

Ecosystem services

WRC study investigates new approach to estuary-based economic empowerment

A WRC-funded study concluded the chapter of a long-term research and outreach programme focusing on supporting the management of estuaries in the Eastern Cape.

Benefits of ecosystem services

South Africa is challenged by the imperative of economic growth, particularly for those who have been and are still being disadvantaged. Ecosystem services supply a range of benefits and so play a fundamental role toward sustainable social and economic development.

Whilst there is wide appreciation of the variability in demand for ecosystem goods and services, there is less appreciation for the variability in the potential of ecosystems to deliver services. Economic enterprises that are based on ecosystem services are thus continuously subject to uncertainty in both demand and supply. Business enterprises based on natural resource systems are vulnerable to failure when this complexity and uncertainty is not taken into account.

Research and outreach programme

Commencing in 1998 the Eastern Cape Estuaries Management Programme (ECEMP) was informed, philosophically, by the identified need to develop local solutions to local problems and work upward and outward from there. Also, at a practical level, there was the recognition that estuaries are valuable ecological, social and economic assets and they require active management.

Management issues

The first phase of the programme involved engaging managers of estuaries to determine what the management issues were and a series of protocols were developed to address these issues. As a parallel process the Programme directly supported management efforts at Mtentu, Mzintlava, Mngazana, Tyolomnqa, Cowie and Bushmans/Kariega Estuaries, learning from these engagements.

A key management issue was its institutional context. To address this, mechanisms were developed to link estuary-based planning and management to the newly established Integrated Development Planning (IDP) processes of local municipalities. This included an education and training course in estuary management aimed at local officials and stakeholders.

Marginalised communities

During this programme it was observed that disadvantaged people living at or near estuaries were continually marginalised in the economic development process and that led to the latest research project.

Reducing vulnerability

The aim of this research was to develop an approach and associated methodologies that would reduce the vulnerability of enterprises founded on one or more ecosystem services. Although the focus was on estuaries and the people living around them, the intention was to develop an approach that would have much wider relevance.

Observations over 10 years

Observations made while conducting research on and supporting the management of Eastern Cape estuaries this research engaged five questions:

- What frameworks and/or models might inform and improve individual and collective understanding of potential for estuaries to support economic empowerment?
- What are opportunities and present state of estuary based economic empowerment with a particular focus on the Eastern Cape Wild Coast?

- From the frameworks and/or models what methodologies might be developed to enable a more fundamental understanding of economic empowerment at estuaries?
- Are the methodologies that are developed applicable in other common pool social-ecological systems such as wetlands?
- What are the policy and management implications of the research?

Case studies key findings

The methodology was applied and refined at two estuary-based and one freshwater wetland based case studies.

Key findings included the following:

- There are significant opportunities for the establishment of estuary- or wetland-based enterprises that can act as catalysts for economic empowerment, but there is a lack of support necessary to do this.
- Stakeholder response to the methodology was, without exception, overwhelmingly positive.
- Participants were able to engage the process effectively.
- The methodology was valid, and missing components were identified and included.
- The methodology could be applied in numerous proactive and responsive planning and management contexts.
- It was transferable to other common property resource systems.
- It had several limitations none which significantly detracted from its overall value.

Policy and practice implications

The findings of the research might make a significant contribution to both policy and practice.

At a practical level:

- Key elements of this research might be included in the estuary management protocol as well as the planning guidelines that emanate from the protocol.
- The estuaries and economic empowerment methodology might be used to organise and focus information collected during the situation assessment phase of the estuary planning and management process.

Training modules needed

It might be useful to develop and include two educational modules: one on estuaries and ecosystem services and a second (linked to the first) on estuaries and economic empowerment/ economic development in the existing estuary management training course material.

Recommendations and opportunities

- Department of Environment Affairs might consider commissioning further case-studies to apply and refine the methodology and provide exposure to local government.
- Department of Environment Affairs might consider investigating what public sector employment opportunities there might be which would result in increased investment and improved maintenance of estuary assets.
- The framework might contribute to improved objectivity in the environmental impact assessment (EIA) process.

Further reading:

To obtain the report, *An Approach to Estuary-Based Economic Empowerment with a Particular Focus on the Eastern Cape Wild Coast (Report: 1705/1/11)* contact Publications at Tel: (012) 330-0340; Fax: (012) 331-2565; Email: orders@wrc.org.za or visit: www.wrc.org.za to download a free copy.