In 2010 we will sensitize the communities and obtain village level consent prior to mapping, and enumerating the 70 villages or village clusters. In 2011 we will check for new residents.

Distribution of LLIN at household level to achieve one LLIN per bed/ sleeping place in 2010 and top-up in 2011. Each year for two years we will spray DDT indoors in half the villages, allocated to intervention type by restricted randomisation.

We will enrol 9000 study children and screen them for haemoglobin density and parasite prevalence at the beginning of the transmission season in 2010. Each year Village Health Workers will be provided with refresher training on malaria diagnosis and referral. We will seek and obtain consent to trap mosquitoes using CDC light traps (LT), exit traps (ET) and MMX traps.

Clinical morbidity will be monitored in study children by Passive Case Detection. Study nurses and fieldworkers will be posted to district health facilities and key village health posts. Study children will be checked monthly for residence and in September for use of LLIN. Exposure to *Anopheles gambiae* mosquitoes will be measured by routine surveillance with LT and ET made on one night every four weeks from June to December. MMX trap collections will be made outdoors to determine outdoor vector densities.

We will screen children for haemoglobin density and parasite prevalence in December 2010 and 2011.

*Incidence of clinical malaria*  
*Prevalence of anaemia*  
*Prevalence of parasitaemia*  
*Density of female An. gambiae*  
*Exposure of children to infectious An. gambiae*