective choice rules and management measures in place concerning fish catch, fish trade and fish processing, including origin of rule
6. Legitimacy of institutional arrangements and organizational set-up involving fishers and other stakeholders. Attitudes towards co-management
7. Conflicts and mechanisms for conflict resolution among resource users

External institutional and organizational arrangements attributes

1. Overall structure of national political and administrative system (relation between legislative and administrative system; centralization/decentralization)
2. Department of Fisheries and other relevant organizational structures involved with fisheries management (mandate and legal basis, structural organization, management function and tasks at national, provincial, district etc. levels)
3. Legal basis for co-management arrangements (enabling legislation, administrative decree, other)

4. Government agencies outside the fisheries sector whose mandate and activities interfere with
or impact on fisheries.
5. Power structures outside the fishing communities which impact on local power structures and leadership (e.g. influence of political leaders, high ranking military or police chiefs)
6. Role of donor organizations in promoting/enabling co-management arrangement.
7. Non-governmental organizations
8. External multilateral and transboundary agreements

Exogenous (macroeconomic, social, political, natural) attributes

1. Political and economic context of co-management arrangement (change in political system and overall economic development since colonial time; major events which impact on the survival of institutions (e.g. market liberalization)).
2. Disasters/calamities caused by war/civil unrest, typhoons/cyclones, earthquake, flooding etc. which impact on the survival of institutions
3. Climate change