



Orissa Reaches Treated Bed Nets to Vulnerable Populations

LLIN distribution synchronised with a communication campaign adopts cluster approach



This publication was produced by the State Vector Borne Disease Control Programme (State VBDCP) and National Rural Health Mission (NRHM), Department of Health and Family Welfare, Government of Orissa with support from Technical and Management Support Team (TMST).

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Abbreviations

ADMO	: Additional District Medical Officer	IEC	: Information, Education and Communication
API	: Annual Parasite Incidence	IPC	: Inter Personal Communication
ASHA	: Accredited Social Health Activist	IRS	: Indoor Residual Spray
AWC	: Anganwadi Centre	ITMN	: Insecticide Treated Mosquito Nets
AWW	: Anganwadi Worker	ITN	: Insecticide Treated Nets
BADA	: Block Accountant and Data Analyst	LHV	: Lady Health Visitor
BCC	: Behaviour Change Communication	LLIN	: Long Lasting Insecticidal Net
BDO	: Block Development Officer	M/F	: Male/ Female
BEE	: Block Extension Educator	MOI/C	: Medical Officer In-Charge
BPL	: Below Poverty Line	MPHS	: Multi Purpose Health Supervisor
BPO	: Block Programme Officer	MPHW	: Multi Purpose Health Worker
CBO	: Community Based Organisation	MTS	: Malaria Technical Supervisor
CDMO	: Chief District Medical Officer	NGO	: Non-Governmental Organisation
CHC	: Community Health Centre	NRHM	: National Rural Health Mission
CSO	: Civil Society Organisation	NVBDCP	: National Vector Borne Disease Control Programme
DFID	: Department For International Development	OHSP	: Orissa Health Sector Plan
DMO	: District Medical Officer	PH	: Public Health
DoH&FW	: Department of Health and Family Welfare	PHC	: Primary Health Centre
DRDA	: District Rural Development Agency	PRI	: Panchatayati Raj Institution
DPM	: District Programme Manager	SC	: Sub Centre
GIS	: Global Information System	SHG	: Self Help Group
GKS	: Gaon Kalyan Samitis	TMST	: Technical and Management Support Team
GoI	: Government of India	VBDCP	: Vector Borne Disease Control Programme
GoO	: Government of Orissa	VBD	: Vector Borne Diseases
HQ	: Head Quarters	VHND	: Village Health Nutrition Day
HW	: Health Worker	VHSC	: Village Health and Sanitation Committee
ICDS	: Integrated Child Development Scheme	WHO	: World Health Organization
IDSP	: Integrated Disease Surveillance Project		



Sri Prasanna Acharya
Minister
Health and Family Welfare
and Public Grievances & Pension Administration,
Govt. of Orissa

MESSAGE

In keeping with our goal of providing effective health care services to rural population with special emphasis on the tribal and backward areas, malaria control and prevention has been the foremost in the agenda.

The 'LLIN Campaign' is an indication of strong commitment and a well planned distribution and communication campaign. Our own State scheme '*Mo Masari*' will endeavour to cover all pregnant mothers, under 5 and tribal school children in highly endemic pockets.

I feel happy that our Gaon Kalyan Samitis faced the challenges of distribution at the village level and led the success of the campaign. The challenge that lie ahead of us, make it imperative that we continue to work collectively and do everything in our capacity to bring more commitment to reduce incidence of malaria especially in the most vulnerable sections of society. We have to ensure that the LLINs are utilized effectively and we continue our efforts in the same tempo.

This document will help us in dissemination of our practices and efforts, lessons from the success of this campaign and emerge as a trendsetter. A lot more needs to be done but I am glad that we have shown credibility by working collaboratively in the best interests of the State.

I thank all our partners for their relentless support to the Department of Health and Family Welfare in making this campaign successful.

I wish the publication a grand success.

(Prasanna Acharya)



Ms. Anu Garg, I.A.S
Commissioner cum Secretary
Dept. of Health and Family Welfare
Govt. of Orissa



MESSAGE

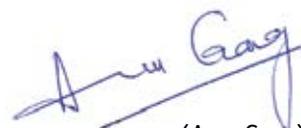
Orissa contributes around a quarter of the country's reported malaria morbidity and mortality, and 88% of this burden is attributable to *Plasmodium falciparum*, the species of malaria parasite that is responsible for severe and complicated malaria. A malaria prevention and control measure needless to say is high priority for the State.

In recognition of the importance of Insecticide Treated Mosquito Nets to maternal and child health, Orissa in partnership with Govt. of India has set a goal of covering every sleeping space in malaria-risk areas with a long lasting insecticidal net (LLIN) and to protect pregnant woman and under 5 children in high burden areas with a State run scheme '*Mo Masari*'. Orissa has succeeded in delivering over 1.2 million nets in most malaria endemic clusters of the State. Between 2010 and 2012, around three million LLIN will be delivered to protect the population at risk.

State specific guidelines, greater involvement of district administration and Gaon Kalyan Samitis (VHSCs) and rigorous monitoring have recorded almost 100% distribution coverage in the identified high endemic clusters within 3 months. The distribution is now followed up with a powerful and innovative social mobilisation and Behavioural Change Campaign '*Nidhi Mousa to Masari Ne*' to promote use and maintenance of LLIN.

This document represents the accumulated wisdom of those who have been most closely involved in the campaign. By collecting their experience and making it available to others, it provides the best guide available for implementation. The authors have spent enormous effort to assure that the best practices are presented in a clear and concise manner. Seeing the results and outcomes of the campaign and after going through this highly engaging document that presents facts and processes in such an innovative manner, I would like to place on record my deep sense of appreciation to NVBDCP, NRHM and TMST for steadfastly supporting the campaign.

A number of partners like WHO and DFID have made essential contributions to this campaign. It is through a collaborative support to the State that the goal of complete ITMN coverage is not a distant dream.



(Anu Garg)



Dr. Pramod Meherda, I.A.S
Mission Director, NRHM
Dept. of Health and Family Welfare
Govt. of Orissa

MESSAGE

Malaria mortality and morbidity has once again attracted keen attention of policy planners especially with respect to role of equity strategies in combating malaria prevalence. The most vulnerable in the community are children under 5 years of age, pregnant women and marginalized communities. Given the local epidemiology of Malaria in the State of Orissa, Malaria Control is integrated with NRHM to further strengthen the programme. The major achievement of this programme is the substantial decline in the number of malaria cases (measured by API- Annual Parasite Incidence) and mortality rate over the years.

With a paradigm shift of malaria control programme across the country, the new programme is able to reach every household through NRHMs most dependable strength at the community level i.e ASHAs and Gaon Kalyan Samitis (VHSCs). Now, every ASHA in the high malaria endemic districts of Orissa are trained in conducting a RDK test, slide collection and administering ACT besides managing a fever treatment depot in her village. The GKS spreads awareness on malaria prevention and provides referral support with its untied fund. The State's decision in involving them in distribution and BCC campaign of long lasting insecticidal nets has brought the most challenging task to a successful result. The most significant contribution made by the GKS was to reduce the conflict in distribution by taking greater ownership at the community level with negligible interference of administration. Based on the successful input to the campaign Gaon Kalyan Samitis have marched ahead in preparing the village health plan with appropriate activities on malaria prevention addressing the local health issues.

NRHM and State VBDCP look forward to hearing lessons learnt from future campaigns and incorporating additional tools to further improve our collective efforts at malaria control. At the success of first phase distribution of LLIN and 'Mo Masari' scheme in the State, I thank all stakeholders, district administration, partners, health functionaries, State VBDCP, NRHM and TMST team members and every ASHA and GKS member for coming together in achieving it.

I take this opportunity to reiterate the commitment of NRHM to provide every necessary support to strengthen the malaria control programme in the State so as to bring down the incidence of malaria to a level where it would not pose any public health problem.


(Dr. Pramod Meherda)

Acknowledgements

This document was produced with the valuable guidance and contributions of Honourable Minister of Health and Family Welfare, Public Grievances & Pension Administration and Commissioner cum Secretary, Department of Health and Family Welfare. The document is based on experiences and lessons learned from the distribution and behaviour change campaign of LLIN in Orissa.

Our special thanks to Shri G. Mathivathanan, IAS, the then Mission Director, NRHM, Orissa and present Special Secy. to CM for his guidance and support; Dr. Krishan Kumar, IAS, Collector, Kandhamal; Ms. Aswathy S., IAS, Collector, Mayurbhanj and Mr. Girish S. N., IAS, Collector, Dhenkanal for their co-operation in documenting the evidences from ground.

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- State Technical Task Force on Malaria prevention and control
- All Directorates of DoH&FW
- Regional Office of Health and Family Welfare
- Dr. R. K. Nath, Joint Director, Malaria (DHS), DoH&FW
- District Collectors of all 21 districts
- District Administrations of all 21 districts
- CDMOs of all 21 districts
- ADMOs (PH)/DMOs of all 21 districts
- State, district and block NRHM Team
- State OHSP Programme Management Unit
- District and Block Health officials of all 21 districts

- VBD Consultants and Malaria Technical Supervisors of all 21 districts
- Anganwadi Workers, ASHAs and Gaon Kalyan Samiti members of all 21 districts
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- Ms. Alison Dembo Rath, Team Leader, TMST
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LLIN Intervention in Orissa – Successes and Challenges

Introduction to a short but high impact initiative to combat Malaria

Malaria prevention and control efforts in Orissa got a “booster dose” with an intervention of Long Lasting Insecticidal Net (LLIN) distribution that was planned on a large-scale from February to March 2010 by the 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), Orissa and Technical and Management Support Team (TMST) supported by DFID.

LLINs are acknowledged as one of the most effective personal protection measures against malaria and other vector borne diseases. The first phase of LLIN distribution in Orissa was completed in 17 clusters covering 21 districts, protecting a population of approximately 25 lakh. Simultaneously, the State carried out the ‘*Mo Masari* Scheme’ to protect pregnant women by LLIN under the Orissa Health Sector Plan.

GoO scores to its credit

- Finalising a comprehensive distribution plan in addition to State specific guidelines
- Adopting a Cluster Approach to maximise benefit
- Distributing LLIN to the ultimate beneficiary through Gaon Kalyan Samitis (GKS) otherwise known as Village Health and Sanitation Committees (VHSCs)
- Launching an integrated social mobilisation and Behaviour Change Communication campaign called ‘*Nidhi Mousa To Masari Ne*’ (Uncle Nidhi! Take your Net)
- Receiving 50% of Government of India’s LLIN stock in 2009-10
- Procuring LLIN from the State resources under ‘*Mo Masari*’ scheme to protect the pregnant women in high malaria burden districts

In Phase-I, it was anticipated that supply would be inadequate to keep pace with the demand. Resultantly, LLIN stock received from the Government of India (GoI) was not enough to cover the population at risk in malaria high burden districts. It was therefore decided to implement a strategy that could ensure maximum public health benefit. Thus criteria were set up for prioritisation of vulnerable areas where LLIN would be distributed through cluster approach.

