NELSON MANDELA UNIVERSITY

Coastal and Marine Research

SANOCEAN PROJECT: Benchmarking knowledge-based adaptive management of estuarine fisheries in South Africa for a sustainable development.

REPORT ON VIRTUAL WORKSHOP HELD ON 27 SEPTEMBER 2021

Purpose of workshop

The purpose of the workshop was to obtain insights from participants in terms of estuary management in general and estuarine fisheries management in particular. The workshop was aimed primarily at local authorities and conservancies/NGOs who deal with day-to-day issues on estuaries.

Attendees

SANOCEAN project team members: Nina Rivers, Aidan Wood, Tor Næsje, Syden Mishi, Oddgeir Andersen.
Participants: Zwartkops Conservancy, Bushmans-Kariega Estuary Care Management Forum, Centre for Estuarine Research & Conservation, Lower Breede River Conservancy Trust, Ndlambe Municipality.

Key question: What are your experiences, insights and challenges in managing South African Estuaries in general and estuarine fisheries in particular?

There were three component questions posed to the participants:

1. What are the challenges for estuary management and estuarine fisheries management?
2. What are the reasons (enablers) behind successful estuary management and estuarine fisheries management?
3. What are the potential 'levers for change' to address challenges which could lead to more successful estuary management and estuarine fisheries management?

Insights from participants were captured as Post-it notes on a Miro Board (Figure 1) and then grouped as categories with comments in table form (Table 1). Participants were given the opportunity to comment on both the Miro Board and the table generated from their insights.

Figure 1 Section of the Miro Board generated during the workshop showing Levers for Change.

Outcomes

The main outcomes from each of the three questions were as follows (see Table 1 for detailed comments for each):

Challenges

1. Institutional and Capacity
2. Poor Governance
3. Education & Awareness

Enablers

1. Champions (right people/right place)
2. Education & Awareness and Knowledge
3. Institutional

Levers for Change

1. Enforcement
2. Knowledge/Information, Communication and Education & Awareness
3. Institutional

Table 1 Categorised insights and comments generated from the Miro Board.

CHALLENGES	
CATEGORY	**Challenge**
Capacity	Lack of State capacity - enforcement, knowledge, funding, manpower, infrastructure/resources (e.g., boats; focus on marine fisheries and abalone poaching)
	Vacant posts (for enforcement) not filled, process to build capacity is slow
Institutional	Corruption - granting of permits for development in sensitive areas, town planning favouring development
	Corruption - Operation Phakisa should have been an enabler but it has been 'captured'
	Estuaries not prioritised at all levels of government - other issues such as housing, jobs etc. take priority
	Lack of institutional continuity or memory - staff constantly redeployed
	Authorities are political appointees with no knowledge of or interest in environmental issues/management
	Estuary management forums not functional or representative of civil society
	Authorities slow to fulfil obligations, e.g., issues raised by EMFs, Breede-Gouritz RQOs
	Insufficient capacity means some estuaries are 'isolated' from management institutions/authorities
	Issuing fines is overly complex, false information supplied, many can't afford to pay anyway
Legislation	Complexity of legislation pertaining to estuaries
	Mandates not always clear
	Authorities (particularly local) not aware of estuarine legislation (e.g., ICMA and Protocol) and their responsibilities
	Difficult to bring about change, e.g., by-laws for power boating that damages littoral habitats, due to vested interests and investments by users

