

## **5. MATERIAL AND METHOD:**

### **Sample collection and Analysis:**

Samples from Narmada river were collected and analysed at quarterly basis w.e.f. October , 2007 in about 1077 kms of stretch right from Amarkantak to Koteswar for biological as well as physico-chemical component , from 30 sites from eastern, central and western zones respectively.

Physico chemical components of river water were analysed as per Standard Method for the Analysis of Water & Waste Water, APHA, 1992 Ed.

Biological sampling involved collection of benthic macro-invertebrates. The biological samples were collected as per standard method by using hand nets, shovel, stones, pebbles, boulders and uprooting macrophytic vegetation of the river. The collected samples were transferred from the net to a sieve (0.6 mm mesh size) and washed in water either by swirling in the river water or by pouring stream or river water through the net for removing the sediments. The benthic animals were then sorted out from the sample with the help of forceps and collected in a white enamel tray having water for identification. The taxonomic identification was done up to family level. The field parameters were done at in the site itself. Rest of the analysis was done in the lab as per approved CPCB protocol.