“State specific guidelines, greater involvement of district administration and Gaon Kalyan Samitis (VHSCs) and rigorous monitoring have recorded almost 100% distribution coverage in the identified high endemic clusters within 3 months. The distribution is now followed up with a powerful and innovative social mobilisation and Behavioural Change Campaign ‘Nidhi Mousa to Masari Ne’ to promote use and maintenance of LLIN.”

**Ms. Anu Garg (IAS),
Commissioner cum Secretary,
DoH&FW, GoO**

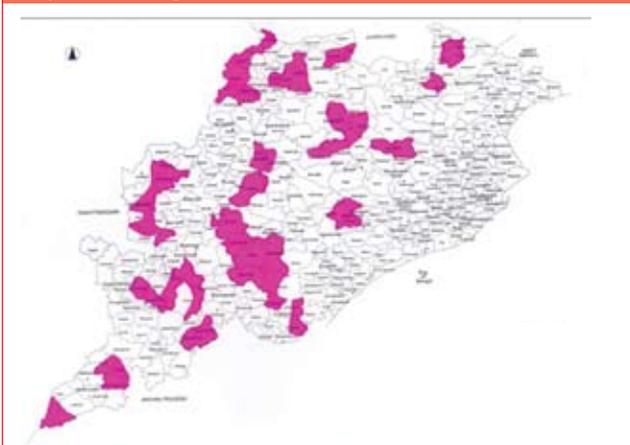
The cluster approach helped identify areas where the Annual Parasite Incidence (API) was more than five with the help of the Geographical Information System (GIS). Clusters of vulnerable and risk areas for malaria were identified using sub centre as a unit for LLIN distribution. A total of 17 clusters comprising 601 sub centres and 5510 villages spread over 69 blocks in 21 districts were covered by the end of May 2010.

Background

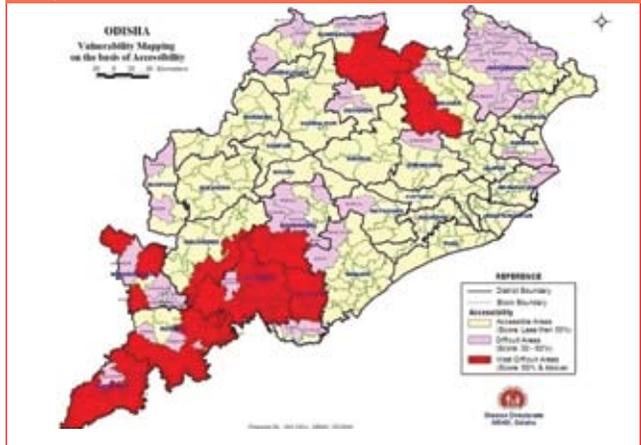
Nearly 1.5 million Malaria cases are reported annually in India of which 0.4 million are in Orissa. With approximately 4% of India’s population accounting for a quarter of the disease burden, Malaria deaths in the State number 192 of 1068 (18%) in India (NVBDCP 2009 provisional). However, across the country, actual malaria deaths and cases are estimated to be much higher than reported.

The State’s ecological and geographical conditions favour various ecotypes of malaria with Anopheles fluviatilis being the predominant vector mosquito. Orissa has a high proportion (>85%) of falciparum malaria which is known to cause complications and death. Based on several drug resistance studies, most of its blocks have been declared chloroquine resistant. Malaria morbidity and mortality is high in hilly areas where penetration of health service is weak and health seeking behaviour often poor. A large proportion of the

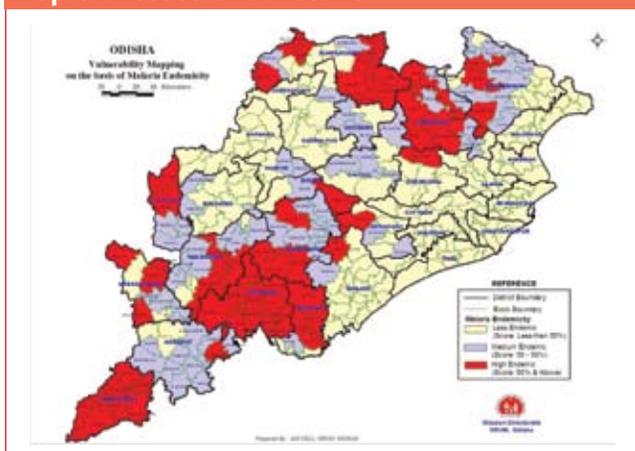
Map showing Distribution Clusters in Orissa



Map of Access and Malaria



Map of Access and Malaria



population in these areas represent tribal communities whose economic and health status is abysmally low. In malaria endemic areas, children below five years and pregnant women are the most vulnerable to falciparum infection.

Indoor Residual Spray (IRS) and use of Insecticide Treated Mosquito Nets (ITMN) are long-term measures targeting adult mosquitoes and have been recommended by NVBDCP as part of the Integrated Vector Management strategy. The programme is now gradually shifting towards reducing areas under IRS and increasing coverage with a new type of insecticide treated nets, namely, Long Lasting Insecticidal Net (LLIN) which remains effective for up to three to five years. Against the backdrop of widespread chloroquine resistance, no chemoprophylaxis with chloroquine is recommended for pregnant women. Only Insecticide Treated Mosquito Nets preferably LLINs have been adopted as a preventive measure against malaria during pregnancy in Orissa.

In addition to the National guidelines to cover all villages in high endemic areas, the State has also introduced the “*Mo Masari*” (My Mosquito Net) scheme, with its own resources under Orissa Health Sector Plan to protect all pregnant women in high burden districts and children of tribal residential schools.

A well structured distribution plan leads to high saturation

LLINs have been shown to have maximum impact if more than 80% of the population in a given community, uses it on a regular basis. This formed the basis for the decision on saturating LLIN distribution in all the villages within a cluster.

Orissa received its first stock of LLIN (around 50% of total LLIN procured by GoI) in September 2009. The challenge was to decide on a plan of distribution that was fair, equitable and efficient. After a series of consultations with district officials and other stakeholders, the distribution plan and guidelines were developed by the State VBDCP with support from NRHM and TMST. These were presented before the State Technical Task Force Committee chaired by the Commissioner cum Secretary, DoH&FW, GoO before being approved by the Government.

As per guidelines, Gaon Kalyan Samitis (GKS) formed under NRHM at the village level were involved in the distribution process for a greater transparency and coverage of LLIN. District administration and field level health staff assisted GKS in the distribution and monitoring process.

What is Gaon Kalyan Samiti (GKS)?

- Village Health and Sanitation Committee (VHSC) is called GKS in Orissa
- It is governed by a management structure at the village level comprising members of the general community; chaired by a Ward Member and convened by an Anganwadi Worker (AWW)
- The objective is to plan and implement health and sanitation related activities through community participation
- An untied fund of Rs. 10000/- is provided to every GKS by NRHM.

The successful distribution of LLIN encouraged the State to upscale LLIN intervention in 2010-11. This process documentation provides an account of LLIN distribution along with steps and remedial measures that were taken at different levels. The community's response provides valuable input as also highlights challenges faced through powerful success stories. While Section I deals with the context and gives an overview, Section II shows how the LLIN distribution plan unfolded, creating efficiencies in the State-to-District distribution chain. Extensive case studies of three districts illustrate their experiences in LLIN distribution as representative samples. Section III outlines the journey from the State to the village level in planning and co-ordination and Section IV

tells us the match between supply, procurement and distribution. Section V details the innovative campaign on Behaviour Change Communication that adopted a multipronged approach to publicise, sensitise and inform LLIN users on the maintenance and usage of LLIN.

The document aims to serve as a reference point for anyone seeking an insight as to how a State with high incidence of malaria and limited resource could use a simple model to reach an item of need to the poorest, most impacted section of the population. The initiative, by virtue of being one of short duration but yielding high impact and on-ground results, is an example that can be replicated in any similar setting.



Couple checking out LLIN received



Efficient Planning Helped Achieve Targets

Tracking LLIN distribution from State to district level

Malaria is a dreaded disease that has haunted the region, claiming lives incessantly, year after year. Following an internationally accepted model of using LLIN, especially among poor and marginalised communities in developing countries, GoI supported the State with its first stock of LLIN from September 2009. Orissa Government developed a systematic plan for LLIN distribution that would cover 69 blocks in 21 districts under 17 clusters. The State plan was backed by strong district micro planning which is detailed through the three representative case studies of Kandhamal, Mayurbhanj and Dhenkanal.

Each of the districts had their own unique experiences and learning based on how the LLIN distribution was envisioned on paper and how it turned out in reality. Through Kandhamal the crucial role of planning and coordination at the district and block levels and how the learning of one block

benefited other blocks that altered their distribution plans based on feedback received by yielding better results are shown. In Mayurbhanj, successful distribution from sub-centre to village level is presented while the Dhenkanal case study gives a glimpse of exemplified results of a humane approach where every vulnerable citizen was a priority for the Government. Through these three case studies one saw how both intent and action came together to ensure that the last beneficiary in the cluster benefited from the LLIN distribution initiative that aimed at reducing the burden of malaria in the State.

5-Step Process followed at State level for guiding districts

Step 1: State-level consultation held on 19th September at Bhubaneswar; State and district officials oriented on cluster approach

Step 2: Blocks and sub centres identified under each of the 17 clusters; State specific guidelines on LLIN distribution developed; micro plans prepared by districts; adequate kitting of LLIN done at stocking points

Step 3: Zonal meetings held from 3rd to 11th of January, 2010 in five locations; micro plans outlined quantity of LLIN needed; district teams oriented on guidelines/ planning and coordination process

Step 4: District teams took stock of existing supplies of LLIN and requirement of LLIN as per the district level micro plan; they oversaw locations where they were to be distributed and assessed quantities for dispatch

Step 5: Directions were sent from Commissioner cum Secretary, DoH&FW to the Collectors of 21 districts; respective District Collectors called for consultation meetings with district officials to discuss and finalise the LLIN distribution strategy.

Details of Zonal meetings held

Date of Zonal meeting	Venue of Zonal meeting	Districts Covered
3 rd and 4 th January'10	Keonjhar	Mayurbhanj, Keonjhar and Deogarh
3 rd and 4 th January'10	Bolangir	Bolangir, Sonapur, Nuapada, Kalahandi and Bargarh
5 th and 6 th January'10	Sundergarh	Sambalpur, Jharsuguda, Sundergarh
7 th and 8 th January'10	Bhubaneswar	Malkangiri, Rayagada, Koraput, Naurangpur and Gajapati
10 th and 11 th January'10	Bhubaneswar	Angul, Dhenkanal, Nayagarh, Kandhamal and Boudh

"Kandhamal has the most difficult block of the State and the cluster approach ensured covering the high endemic malaria blocks that will help in reduction of falciparum malaria cases in the district. I am taking all possible steps to ensure a better coverage by involving all possible stakeholders for monitoring. We will also use our own community based theater group 'Antaranga' for the BCC campaign"

Dr. Krishan Kumar, IAS

District Collector, Kandhamal

Kandhamal District

Highest on Vulnerability Scale; Leads in LLIN distribution

Kandhamal is one of the tribal districts of Orissa which is most vulnerable for Falciparum, the dangerous variety of Malaria. Nearly 52% of its population belongs to Scheduled Tribes and 17% Scheduled Castes. Also, 24 of 44 most "difficult" Panchayats in terms of access, infrastructure and development in the State fall under the Tumudibandh, Daringibadi and Kotagarh blocks of Kandhamal.

