REDUCING MALARIA MORTALITY AND MORBIDITY THROUGH LONG LASTING INSECTICIDAL NETS INTERVENTION: THE ODISHA EXPERIENCE

Problem Statement

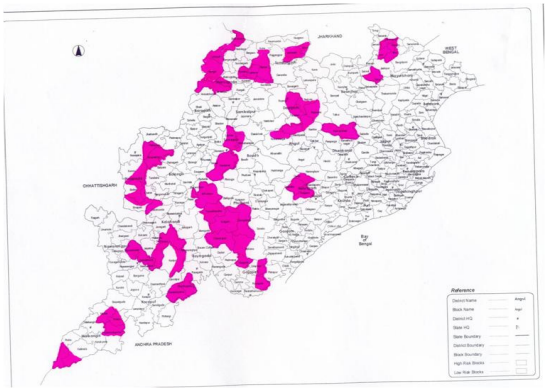
Nearly 1.5 million Malaria cases are reported annually in India. At 0.4 million, Odisha accounts for 4% of the Malarial Disease Burden. Anopheles Fluviatilis is the predominant vector and the State has a high burden of Falciparum Malaria i.e> 85%, causing complicated malarial disease. Odisha accounts for 18 % of the total malarial deaths in India (192 of 1068).[1] Based on several drug resistance studies, most of its districts have been declared chloroquine resistant. Malaria morbidity and mortality maximally affect hilly areas, populated by Tribal communities where the penetration of health service is weakest and the health seeking behaviour is often poor. In these malaria endemic areas children below 5 years and pregnant women are the most vulnerable.

Program Description

Long Lasting Insecticidal Net (LLIN) is acknowledged as one of the most effective personal protection measures against malaria and other vector borne diseases. In 2009 – 2012 State Vector Borne Disease Control Programme (State VBDCP), Department of Health and Family Welfare, Government of Orissa (GoO) in collaboration with the National Rural Health Mission (NRHM) launched and implemented the *'Mo Masari Scheme'* to protect pregnant women by LLIN under the Odisha Health Sector Plan. Since inception, 38 lakh LLINs have been distributed in Odisha in 21 clusters covering 26 districts, protecting a population around 85 lakh. Careful planning and implementation of the program resulted in successful outcomes. These stages are as follows:

- **Planning Phase:** A robust distribution plan and guideline was developed by State

VBPCP after a series of consultations with



district officials and other stakeholders. This endeavour was supported by NRHM and TMST. The state plan was backed by strong district micro planning. Each district had their own unique experience and learning based on how the LLIN distribution was envisioned on paper and how it turned into reality. Goan Kalyan Samitis (GKS) were involved in the distribution process to ensure greater permeability, transparency and coverage of LLIN. District administration and field level health staff assisted the GKS in LLIN distribution and monitoring process.

- **Process:** As a spin off from the success of the Pulse Polio Programme, LLIN was distributed within a single day, to ensure zero pilferage; greater accountability;

[1] NVBDC 2009

maximum coverage and better coordination. Follow-up or mop-up rounds lasting another week helped assess shortage of LLIN at village level based on which additional requisition was made from the buffer stock available at district. Three strategies were used to distribute the LLINs. These are:

- *Cluster Approach:* GIS mapping identified the clusters of targeted sub – centres having high APIs or difficult terrain making Indoor Residual Spray difficult to implement.
- *Time bound approach* to deliver LLINs
- *Generating awareness for use of LLIN:* A three tier approach to Behaviour Change Communication (BCC) was developed. The first tier included a community needs assessment and demand generation through '*SwasthyaKantha'* (the health wall at the village), use of platforms such as VHND and Immunisation days, dissemination in local haats (market), stalls in local fairs/festivals. The second tier included demonstration of hanging and drying of nets by the Block level Health Team and a BCC campaign known as *'NidhiMousa to Masari Ne'*. The third tier concentrated on bringing in behavioural change amongst the users by reiteration of messages on malaria control and prevention and usage and maintenance of LLIN. It included included*NidhiRatha*(A van campaign) and *Jatra performance* (folk theatre).

Program Impact

There has been drastic reduction of cases and API over the years after the LLIN distribution. The following are few examples from selected districts which substantiate the best practices revolve around the LLIN distribution its use by the community.