Governance	Poor cooperation between departments with overlapping and/or conflicting mandates
	Cooperative governance between local, provincial and national authorities is poor
	Inland and coastal municipalities do not cooperate - links from catchment to coast are lost
	Departments avoid responsibility - shift blame
	Responsibility mandate not clear, resulting in legal battles, e.g., estuary located on border of local or district municipalities
	State not willing to accept assistance from civil society (e.g., monitoring efforts, powers revoked for honorary officers)
	State outsourcing their key functions/mandates is not sustainable
	Lack of political will to engage in estuary management
Education/awareness	Authorities not educated about estuary-specific management needs and mandates
	Municipalities in particular do not regard estuaries as holistic systems
	Educational material is available but not disseminated to authorities and users
	Information on estuary health not communicated with users - poses health risk w.r.t. water quality
	Recreational anglers unaware of their impact on resources (don't understand or unaware of cumulative impact)
	Vandalism of educational signage deprives users of knowledge
	Lack of awareness of the connectivity between societal and ecological factors - authorities and civil society
Knowledge	Management informed by outdated information and therefore not trusted by users who won't buy into management interventions
Water flow	RQOs not met, insufficient inflows cause change to estuarine habitats and silting
	River flows altered or diverted from estuary
Judicial	Breakdown in judicial process - few convictions, fines do not act as a deterrent
	Environmental issues not a priority for the State - insufficient court action to challenge transgressions
Societal	Small-scale fishers verbally abused by public - breakdown in trust and relationships
	Some NGOs/conservancies not inclusive/representative and not aligned to current policy direction
	Communication/language barriers between diverse role players
	More harm done by 'outsiders' rather than residents - either lack of awareness or a 'don't care' attitude
	Implications or consequences of actions is different for user groups, e.g., no fish means mean no food for small-scale fishers but not as serious for recreational anglers
Management approach	Complexity of estuarine systems overlooked - links to marine, terrestrial and freshwater not always taken into account
	Need to raise awareness or educate users first before being critical or enforcing regulations

ENABLERS	
CATEGORY	**Enabler**
Capacity	Honorary marine conservation officers and fisheries control officers assist as observers (but no powers)
Champions	Volunteers from NGOs/conservancies offer vessels for use by authorities to patrol
	Conservancies/NGOs assist authorities in implementing and raise awareness of issues
	Conservancies/NGOs undertake education programs, clean-ups, illegal net removal, create general awareness

Education/awareness	NGOs/conservancies undertake education programs for fishers, bait collectors, learners and citizens
	Lot of good information available for dissemination
Knowledge	Up-to-date (and inclusive) knowledge systems
	Credible science
Institutional	Effective Catchment Management Agencies (e.g., Breede-Gouritz) for water resource quality/quantity objectives
	Functional estuarine advisory forums (with representative civil-society participation)
Value	Proven economic value of estuaries is a motivator for caring or sustainable activities

CATEGORIES	LEVERS for CHANGE
Enforcement	Need a carrot & stick approach - engage and educate first (highlight incentives for sustainable use) then enforce
	Presence of estuary (patrols) to act as a deterrent (do not necessarily need to confront, just observe)
	Reconsider appointment of Honorary Fisheries Control Officers with powers to act instead of just observing
Judicial	Examples need to be made as a deterrent, e.g., some hefty fines and successful prosecutions
Knowledge/information	Strategic documents such as the NBA made into more accessible format for end-users
	SAEON's SAEIS (SA Estuary Information System) as a repository of information accessible to all
	Access to and flow of information
	Greater transparency with regards science & data - how is research done and data collected
	Interact with and adopt knowledge and ideas from community members (indigenous & local knowledge systems)
	Embrace citizen science (monitoring, indigenous knowledge) to instil a sense of ownership amongst users
	Acknowledge, understand and accept the diversity of viewpoints from stakeholders
Communication	Identify pathways for disseminating information from coordinated knowledge systems; availability of material/information
	Communication is key to opening doors and building relationships and trust between communities, users and authorities (promotes cooperation and compliance, e.g., small-scale fishers reporting illegal nets as this impacts their livelihoods)
	Acknowledge and make use of the power of the press and social media to get message across
	Get message across to 'outsiders' who visit estuaries - awareness of local issues and estuarine value
	Use communication to 'jolt' people out of their complacency towards estuaries and resources
Education/awareness	Important for all, from end users to researchers to authorities
	Increase awareness of importance (value) of estuaries within municipalities
	Increase awareness about consequences of actions or activities, i.e., benefits of sustainable use and adhering to regulations
Water	Implement RQOs
Cooperative Governance	Need better collaboration between government institutions at all levels (coordination, communication & cooperation)
	Learning from successes and mistakes - communicate and coordinate with institutions that are successful in terms of estuary management (e.g., CapeNature)
Institutional	Functional Catchment Management Agencies could have significant impact
	NGOs and conservancies need to be more diverse or inclusive and adopt an education-based approach to resonate with younger and more diverse user-groups

Protection	Need other forms of protection besides official protected areas (e.g., local rotational or seasonal zonation?)
Economic value	Determine value to demonstrate what will be lost if estuarine health and/or resources decline