What worked to their advantage was the fact that learning and outputs of one block were immediately adapted to other blocks. About 100,000 LLINs were allocated for the district. Out of a total of 11 blocks in Kandhamal, three blocks i.e. Tumudibandh, Daringibadi and Kotagarh were selected for LLIN distribution. A total of 43 sub centres and 765 villages were covered protecting around 1.8 lakh population.

Steps adopted by the District to achieve desired results

- On 10th February, District Collector called for a consultation meeting which was attended by Project Director (DRDA), CDMO, ADMO (PH), District



Discussions during preparatory meeting at block level for the distribution of LLIN - Daringibadi block-Khandamal

Social Welfare Officer, District Programme Manager (NRHM) and VBD Consultant (NVBDPC) to outline LLIN distribution strategy in Kandhamal district.

Important decisions taken included:

- ◆ Fixing responsibilities for various departments
- ◆ Adopting fixed date approach for distributing LLIN (given in table below)
- ◆ Making Anganwadi Centre as distribution point at village level
- ◆ Forming monitoring teams at district and block level
- By 15th February, 2010 every sub-centre received its quota of LLIN
- District Health Department drew up a micro plan starting with an orientation of block level officials, health workers and GKS members
- Sector meetings were held to orient Accredited Social Health Activists (ASHAs) on community mobilisation;
- Involvement of Panchayati Raj Institution (PRI) members to ensure accountability among line departments
- BDOs shared the micro plan and promotional material with ICDS supervisors, bringing them on board
- AWWs were oriented in the Integrated Child Development Scheme (ICDS) sector meeting by the Medical Officer/Block Extension Educator (MO/BEE) on the distribution process and their involvement
- Block level inaugural ceremony on distribution of LLIN was held to consolidate support and commitment to the LLIN distribution initiative

Winning decisions with fixed date approach

Sl. No	Blocks	Target of LLIN	Date of distribution	LLIN Distributed	Percentage
1	Tumudibandh	18841	25 th Feb'10	13453	71.4%
2	Kotagarh	22117	28 th Feb'10	17033	77.0%
3	Daringibadi	37806	8 th & 11 th Feb'10	37656	99.6%

The remaining LLIN were distributed during the mop-up round.



Miking and IEC Stall at Mother's Mary festival, Daringibadi

Daringibadi Block achieved almost 100% distribution within a month. The success was attributed to the following factors:

- Health department taking a timely decision to postpone the distribution dates to ensure maximum participation which was coinciding with a popular local festival – **Mother Mary's festival** falling on 5th February. The week long festival attracts people from within and outside the block to Daringibadi to participate. Sensing an opportunity, a decision was taken to shift the distribution dates from 5th and 8th of February to 8th and 11th February and use the festival date of 5th as an IEC event with miking and information stalls telling people about merits of LLIN usage and to avail government's initiative of distribution
- Handing over identification slips with house coding, BPL card and serial number to facilitate easy collection and record maintenance of LLIN
- Upgrading register that was used for survey as a distribution record
- Using GKS fund to meet transportation cost of LLIN (Sub Centre to AWC) in some cases

Mosquito nets provide a relief to me and my family

Ajaya Ku. Nayak, a 35-year old and a resident of Gudikia village, in Daringibadi block of Kandhamal District lives with his wife and four children in a cramped 12 feet X 4 feet thatched house, is subsisting on a meager salary of Rs. 30 a week. He was suffering from a mysterious skin disease. His fleshy tissues were dissolving, he had lost an eye and the infection was spreading. He had several episodes of malaria like fever and was not sure if this was a reaction to medicines. He knew that using a net would prevent him and his family from malaria, but he could not save the money to buy it. When his wife informed him that the Government was providing new type of mosquito nets with a contribution to GKS of Rs.10 for every poor family (Below the Poverty Line) and he was eligible to get three, the nets suddenly seemed within his reach. He had a word with the Anganwadi worker to confirm the news and was the first to line up on the day of distribution. He knew his tiny house would be unable to accommodate three nets but he will use the courtyard, where now it would be possible to sleep under protection, free of the buzzing disease-laden mosquitoes which had hounded him for years and will also keep his children out of suffering.

Performance of the three blocks

- Converging with different programmes and using AWC as distribution points
- LLIN distribution was a well thought out exercise that had the full support, involvement and participation of many line departments. Nayak, in the above example, benefited from LLIN distribution which in his case would not have been possible if AWC was not made a distribution point. Under each AWC, there were more than 5-6 GKS (revenue villages) with 5-10 households. It enlisted the support of Female Health Workers, ASHAs, Health Workers and NGOs to distribute



Women from adjacent hamlet going back with LLIN, Dhenkanal district

the net and ensured customised attention through household visits and individual attention; printed IEC materials were distributed by AWW and ASHA under the supervision of Sector Supervisor of ICDS or Health Sector Supervisor, Lady Health Visitor (LHV). BDOs of the blocks were given the overall responsibility to manage and co-ordinate with all line departments.

Distribution on a single day

Inspired by the success of the Pulse Polio Programme, LLIN was distributed during the course of a single day, ensuring zero pilferage; greater accountability; maximum coverage and better coordination since the schedule was tight and micro planning helped outline each step. Follow-up or mop-up rounds lasting another week helped assess shortage of LLIN at village level based on which requisition was made for additional stocks from the buffer stock available at district.

Involving the Gaon Kalyan Samiti (GKS)

GKS was already a well entrenched entity within most villages. It was familiar with the challenges of its village as also individual case studies. This came handy while coercing people to avail LLIN distribution. GKS members also decided on behalf of poor and infirm villagers that they be given free nets.

“We had apprehensions about undertaking a massive task like distribution on a single day but seeing the end result and effectiveness of the approach, we are glad, we embarked on an ambitious plan. This was possible only because we had backed it with carefully worked out steps. Resultantly, we saved time and resources as we cut through the red tape. There was reduced risk of pilferage and people were happy since they did not have to wait for long or return for another day. It also made monitoring easier. ”

**– Dr. Ahwini Ku. Das, MOI/C,
Tumudibandh block.**

Micro detailing undertaken

Micro plans were prepared by Block level officials with the help of Female Health Workers, Multi Purpose Health Supervisors (MPHS) and GKS members. These included detailed listing of number of households along with estimated number of LLIN that would be required. The district and block team distributed the available stock amongst the three blocks based on these micro plans.



Phula Baskey taking the help of the villagers to tie the LLIN



Phula Baskey thrilled to take her LLIN



Understanding the old woman's plight GKS decides to send one LLIN free of cost



Phula Baskey, aged around 90



The woman receives her quota of LLIN



AWW and ASHA from Kurkutia village of Bisoi Block, Mayurbhanj reach CHC to receive LLIN stock



LLINs loaded on a hired vehicle

Mayurbhanj Journey from CHC to Village;

On 4th March, ASHA and AWW of Kurkutia village in Nuagaon Block went to Manada CHC to collect LLINs for distribution the following day. AWC, the venue for distribution was teeming with eager villagers who came to receive their LLINs. Effective publicity had already been undertaken by ASHA and Female Health Workers through wall writing and household visits. Monitoring and supervision teams from the district comprising of VBD Consultant and MO (IDSP) had visited the distribution point and checked if everything was according to plan. They urged the AWWs to hasten the registration process to ensure people did not have to wait for long.

Cluster Profile

Out of a total of 26 blocks in the district 8 blocks were

Clusters	Blocks Covered
Cluster 1	Sriramchandrapur and Kaptipada
Cluster 2	Jashipur and Manada
Cluster 3	Gorumahisiani, Bijatola, Badampahad and Tato



Loaded vehicle accompanied by AWW and ASHA leaves to the village

District Reaching the last beneficiary

When the name of Phula Baskey was called out and no one stepped forward to receive LLIN, someone said she was a 90-year old who wanted to come to pick up her LLIN but was too old to walk to AWC. GKS members made a note of this and sent a volunteer to Baskey's house with a free LLIN, much to the joy of the old lady and villagers who felt reassured to see the compassionate understanding of GKS to ensure an equitable distribution process.



5th March, the distribution day starts with preparation of register with guidance from MO (IDSP) and VBD Consultant at AWC



Preparing for the Distribution (LLIN Coding, Register and Contribution Fund collection slips)



Community gets information about distribution date and venue from GKS Health Wall

of Mayurbhanj

covered under three different clusters for LLIN distribution.

	No. of Sub Centres	No. of Villages
	26	136
	19	153
	74	504



A woman getting registered and paying the contribution money



Community waiting for their turn

24x7 Monitoring teams at the district level

Formation of 24 monitoring teams included resources from other blocks leading to better utilisation of human resources and giving an exposure.

Experience of distribution in other blocks helped saturate coverage in remaining blocks

Based on the experience of LLIN distribution in the initial distribution, quick lessons were put together and shared with other blocks to ensure they were better equipped. This contributed in ensuring better preparedness and performance. Therefore Tumudibandh achieved 71% coverage; Kotagarh 77% and Daringibadi which was the last in line, achieved almost 100% in the distribution of LLIN.

Challenges along the way

There were minor hiccups in the distribution process at different levels but what made them triumph over the odds, was the crafting of solutions that were based on practical lessons.

1. While involving GKS in the distribution process was a good idea, sufficient time was not given for orientation to its members, leading to gaps in how surveys and record keeping were carried out.
2. While demand got created for adolescent girls, boys and widows, there were no nets for them since these groups had not been taken into account during the preparatory round of the survey and micro plan. In spite of having 3% buffer stock, there was a gap of 5% between LLIN supplied and distributed in almost all villages.
3. Fears and myths of the community in using LLIN could be seen with some complaining of itching and reddishness due to sleeping under net.

Summing up

As a follow up, the district administration planned to

- have home visit cards for tracking usage of LLIN with details on malaria incidence, symptoms, blood sample and key messages on malaria control;
- develop focused groups to don the mantle of being change agents - children in tribal residential and non residential schools could sensitise families and

others and daily wage labourers could sensitise co-workers, etc.

