**Cost effectiveness analysis of fully time paid community health worker in three rural districts – Tanzania: Rufiji, Kilombero and Ulanga**

**Background**

Community health workers (CHW) have been in place for a number of years. The WHO advocates the use of CHW to expand health services coverage, as one of the method to tackle health workers shortages mostly in developing countries health systems. Many studies have depicted the importance CHW in improving community health especially in maternal and child health but few looked on cost effectiveness, mostly with full time paid CHW working in health systems.

**Objective**

To assess the cost effectiveness of deploying fully time paid CHW with multitasks in rural health system of Tanzania.

**Method**

The cost detailed was prospectively collected throughout the implementation of the program. Life years gained was estimated based on the number of under five death aviated resulted from health services coverage after introducing full time CHWs to the villages.

**Result**

The estimated incremental cost effective ratio (ICER) per life year gain was 20.22 USD. And the country gross domestic product (GDP) per person for year 2013 is 694.7. With this scenario, that the ICER is less than the GDP, for the under five child mortality rate of 151.4 for the control and 144.8 for the intervention area per 1000 life birth, the full time deployed CHWs intervention considered cost effective. The result was most sensitive to uncertainty in the estimate of life year gained.

The full time paid CHWs appeared to be cost effective when serving rural community especially those with insufficient health professions. The use of these CHWs to expand health coverage, mostly in rural and under saved communities facilitates the available health facility workers to concentrate fully at health facility and just set few hours to supervise CHW working within their facility catchment area.