

## Project Update: September 2010

The characterisation of the abiotic and biotic environment of the Mpenjati and Mlalazi estuary during the dry season was conducted during June and September 2010. In June 2010, the mouth of the Mpenjati estuary was closed so three stations were sampled along the estuary. At Mlalazi estuary, four stations were conducted plus one at the estuary mouth during low tide to measure outputs from the estuary. During September 2010, Mpenjati estuary was still closed. So far, this estuary has been closed off to the sea for approximately 4 months. Three stations were again sampled along the estuary. At Mlalazi estuary, four stations were sampled but this time we sampled at the estuary mouth during both high and low tide to quantify inputs and outputs respectively.

In each station, physico-chemical parameters were measured at sub-surface (ca. 50 cm) of the water column. Water samples were collected for determinations of organic and inorganic nutrients. Sediment samples were also taken for nutrient content and granulometric analysis. Samples from the phytoplankton, zooplankton, meiofauna and macrobenthic communities were also collected. Sediment and benthic communities were only sampled along the estuary but not at the estuary mouth. The next sampling is scheduled at the end of November 2010; it will be our first characterisation of both estuaries during the wet season.