- use community based theater groups regularly in NREGS sites for promoting messages

Dhenkanal District: Cluster Approach ensures strong coverage

Using the cluster approach in Dhenkanal only one block (Kankadahad) was covered. This had 16 sub centres and 109 villages. The area is endowed with both plain and hilly terrain and is home to tribes where incidence of malaria is high. The story of Jatak Behera was heartwarming. A 60- year old divorcee of Brahmania village, she lived in a modest hutment with her 35-year old son. Being a BPL family they were entitled to two nets with contribution of Rs 10 each. But since she did not have a BPL card, she was not sure she would get them. Last summer she had a bad bout of malaria and compounding her insecurity was the present condition of her mosquito net, which was completely worn out. Knowing her plight, GKS members decided to gift her net. This was a joyous occasion for her and the son.

The examples and case studies of the three districts give a glimpse of performance of other 18 districts covered in the first phase of LLIN distribution.



Jatak Behera in her small hut in one of the village in Dhenkanal



Meeting LLIN Distribution Goals

Planning and coordination makes State to village journey smooth

Converting action plans to ground level realities is a challenge anywhere in the world but more so in a State like Orissa, where infrastructural facilities such as roads are limited, terrain difficult and people semi literate. Having achieved success in promoting and accelerating the implementation process in similar programmes such as the Gaon Kalyan Samiti (GKS), the Orissa Health Department was confident of taking on the task of distributing LLIN to vulnerable communities across 21 districts in the State. The challenge was in getting line departments to converge and take responsibility for clearly defined tasks which could eventually come together to bring about desired results.

Once the State Government received 50% of GoI procure first phase LLIN, the task ahead was to take it to the next level, namely ensure smooth and 100%

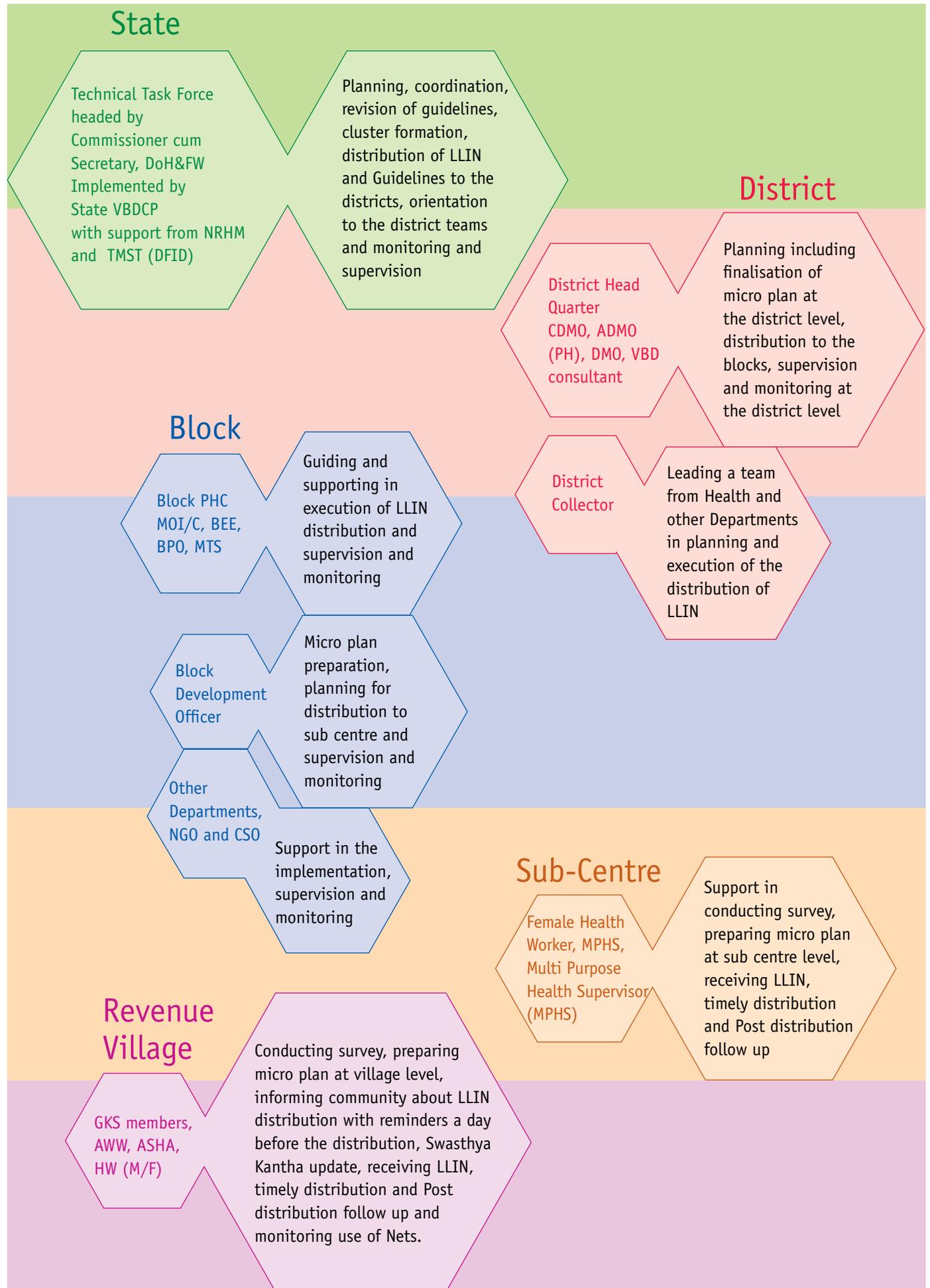
distribution and coverage at sub-centre level. For this, a strong State level Planning and Coordination strategy was outlined.

At STATE level

Planning Process: Clear steps

- Planning for storing and supply of LLIN to districts
- Procurement of LLIN under 'Mo Masari' scheme
- Developing strategy for distribution and dissemination of knowledge on LLIN usage and maintenance synchronized together
- Improvising guidelines to suit State specific needs
- Developing monitoring mechanisms
- Outlining roles and responsibilities

Roles and Responsibilities in LLIN Distribution (From State to Village)



Coordination: Inching towards end goal

- Orienting district teams on cluster formation, and preparing micro plans
- Organising zonal meetings to orient district teams from 21 districts on guidelines, revising micro plans prepared by district teams as per LLIN allotted to districts
- Supportive supervision to districts by the nodal officers
- Undertaking regular and systematic monitoring and supervision
- Mid-course reviews at State level by the technical task force committee

Implementation Strategy

Strategy 1: Innovative Cluster Approach

Clusters having sub-centres with high API (preferably more than five) were identified. Clusters comprised of sub-centres of high endemic areas even bordering adjacent blocks/districts; selecting contiguous areas based on sub centres with high API/difficult terrain where Indoor Residual Spray (IRS) was not a suitable alternative or where there is poor acceptance of IRS. GIS maps helped to identify the targeted sub centres which were clubbed into clusters based on their geographical proximity.

A total of 17 clusters in following 21 districts were identified: Angul, Bargarh, Bolangir, Boudh, Deogarh, Dhenkanal, Nayagarh, Sonapur, Gajapati, Jharsuguda, Kalahandi, Kandhamal, Keonjhar, Koraput, Malkangiri,

Strategy to achieve saturation of LLIN distribution

At the monthly Malaria review meeting held under the chairmanship of Commissioner cum Secretary, DoH&FW, GoO a 3-pronged strategy evolved:
 Strategy 1: Following innovative cluster approach
 Strategy 2: Having a time-bound intensive distribution network
 Strategy 3: Generating awareness for use of LLIN

Learning:

This proved to be an effective strategy since high coverage of LLIN was seen in concentrated areas.

Mayurbhanj, Nawrangpur, Nuapada, Rayagada, Sambalpur and Sundargarh.

Advantages of cluster approach

- Ensuring protection of the entire population of a particular area which in turn would facilitate impact assessment and improved Malaria control efforts in future.
- Focusing on clusters ensured logical and proper distribution of LLIN.
- Easy to periodically monitor and assess the use of LLIN and the incidence of Malaria.

Strategy 2: Time-bound and intensive distribution

The State decided to distribute LLIN in an intensive manner with time-bound approach. The first phase of GoI supplied LLIN stock was received by December 2009. Government decided to distribute it to community well before the onset of monsoon, when the high malaria transmission period starts. The State and district health machinery swung into action, without losing more time.

Strategy 3: Generating awareness for use of LLIN

It was important to advocate and get the policy and decision makers on board to synchronise the BCC campaign at the community level so that they understand the benefit and use of LLIN immediately after receiving it. The State agreed to a communication campaign developed by State VBDCP and TMST and provided the funding support from Orissa Health Sector Plan budget. The plan entails a three tier approach to prepare the community for better use of LLIN.

The State demonstrated the effective use of folk theater such as Jatra and Pala for communicating messages on malaria prevention and control during the State

level advocacy event 'Malaria Niyatrana Abhiyana' supported by WHO while launching 'Mo Masari' scheme. The demonstrated Jatra has been adopted and modified to include in the campaign. (Discussed in Section V).

State-specific guidelines for LLIN Distribution

Once the strategy was outlined for distribution and acceptance created for LLIN, it was important to see how the LLIN distribution would take place at the ground level. Based on a basic framework received from GoI, the State team developed a detailed State-specific guideline for easier and smoother implementation.

"Building a uniform strategy across a diverse situation was the biggest challenge. Districts were taken into confidence with their inputs into planning to develop it".

Mr. Hemanta Kumar Das, Project Coordinator, Global Fund, State VBDCP

Strategy adopted for LLIN distribution at village level:

- Earmark 1 LLIN for 1-2 persons, 2 for 3-5 persons, 3 for 6-7 persons and 4 for 8-10 persons (priority to pregnant women) for every selected village
- Supply adequate stock to block PHC/CHC by the district who will supply to concerned sub-centres under supervision of Block Medical Officer
- BEE under guidance of Block MOI/C to be responsible for receipt, storage and distribution of LLIN from District HQ to SCs
- Distribute LLIN at village level through GKS under close supervision and monitoring of Multi Purpose Health Worker (MPHW), Male/Female (M /F)
- MPHW under supervision of Multi Purpose Health Supervisor (MPHS) and Malaria Technical Supervisor (MTS) to sensitise GKS at least 3 days before LLIN distribution; inform villagers accordingly



State level consultation meeting

"LLIN was a new and highly effective malaria control intervention launched in Orissa in November 2009, in collaboration with WHO. Around 12 lakh LLIN (about 50% of the First Phase GoI procured LLIN) were received from GoI. It was a challenge to distribute nets to the needy in a transparent manner and to ensure usage. The advocacy and social mobilisation activity used street theatre, local folk art like Pala and exhibition. The initiative had the support of the Health Minister, Commissioner cum Secretary DoH&FW, GoO, MD, NRHM, district officials, dignitaries from GoO, and officials from Directorate of NVBDCP, GoI and WHO. Seeing its success, it was decided to take it to the cluster level where LLIN have been distributed. The intensified BCC campaign is operationalised in 21 districts covering 17 clusters with the funding support from OHSP and technical support from TMST. The end goal is to drive home the message regarding the efficaciousness of LLIN and to promote its long-term usage in the ultimate health interests of Orissa's rural poor."

