

# Marine pollution along the East African coast: problems and challenges

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The Kenya coastal and marine environment possesses a variety of natural resources that support livelihoods of a rapidly growing population currently estimated at 3,3 million. These resources are, however, threatened by pollution, physical alteration and destruction of habitats, over-exploitation of resources, uncontrolled development, coastal erosion and climate change (ICZM Action plan 2011–2015). A brief, incomplete review of available (open) literature on pollution and ecotoxicological studies in marine ecosystems along the East African coast demonstrates that there is a general scarcity of information on the type and distribution of contaminants (exposure), their effects and their potential risks to man and the environment. In their review on marine pollution research performed in South Africa (including East African coastlines) during the period 1960 to now, Wegener and Degger (2012) concluded that (1) in general, relatively few papers are available on this issue, and (2) there has been a dramatic decrease in this number (to less than 50 papers per decade) since the 1980s. They also state that this observation can be linked to the lack of a marine pollution monitoring program in South Africa. Our review shows that these conclusions also hold for Kenya; indeed only a very limited number of papers on coastal water pollution are currently available in open literature. To better understand and manage the marine resources in the context of an integrated management of coastal and marine (offshore) resources there is a clear need to develop and implement research and sustained monitoring capacity of marine pollution and other environmental stressors (e.g. toxic algal blooms) in Kenyan waters. This paper is aimed at initiating discussions on a way forward to develop a tiered research and implementation approach.

## References

- ICZM (Integrated coastal zone management) action plan for Kenya. 2011–2015. National Environment Management Authority, Nairobi, Kenya. ISBN 9966–7460–6–4.
- Wegener V. and N. Degger. 2012. Status of marine pollution research in South Africa (1960–present). *Marine Pollution Bulletin* 64:1508–1512.