

## Project Update: December 2010

The last field trip at Mpenjati and Mlalazi estuary was conducted at the end of November 2010. It was the first characterisation of these environments during the wet season conducted for this study. Mpenjati estuary opened to the sea at the end of October 2010. So far, Mpenjati estuary has been opened for a month. Thus, sampling at the estuary mouth during high and low tide was conducted to quantify inputs and outputs from this estuary during its open phase. At Mlalazi estuary, sampling was conducted as detailed for the previous samplings.

The analysis of water samples from June and September 2010 showed marked differences in the concentrations of Chlorophyll  $-a$  (Chl- $a$ ) and Total Suspended solids (TSS). A strong decline in total Chl-concentrations was observed in Mlalazi estuary from June to September 2010. This trend was also observed in Mpenjati estuary, but not in the station closed to the estuary mouth where Chl-concentrations in September were two times higher than in June 2010. These differences in the phytoplankton biomass will probably alter the species composition and biomass of other groups in these systems.