Dr. M. M. Pradhan, Deputy Director Health Services, Malaria, DoH&FW, GoO

- GKS to prepare list of households (no. of family members and pregnant women); GKS to inform MPHW a day before distribution; GKS to maintain record of distributed LLIN in register (See prescribed distribution format in Annexure)
- Open LLIN packs before a small committee (comprising minimum 3 GKS members) who certifies the quantity

No household should be debarred from availing the benefit of LLIN usage. Special care must be taken to cover households that were unable to pay the contribution money.

- Monitor LLIN distribution and its use through village code/serial number of LLIN (as recorded in register) with permanent marker pen; AWW/ASHA to write number under the guidance of health worker
- On receiving LLIN from GKS, beneficiary will sign/affix thumb impression on the register with date of receipt
- Post distribution, register to be certified by MPH and GKS convener
- Village-wise report of LLINs received by GKS and distribution record to be submitted monthly to Block MO by concerned MPH
- Transport cost for LLIN from sub-centre to village (if required) to be met through untied fund of concerned sub-centre or of PHC
- Nominal amount would be charged for the LLIN (Rs10 from BPL family and Rs20-30 from APL family). Pregnant women and boarders of tribal residential schools would be exempted. The collected amount would go towards a contributory fund managed by GKS for control of malaria and prevention of vector borne disease. GKS may also decide to provide free LLIN to households of very low economic status
- For pregnant women, children <5 yrs and boarders of tribal residential schools, the government launched "Mo Masari" scheme – these groups would be protected by LLIN/ITMN in a phased manner

Post strategy development, State government's role expands

On the basis of high endemic malaria areas, allotment of LLIN per district was decided. At the State level two consultation meetings were held on 19 November and 7 and 8 December 2009, in Bhubaneswar where

District Medical Officer (DMO), Additional District Medical Officer (ADMO) (PH), NVBDCP Consultant, MTS and District Programme Manager (DPM) of 21 districts participated. These officials were oriented on how to identify clusters and prepare micro action plan for LLIN distribution based on the epidemiological parameters. The final guidelines were circulated to the districts in January 2010.

Monitoring and Supervision

Teams were formed at the State level for facilitating distribution of LLIN at the identified clusters. A checklist was developed for monitoring and supervision by the team.

With constant monitoring by the State team major constraints were identified and remedial measures undertaken that resulted in almost 100% distribution up to the beneficiary level within a short span of three months.

At the DISTRICT level

Conduct Orientation

Zonal meetings: After the State level consultations zonal meetings were held where micro plans of districts were whetted and revised as per the number of LLIN received by the State. After zonal meetings, districts finalised route plans for distribution.

Directions were passed from Commissioner cum Secretary, DoH&FW to the District Collectors.



A group of women comes to receive LLIN- Village Basila, Block

Select Remedial measures that yielded positive results

- Revising format for conducting household survey and registration during LLIN distribution to include pregnant women under *Mo Masari* Scheme
- Instructions given by State team to district to revise distribution procedure and not follow any stringent rules that could hamper coverage (In Kesinga block, Kalahandi district monitoring team felt that distribution team should not insist on voter ID card being produced though not mentioned in the guideline)
- Rigidity over contribution fund was impinging upon achieving complete coverage in few districts which was brought to notice of the State monitoring team. Those districts were advised to have full flexibility with regard to contribution money as per the State Guideline.

Support of Technical and Management Support team

TMST, funded by the UK Department for International Development (DFID), provides valuable support to the LLIN distribution effort in the following areas:

- **Planning:** Helped develop an epidemiologically sound and logistically feasible distribution strategy, involving communities for final point delivery of LLIN to households
- **Communication:** Provided innovative ideas through a BCC plan and supported in implementing the plan
- **Review and Feedback:** Made field visits to review on-ground activities to provide feed back to the DoH&FW
- **Monitoring:** Providing support in introducing a monitoring tool (LQAS)* to enable coverage and use of LLINs to be assessed at block and district levels
- **Procurement:** Supports efficient and transparent

procurement of LLIN by Department of Health for Orissa's '*Mo Masari*'** scheme for pregnant women

- **Documentation:** Offers technical support for high quality documentation of the LLIN distribution process
- **Research:** Plans studies and operational research on the links between malaria and malnutrition
- **Institutional development:** Through the Malaria Resource and Collaboration Centre, conceptualises various activities that can build institutional capacities.

"Our team gives utmost priority to support for malaria programming in Orissa. Tackling malaria impacts not only on malaria mortality and morbidity but also on maternal mortality, low birth weight, child mortality, malnutrition and impoverishment.

Investing in malaria control is a sound investment for better health in Orissa and we are proud to be able to support the Government of Orissa with their initiatives".

*Alison Dembo Rath, Team Leader,
TMST*

*The Lot Quality Assurance Sampling (LQAS) provides reliable estimates using small sample sizes. It helps block and district programme managers to know if they are on track for achieving targets for LLIN coverage and early diagnosis and treatment of malaria. DFID contracted LQAS specialists from the School of Tropical Medicine, UK to provide expertise for LQAS roll-out in year 1. Capacity for LQAS is to be sustained and is being developed in local institutions by LSTM working with Orissa-based technical assistance team.

**Technical support is provided by TMST for efficient and transparent procurement of LLIN by Department of Health, Govt. of Orissa, for *Mo Masari* scheme. Orissa is the first State to procure LLIN independently. Negotiation on cost and quality ensured best price of less than Rs 300 for a double net. These LLIN are colour coded (blue) since people prefer it over white which looks dirty quickly. In 2009, as many as 300,000 LLIN were purchased through DFID support to the Orissa Health Sector Plan.

“Our focus has been always to bring down the incidence of malaria and thereby reduce malnutrition among the vulnerable groups such as children, pregnant women and large population of tribal residing in forest and its fringe areas. As an attempt towards that, the district administration has set up a rigorous monitoring system for the awareness and distribution campaign in the district.

We utilized the capabilities of GKS that are in place and functional in social mobilisation and community involvement related activities. GKS were involved in preparing micro plans and in the process were made to understand the various other health and sanitation related issues that are directly or indirectly related to incidence of malaria in their own village”.

Dr. Pramod Meherda, IAS, the then District Collector, Mayurbhanj and present Mission Director, NRHM

Commissioner cum Secretary, DoH&FW also personally interacted by phone with the District Collectors of difficult districts for their personal attention.

For intersectoral convergence, representatives from other Departments were involved in the planning and distribution at district and block level.

SHGs of Jorada Village Lead the LLIN Distribution Process

Successful distribution of LLIN in village Jorada, located in sub-centre Jorada, Block- Kusumi of Mayurbhanj district was a mini feat. One of the rare villages where GKS had not been formed, since its Ward member had died the previous year, meant that organising people and ensuring smooth distribution would be challenging.

Basanti Soren, Female Health Worker and Nasa Murmu, Anganwadi Worker organised a village level meeting on 22.02.2010. In the absence of GKS they involved existing SHGs to distribute LLIN. The two most active

SHGs: Kalika and Maa Mangala were deputed to handle the task. On 8th March a follow-up meeting was held to discuss distribution plan and how villagers would be informed the following day. Presidents and Secretaries personally supervised the distribution along with other health officials.

Monitoring and Supervision

Health officials responsible for monitoring included Chief District Medical Officer (CDMO), ADMO (PH), DMO, MO (IDSP)/Epidemiologist and VBD Consultant. A checklist was maintained for monitoring and was also updated daily. In districts where VBD Consultant position was vacant, the ADMO (PH) monitored and apprised CDMO on distribution status. Concurrent reviews helped undertake mid course corrections. In addition to Health department, in many districts officials from other line departments contributed in monitoring and supervision of the distribution of nets.

Challenges

- **Insufficient storage space for LLIN:** Remedial action including sending LLIN to block CHC/ PHC immediately after they were received at the district.
- **Difficult to monitor:** Vast area of operation and inaccessible areas made it difficult to monitor and supervise
- **Unable to achieve 100% coverage:** Though district administration tried to distribute all the LLIN received from GoI, there were districts where 100% coverage was not achieved due to shortfall. With demand having been created, people turned up at distribution points and in some cases returned empty handed, since stocks were exhausted. This meant there were still vulnerable households where malaria infections were possible. Daringibadi block of Kandhamal district achieved nearly 100% distribution but it still could not achieve complete coverage of households at the sub-centre level.

Innovation: Using GKS members to play the role of Influencers

Some districts like Dhenkanal and Mayurbhanj planned to utilise GKS fund to ensure use of LLINs by the community. Members from GKS were entrusted to visit and motivate families to ensure regular use of LLINs at night. They were incentivised through contribution fund.

Recommendations

- A day prior to distribution, ASHA/AWW could collect contribution money through home visits; receipt/coupons could be given to users to enable them produce it at the time of registration, making it easier to handle large numbers of people while paving the way for smoother distribution
- More intensive training to GKS members would be required to enable them for an efficient household survey that can avoid the shortfall of LLIN

- Providing more fund to the districts would help them to develop local specific IEC/ BCC activities.

At the BLOCK level

Orientation meeting

The meeting helped structure a micro plan; draft route plans on distribution; monitoring checklist; household survey with inputs from concerned officials. The BPO/ MO/ MTS were sensitised on supply, storage, transportation, record keeping, coding of LLINs, fund management and follow-up activities in the blocks.

A sensitisation meeting on LLIN distribution was held in each block with MTS, Female Health Workers, AWW, HW (M/F) and MPHS. Female Health Workers were briefed on conducting household survey and AWWs conducted the same with support from ASHA and GKS members and submitted it to the Female Health Worker who verified the survey list before submitting it to the



Monitoring during distribution at village level

BEE. BEE verified the survey list and prepared a micro plan under the guidance of MOI/C.

Block level micro-plan with route chart was prepared in all blocks to facilitate monitoring and supervision. Contact phone numbers of supervising and monitoring health staff, PRI members were put in the format for feedback and monitoring. The final block level micro plan was submitted to ADMO (PH) or DMO by concerned MOI/C.

Monitoring Mechanism and Supervision

At block level BEE, BPO, MTS, Sector Supervisor, AYUSH Doctors and Block Accountant and Data Analyst (BADA) were responsible for monitoring and supervising distribution. At sub-centre level MPHS, HW (M/F) monitored and reported to MTS/ BEE. MTS updated MOI/C daily on distribution status. Although no prescribed format was maintained by MTS, there was a feedback register with beneficiaries' opinions on distribution and usage. In some districts, the district administration made the BDOs in charge of overall monitoring and supervision.

Challenges

- In few places the village survey was not undertaken systematically to estimate the requirement. Hence in spite of there being a 3% buffer stock, few households were left out; these will now be covered during the second phase allotment

- When LLINs were brought back from other blocks in open packs and distributed, people complained of being given used ones
- MTS and BEE were overburdened since distribution spilled over even on holidays
- Lack of a dedicated vehicle made monitoring difficult since many distribution centres were situated at places bereft of proper roads
- In some places there was a deviation from the micro plan and distribution time was extended to two days which overlapped with other programmes such as the one on immunisation.

Innovations:

- Communities move from being spectators to participants – photo register-MTS
- In few places such as Mayurbhanj, MTS maintained feedback register during distribution where beneficiaries shared their opinions/views; this was useful for members of the community
- In some villages young and old, all extended their support
- Effective convergence with NGO:
 - ◆ Lepira Society took responsibility of distributing LLIN in 20 sub-centres in Manada Block of Mayurbhanj district,
 - ◆ NGO Jagruti in Daringibadi block of Kandhamal took responsibility of providing transportation of LLIN to villages and in monitoring



Register for distribution - Monitoring

“It was a good idea to involve GKS in distributing LLIN. By virtue of belonging to the same village, they were familiar with people and their predicament. This made it easy to reach those who could not make it to the distribution or who needed coercing.”

*Dr. Santosh Ku. Jena (FN), MOIC
Manada Block, Mayurbhanj district*

Recommendations

- More specific household surveys needed with mention of adolescent girls and old people understanding the sleeping pattern of a family
- Separate vehicle needed to be arranged for better monitoring
- Need to develop specific BCC plan for tribal populations
- Physical verification of LLIN is essential as the poor are likely to sell them in moments of dire need

At the VILLAGE level

Female Health Workers were closely guided by MPHS, LHV/ HW/MTS to complete the survey at the earliest. All GKS members were sensitised about distribution mechanism of LLIN by Female Health Worker and MTS at sub-centre level. All were sensitised on record keeping through registers, receipt books, fund management and coding of LLIN during distribution. The date of distribution was finalised in consultation with GKS member as per villagers' convenience.

As part of pre publicity Village Health Nutrition Day (VHND), MAMTA Diwas and Immunisation Days were utilised to inform community on LLIN usage and convince people to contribute nominally and voluntarily for the net. 'Swasthya Kantha' (health information wall set up by GKS at village level at a common place) was updated with information on venue, date and time of distribution. A day before distribution, GKS meeting was held to brief them on all aspects. This was attended by Ward Member, AWW, ASHA, Female Health Worker and villagers.



Swasthya Kantha update at village level

Challenges

- Scattered household patterns created difficulty in conducting the survey
- In few places where some of the GKS members were not involved during distribution, AWW and ASHA sought help of other villagers as volunteers
- In some places, community members were not made aware of the need to keep the net open in the shade for 24 hours before use – hence complaints of skin rash and itchiness were received which were addressed during the BCC Campaign
- Actual ground level sleeping patterns of a family necessitated distribution of more LLINs than those projected using the 2.5 persons/net calculation norm.

Monitoring Mechanism and Supervision

At village level, distribution was closely monitored and guided by LHV/HW/ MPHS and CBOs/ NGOs.



Matching Supplies with Demand

Organising supply and procurement from State to Village level

The Government of India supplied 11, 99,000 LLIN to Orissa. The State Government has procured an additional 1, 01,350 for the 'Mo Masari' scheme which mandated them to provide LLINs to pregnant women.

The GoI supplied 84 truck- loads of LLIN to the State Head Quarters. It was a challenge at the State level to store and supply it to the concerned districts.

Guidelines were set out from the State to manage the supply chain with roles and responsibilities defined clearly for each level. The orientation at State level cleared the queries the district functionaries were having with the help of flow charts. ADMO (PH)/ DMO are solely responsible for receiving LLIN at the district level, for storing and supplying it to block PHC/ CHC. These are then stored at Block PHC/ CHC under supervision of BEE who manages its receipt, storage and further supply of LLIN from PHC to sub-centres.

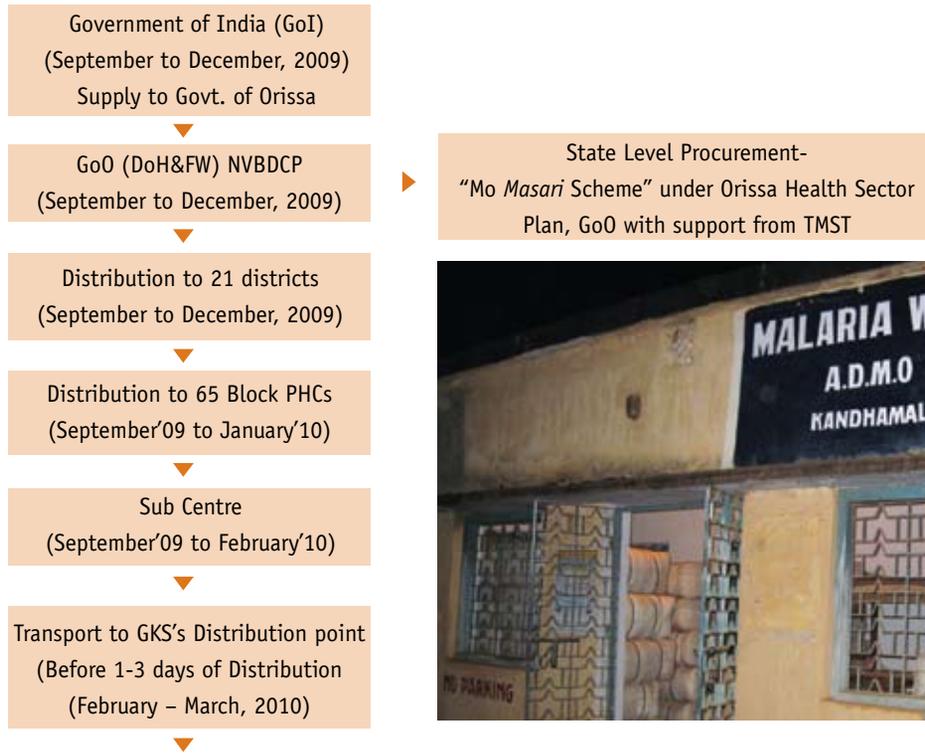
Innovation: Overcoming Transportation Glitches

Based on availability and convenience, either small trucks (Marshall/ Pickup) or cycle trolleys and even head loads were used to transport LLINs from PHC/ CHC (Mayurbhanj district).

Distribution at village level

LLIN packs were stored at AWC. On the morning of the distribution ASHA reminded the community about distribution of LLIN. Other responsible people (GKS members, Female Health Worker, AWW and ASHA and in some places Sarpanch, Naib Sarpanch and MTS) reached the distribution venue half an hour ahead of schedule. In case distribution point was other than AWC, the Female Health Worker or AWW took responsibility of handing

Undertaking supply and distribution functions



“There was a great difficulty in stocking the LLINs, as they were dispatched from the Government of India at a time. About 5000 Sqf. space was required to store 11.99 lacs LLINs. We took the support of Warehouse Corporation of Orissa to find a space for storage and trucks were unloaded the same day of receiving them. A total of 140 trucks with capacity of (6 metric ton each) were sent to the districts. In transportation as well, there were instances of hindrance. At Malkanagiri district, due to some unexpected disturbances the truck loaded with LLINs was stopped. We took special care in such districts where tensions were high.”

Mr. Susant Ku. Parida: Consultant Procurement & Supply, State VBDCP

over LLIN. These were opened in the presence of Female Health Worker, AWW, AHSA and GKS members with a GKS member keeping count and readying it for distribution. This committee confirmed the number of LLIN received.

Distribution Process

By the time villagers gathered, GKS members and ASHA started coding LLINs with permanent markers. Distribution was handled by Female Health Worker and GKS members. This was usually at AWC/youth club/sub-centre. Two counters for registration/collection of contribution money/providing receipt and distribution were set up.

Distribution usually commenced at around 10.30 am and continued till 4.30 pm (where register was not prepared earlier, distribution was delayed). ASHA informed villagers with a household visit about LLIN distribution before it started, reminding them of venue and time. During distribution, Female Health Worker or AWW informed people about its usage. They



Padmabati in smiles on receiving LLIN

Care and Compassion Light up a poor man's life –

65-year old Soko Purti of Manglusahi village in Kathbaria Block of Mayurbhanj District was visually challenged and cared for by his sole family member, a 12-year old granddaughter, Padmabati. Unable to work, he was dependent on the young girl who managed to earn a few rupees by collecting and selling forest produce. Aware of the family's condition, GKS, on priority, provided them LLIN without collecting any contribution fund. Going a step further, they gave the adolescent girl a separate net. More than the physical comfort provided by the net, it was the feeling of being cared for that proved to be a moving experience for the grandfather-grand daughter duo.

also exhibited IEC material on Malaria control. In many places, LLINs were provided to villagers without packets in order to avoid users from storing food items such as puffed rice in them or reselling LLIN.

Post distribution, contribution money and total number of LLIN distributed were calculated. The monitoring representative from PHC/ CHC certified the



Distribution at village level

distribution and a village-wise report of LLIN received and distributed was compiled by GKS and submitted to Block Medical Officer by concerned MTS.

In Badampahad block of Mayurbhanj district, there was greater involvement of GKS/ MTS/BEE since MOI/C visited distribution centres, ensuring smooth operation. Back up plan was evident in Village Jorada of Kusumi Block of Mayurbhanj district where there was no GKS (the ward member had passed away) but the SHG stepped in and played a crucial role in distribution.

Voices

Knowledge and awareness of people on LLIN usage and its maintenance was enhanced and many shared their stories. Selected feedback from the community:

Men and women of Bilamala village subsist on their daily wage earning which amounts to barely Rs 70 a day. Finding work is a challenge, with most getting odd jobs for barely 15 days a month.

34-year old Tillottama Badseth, a widow and mother of five children, found it difficult to feed her children with an income of not more than Rs700-1000. Listed in the below poverty line (BPL) category she did get some benefits from the government but these are still not enough to help her make ends meet, especially in the event of an unforeseen emergency.



Tillottama Badseth, Mother of 5 children, Bilamala village and sub centre, Tumidibandha block, Kandhamal district

When her elder daughter got Malaria, she was forced to borrow money at a high rate of interest to get her treated. When she heard that LLIN was being distributed, she was one of the first to line up and collect her nets. She saw merit in having them for her entire family and ensure they did not get malaria and jeopardise her already precarious financial condition.

Bilamala and many other villages have such stories of elderly, pregnant women and children who have suffered from Malaria and availed the nets offered by the Government.

There was general awareness among the community on benefits of LLIN usage. But there were some gaps with regard to its maintenance.

- “I lost my wife to a disease six years back. I do not want to lose my children at any cost. I will do whatever it takes to ensure they do not fall prey to Malaria. I will contribute to get my net and use.” - Jagabandhu Hembram, 38 years, village: Manglusahi, sub centre Kathbaria, Block Badampahad, District: Mayurbhanj

- “I was using ITN and am aware that it saved me and family from getting malaria. But for a long time now no one has come to impregnate the net. Now I have received three LLINs which appear very good and effective. They are also bigger than the earlier ITN.” Layani Badaraita (Pregnant women), 35 years, village Padikia, sub centre C-Kumbhargaoon, Block Daringibadi, District Kandhamal
- “I know about the net but could not afford to buy it from the market. But now as the government is providing it, I received two LLINs with a nominal contribution. I am very grateful.” Matrimanga Padra, 38 year old widow with two adolescent girls, village Adibanga, sub centre C-Katinga, Block Daringibadi, District Kandhamal

Innovations

- Greater convergence happened between ICDS and Health Department as AWC was made the distribution point in most of the districts.
- As distribution was carried out on a single day, monitoring became easy in Kandhamal and people



Wall writing by ASHA for pre publicity of LLIN distribution- Innovations

too were happy since they did not have to come again.

- Wall writing by ASHA: Before distribution, ASHA wrote on walls of several households the date, time and place of distribution.
- In some villages introduction of the coupon system helped streamline the distribution process
- The health wall of the village GKS 'Swasthya Kantha' was updated in almost all villages giving information on date, place and time of distribution
- Information on date, place and time of distribution was disseminated at local haats (markets), fairs and festivals.

Challenges

Fears: In some villages there was fear amongst people that LLIN was poisonous and harmful. They reported instances of allergy, skin rashes and itching. Many decided not to wash the nets with detergent thinking its medicinal effect would wear off.

Banishing doubts and laying fears to rest

Arjun Pingua lived with his wife and three children in Manglusahi village in Kathbaria Block of Mayurbhanj District. His wife Sabina Pingua was pregnant with their

fourth child. Though he needed a net and knew it was being distributed in his village, he did not show up to collect it. Someone told him that it was poisonous and could negatively impact the unborn child. He shared his apprehension with AWW and ASHA but was not convinced. When the MOI/C visited the village and was informed about Arjun, he decided to meet him. A frank chat ensued where he used scientific evidence and case studies to show him that the net would actually protect the mother and child. Convinced, he put in his contribution money and brought one net, while a separate net was provided for his pregnant wife.

Wider area of coverage: Some villages were large and unwieldy, while certain households had many members, making distribution difficult to manage.

Misuse: Since most of the beneficiaries were poor and semi literate, getting them to understand the worth of LLIN was a challenge. There was a likelihood of their selling or misusing it for activities like fishing or using its covers to keep consumables/food. It was important to inform them that the net had insecticides which could be harmful. To avoid misuse in one of the villages of Dhenkanal, Female Health Worker with support from

“Acute poverty may force some villagers to use LLIN to store consumables/food (containing insecticide, this could be harmful); and others to sell it for few extra rupees. To ensure LLINs were not misused, GKS members were trained to monitor these through home visits. In the event of a missing LLIN, they would levy a fine as a mild deterrent. It was to be reinforced that the net was for their safety from mosquitoes and malaria and it was given to them at the cost of another vulnerable person. This sentiment had to be sacrosanct and they must use it for the right purpose.”

Sushila Naik, Female Health Worker, Batagaon sub-centre, Birasal PHC, Kankadhad block, Dhenkanal district

GKS decided to penalise villagers by fining them if found misusing them.

Conflicts and disturbances during distribution:

Many villagers added to the chaos and confusion at the distribution counter insisting they be given more than their allocated number of nets, saying that they had adolescent girls and boys. In cases where Female Health Worker did give out extra nets after consulting GKS members, they tended to fall short of LLINs as calculated.

Contribution money: In most districts there was no parity in fixing the contribution money which led to confusion amongst beneficiaries. The beneficiaries

“People in many districts including Dhenkanal are semi literate. The use of innovative IEC campaigns are highly valuable, especially in educating and dispelling misconceptions.”

Dr. N. C. Raj, ADMO (PH), Dhenkanal

agreed to contribute when it was explained to them that the money would be used by the GKS for malaria control activities at the village level

Transportation: Since the physical geography in the blocks included an abundance of forest and hills, support from NGOs and CSOs was taken to reach some of these places.

The State also met the challenge of procuring LLIN for ‘Mo Masari’ scheme with its own sources under Orissa Health Sector Plan. State VBDCP with support from State Drug Management Unit and TMST successfully procured more than 1 lakh LLIN to protect pregnant women.

“Since it was a new product for the State to procure, completing the procurement in the stipulated time frame with a proper tendering process was a challenge in itself”.

CA. Hemant Ku. Nayak: Procurement Specialist, T&MST



Right Campaign with Right Messages

LLIN Distribution gets the right impetus with appropriate BCC strategy

The State government was clear on the reasons for change in strategy of promoting LLIN over ITMN but the new move left a challenge of many FAQs to be faced with community. A strategic behavior change campaign alongside distribution to promote the use and maintenance of LLIN was launched. To generate this awareness and ensure usage of LLIN by the community, a pre-publicity to generate demand for mosquito net, demonstration of use during distribution and a month long BCC Campaign 'Nidhi Mousa to Masari Ne' following distribution.

While the government drew plans on implementing a well planned and organised distribution blueprint with clearly defined roles and responsibilities at the State, district, block and village level, a simultaneous Behaviour Change Communication strategy was developed to communicate messages to different target groups through multiple avenues. These messages were centered around promoting efficacy of LLIN through

culturally and socially acceptable BCC activities in key locations. In the case of Orissa and especially in the context of the LLIN distribution programme, this included areas in and around catchments of the sub-centre, as well as at service-delivery points. Activities were based on a single or multi-channel approach, depending on the desired objective and special attributes of the target group/s.



Jatra performance during launch of 'Mo Masari' scheme at Bhubaneswar

The LLIN distribution programme was backed by a broad-based multimedia, multi-sectoral mass mobilisation activity that created demand for LLIN. The State VBDCP; DoH&FW, GoO with support from TMST played a crucial role in developing a practicable and innovative campaign with clear objectives and timelines. The concept note developed by State VBDCP and TMST for the campaign was embedded in the overall strategy of LLIN distribution. As part of the strategy, media

such as Jatra and Pala (folk theaters) was tested and launched at a State level event on malaria prevention and control supported by WHO during the launch of 'Mo Masari' scheme. The BCC plan highlights a combination of tools adopted to reach the community with a van campaign for social mobilisation and an improvised version of Jatra (folk theater) with messages focused on LLIN use and maintenance – to make it a right campaign with right messages.



Wall writing by ASHA as part of pre publicity



MTS explaining on usage of LLIN during distribution

Three tier approach of BCC:

1. Pre publicity activities to inform about LLIN distribution: The pre-publicity campaign was focused on creating a demand for LLIN at the community level. The key information given during these activities were date, venue and time of distribution along with the benefits of the new type of nets given. ASHAs and GKS members were oriented to take up publicity activities such as updating 'Swasthya Kantha' (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. Innovative mechanisms such as wall writings by ASHA, drum beat by Dakua (informer at village level) reminding the date, venue and time of distribution by announcing were adopted by GKS members.
2. Demonstrations during distribution: The block level Health team under the leadership of Medical Officers (MO) organized demonstration at village level during distribution. Demonstration included hanging and drying of nets under shade. Handmade posters and pamphlets were used to explain the community to promote the usage of LLIN.
3. BCC campaign 'Nidhi Mousa to Masari Ne': The first two interventions of BCC generated demand amongst community for LLIN and gave hands on information on the first wash and hanging of net. The last segment of BCC concentrated on bringing in behavioural change amongst the users by reiteration of messages on malaria control and prevention and usage and maintenance of LLIN. This segment included van campaign (Chariot named as Nidhi Ratha) and Jatra performance (folk theatre). The Nidhi Ratha was used to inform the villagers on performance of Jatra while messages on malaria prevention and control and usage of LLIN adopting popular Oriya songs were played and leaflets distributed throughout its journey. Jatra troupe followed Nidhi Ratha reiterating the messages in a

humorous and appealing story format. Where ever organizing Jatra was not possible video shows were given as an alternative. It has been suggested that a minimum of four shows to be organised against one Jatra performance. Adaptation of the script to local dialects to suit the audience was allowed without changing the key messages. The plan was developed till the last mile suggesting on the process of selection of venue of performance at village level making GKS responsible.



Community watching Nidhi Ratha

“The BCC plan that was shared with the State Technical Task Force Committee was appreciated and a consensus was arrived to launch the distribution and communication campaign together. The challenge faced and resolved was the synchronisation of both in terms of BCC interventions at three critical stages i.e., pre, during and post distribution.

The strategies and messages to be communicated were carefully thought and developed taking into account the information need of the community. The post distribution campaign was strategically placed after a month of distribution to remind the community on the correct knowledge and practice while attending the questions they had in mind after initial usage of LLIN. The learning of GKS communication campaign was brought into this campaign but it has its own uniqueness that adopted

traditional model of communication for maximum coverage. Keeping in mind the media dark and inaccessible areas multiple avenues were suggested that has a combination of a van campaign for mobilisation of community and a folk theatre/video shows as an edutainment media. The performance/video show was followed by an interactive question answer session wherein community clarified their doubts with ASHA, Female Health Workers, MTS and others.

More sustained efforts need to be planned by adopting cost effective communication models which can be integrated with regular activities at GKS level.”

Excerpts from a meeting with Mr. Devjit Mitra, Communication Specialist, TMST supported by DFID

Objectives of the BCC campaign

- Create greater interest and demand for use
- Increase in-depth knowledge on use of LLIN for malaria prevention and dispel myths and misconceptions
- Create better understanding of LLIN usage
- Strengthen risk communication, especially among vulnerable groups like unprotected pregnant mothers, children under 5 and elderly

- Sustain behaviour change by moving from awareness to action to adherence

Target audience

Apart from the general population and high risk groups of the cluster, the BCC communication aimed to reach various influencers within the community, such as Women SHGs, PRI representatives, local bodies, youth clubs, Anganwadi Workers, Village Development



Community watching folk theatre performance

Officers, teachers and other service providers like ASHA, Female Health Workers, and Health Workers. It hoped to inform and also educate government officials of Departments, other than Health. The programme also included Balika Mandal, Kalyani Clubs and CBOs. Partnerships were formed with NGOs for better implementation of the campaign.

Themes for developing communication messages

- Identifying symptoms
- Knowing it was preventable
- Using tested and treated mosquito nets
- Understanding difference between ITMN and LLIN
- Trusting public health system and its decision of making these available
- Proper use and maintenance of LLIN
- Using LLIN for the purpose they were meant for and not selling or recycling them for other household needs/chores

Coverage

- Outreach to all the villages of 21 districts following cluster approach
- Villages in and around the villages covered under cluster approach

Implementation of BCC Campaign

While pre and during distribution communication activity plan was embedded with the distribution guideline but a specific 'Nidhi Ratha' guideline was developed at the State level developed to carry out at the district level. The State Technical Team oriented the district level team and others involved in executing the BCC plan.

Branding the Communication Campaign

Tagline: *Nidhi Mousa to Masari Ne* (Uncle Nidhi! You take your Net)

Logo design and branding details were developed by



Nidhi Ratha decorated as given in the prototype

the State with prototypes being provided to Districts. The list of prototypes is:

1. 'Nidhi Ratha' tableau design
2. Audio spot of 30 minutes duration adopting popular Oriya album songs
3. Nidhi Theater script and Video
4. Illustrative leaflets for household on use of LLIN

Campaign at ground level

The BCC campaign broadly followed the steps at district level

Planning: One Jatra performance/video show for a population size of 2,000 was planned thereby covering an average of 40000 population in a cluster; district and block level orientations undertaken, micro plan at block level included draft route plan for Ratha followed by Jatra was prepared and submitted to the district; ten days were allocated for preparing a micro plan; selection of vehicles, theatre groups and printing of leaflets was done through tendering.

Roles and responsibilities: Roles and responsibilities of each of the official from district to sub centre level and selected NGOs were clearly spelt out that helped in proper coordination and monitoring of the BCC campaign.

Finalisation of Jatra performance: Local troupes were identified and oriented about the campaign. A demo of State performance was shown using DVD to



Finalising the Jatra performance monitoring team

“The BCC Campaign has been well accepted by the people in all areas. The judicious combination of folk media and IEC tools and question and answer sessions on queries has been instrumental in disseminating the valuable messages, clarifying the doubts of people. In most areas, people do not have this habit of using nets while sleeping, motivating the people to use LLIN is a behaviour change intervention. After this BCC Campaign, we need to sustain this effort of behaviour change through ASHA, Anganwadi Workers and GKS. If, 80% of the people who have received LLIN will use the same regularly, I will call this a success.”

Mr. Charu Mohapatra: IEC Consultant, State VBDCP, DoH&FW

the troupe for replication. The local troupes adapted the language of the script that was more suitable to the community. A rehearsal was performed and post performance feedback was given to the troupe by the district team.

Launch of BCC Campaign by flagging off Ratha: Rathas were flagged off at the district level ceremoniously launching the campaign. The Ratha carried the message on Malaria prevention and control, usage and maintenance of LLIN through songs (adapted from popular Oriya album songs) and leaflets. The Ratha also announced



Flagging off Nidhi Ratha by District Collector

the arrival of Jatra troupe in the village to spread and reiterate the message on Malaria prevention.

Monitoring of campaign from State to PHC level:

State level monitoring plan for LLIN's BCC and Social Mobilisation included setting up a help and monitoring desk led by Social Mobilisation consultant; phone updates being sent through SMS and a special email ID (llinbcccampaign@gmail.com) used to send updates to the State cell; letter from Commissioner cum Secretary was sent to all collectors for setting up an external monitoring cell on the lines of what Kandhamal had done during its LLIN distribution; State level team visited districts (integrated with IRS monitoring team); Nodal officers carried out monitoring in their respective districts using prescribed checklist; feedback from public/civil society/media was obtained through a questionnaire and media reports were collated and analysed. In some of the districts, NGOs and Public Health Networks (wherever present) were roped in to provide external monitoring support.

District level monitoring plan for LLIN's BCC and social mobilisation included internal monitoring plan as per guidelines; external monitoring was headed by district collector; weekly reports to the State were sent; wall writing was done on the Swasthya Kantha; and Nidhi Ratha and Nidhi Show's micro plan was uploaded on the web site for monitoring by State official.

Monitoring at PHC level included GKS members at village level being given the responsibility of certifying Ratha's movement and performance of Jatra in the village.

Challenges faced during monitoring included the absence of a budget for creating mobility for the BCC Campaign's monitoring, they were however permitted use of the Mobile Health van. It became difficult to constantly monitor the movement as phone connectivity was missing in certain zones due to geographical conditions; petrol/ diesel was not available leading to some difficulty in the Ratha's movement.

“In the entire campaign, monitoring has been given ample emphasis. In consultation with the Joint Director- NVBDCP, Deputy Director- NVBDCP, IEC Consultant- NVBDCP and Communication Specialist of TMST, a multi-tier monitoring system from State to block level was prepared. In addition to this, another monitoring system at the district under the chairmanship of the Collectors was made possible through a letter from Commissioner cum Secretary, DoH&FW. A separate e.mail id: llinbcccampaign@gmail.com has been created and all the districts are sending updates to this on weekly basis. In seven districts, an External Monitoring System has been developed by Public Health Resource Network. But even with such comprehensive plans, some blocks are unable to send the updates to the district on regular basis as a result of which the district delays in updating to the State level authority.”

Mr. Debakanta Sandibigraha- Social Mobilisation/NGO/PPP Consultant, State VBDCP, DoH&FW

A detailed account of how the campaign unfolded in Banthala PHC, Village Chutiki, Puranakote gram panchayat in Angul block is given below

The Jatra troupe reached the village and met ASHA, ward members, village leaders and informed them about the performance. They decided to hold it in the village primary school. Thereafter, artistes of the troupe moved around the community and mobilised people to come and see the show. This was followed by an interaction with people being encouraged to ask questions and clarify their doubts. Most of their concerns were around body rash and skin allergies. They were advised to wash their nets in plain water and to dry them under shade. They were given simple tips on its upkeep and told that if kept properly, they could last for years.

“Being the Director of Jatra troupe, I have conducted a number of shows, but this is very different. The messages are clear and are well-accepted by the people.

The response of the people has been overwhelming, and perhaps that is what inspires us to make better effort with greater enthusiasm for the next show. Throughout the show, in each village the number of audience has increased with time, and none has left the show in between before the climax. The script, the messages and the presentation have attracted them. At Deulijharana Village of Sapoinala Sub-centre (Chendipada Block), the gathering was about 2,500.

What makes the show special is “Nidhi Mousa”. We have ensured that the character appears alike as branded in the Ratha. We have made some modifications on spot keeping in mind the queries of audience. For instance, it was shown that “Nidhi Mousa” realized his mistake and took the LLIN. After the show, people asked, why “Nidhi Mousa” did not pay the contribution money. We incorporated the contribution money in the script and showed that it was kept by GKS for further health related activities. From then onwards, we never came across that question, and people are quite convinced now.”

Nityananda Swain (Khokan), Director- NUPUR Jatra Troupe

Voices from the community



“Ratha came to our village with songs and messages on LLIN distribution. I found the messages that were beamed on it very useful. Even though I have done my matriculation, I was oblivious of simple facts on malaria prevention. I received three LLINs and am relieved that my unborn child too would be protected.”

Santoshini Mahapatra, 25 years, 9 month old pregnant



“I have a family of ten to look after. There are financial constraints but after hearing about LLIN, its usage and more importantly the problems

we would face if our families suffered from malaria, made me go for nets in the interest of my family.”

Padmini Mohapatra, 28 years



“I liked the tune of the song, “masari tangiki sua, malaria ru mukta hua (Use net while sleeping and be free of malaria). My family is happy to hear me hum and sing it aloud.”

Kirtana Raul, 75 years

“I like the character ‘Nidhi Mousa’ a lot and I am able to relate it to one of my uncle who says no to everything like Nidhi mousa says no to net.”

School student





Conclusion and Next Steps

Malaria is the fifth cause of death from infectious diseases worldwide and among the top ten reported causes of death in all age groups in India. The disease is deeply affected by social and economic conditions and is referred to as both a disease of the poor and a cause of poverty. The marginalised, poorer sections - mostly rural and tribal with low socio-economic status, limited access to quality health care, communication, other basic facilities, lack of awareness on protection measures, are often the worst sufferers. Orissa has a high burden of malaria and the decision of the Government to distribute LLIN in a large scale among the vulnerable population is a strategic shift in the control programme.

The LLIN distribution plan aimed to cover 69 blocks in 21 districts under 17 clusters. About 11.99 lakh LLINs were received by the GoO from GoI in the first phase. It was a well planned strategy that drew from current

“The next steps are to have a differential or a robust equity strategy to bring down incidence of malaria in communities that live in forests, forest fringe and scheduled areas of the State. We also need to take forward BCC campaign in a more sustainable manner and also make malaria a very important component of school health programme”

Dr. Pramod Meherda, IAS, Mission Director, NRHM, GoO

initiatives like the Gaon Kalyan Samiti (GKS). Since not all districts could be covered and within that not all population could be protected, an attempt was made to create a priority list. Using the cluster approach, villages of high vulnerability were chosen as beneficiaries. While some districts like Kandhamal achieved nearly 100%

distribution i.e., complete stock of LLIN received from the State was distributed in one go, there were learning from each of the districts. These would feed into the next phase of LLIN distribution. Orissa expects to get a good number of LLINs in subsequent years based on the systematic process that has been institutionalised in the first phase. The ownership from the State government has been strong and the State is willing to put its own resources into procurement of LLINs for pregnant women as planned under the budget of Orissa Health Sector Plan for 2010-11 and 2011-12.

The strength of the campaign rested on various factors. It drew a lot of its inspiration from previous mass mobilisation events in the State, such as the recently formed Gaon Kalyan Samitis where villages formed their own GKS using advocacy, grassroots Health Workers and convergence of different Government Departments at the State, district, block and village level. Over and above strong Behaviour Change Communication strategies adopted will be sustained with continued BCC activities at village level using the contribution fund collected by GKS.

During implementation, the campaign did encounter some technical and human resource glitches, which must be taken into account as next steps are planned. While every effort was made to create efficiencies in supply and distribution and in ensuring that people who came to collect their nets do not face any inconvenience there were a few things that needed to be addressed. In some places stocking LLIN was an issue, especially villages where GKS were not formed. Transporting these stocks to remote areas also proved to be a challenge. A more streamlined approach from Centre to State to the final destination would have to be chalked out with respect to individual blocks and then to ensure that they were stored close to the venue of distribution. Every village to have a few hundred extra nets would have been a good idea, because in many places, GKS members and ASHA/ANM requested nets to be given to genuine cases but whose names were not there in the list, leading to a shortfall. As a pre distribution activity, household surveys should be carried out exhaustively. This would

serve as a ready reckoner based on which block/village wise distribution plans would be implemented. More BCC activity around correct use of nets and on not using them for anything other than the purpose of malaria control should be an ongoing activity.

Training all the volunteers and GKS members who were assigned special duties for distribution – right from bringing people to the venue and giving them prior information to making lists, distributing nets, maintaining records and creating requisition slips for extra LLIN, is imperative. Since most of the human resource at the distribution point was an amalgamation of different sources, bringing them on the same understanding was important. The District Collector or the Block Development Officer would perhaps have to structure a short briefing cum training session, including doing a mock drill to ensure that everyone worked in tandem with each other and on the day of distribution carried out every function with élan and ease.

“I am confident that the LLIN will be used by the community that is expected to bring down the incidence of malaria in those high endemic clusters. I am looking forward to further saturation of the vulnerability community and strengthen the intervention”

Dr. R.K.Nath, Joint Director Health Services, Malaria (DHS) cum State Programme Officer, DoH&FW

The immediate next steps of the programme are;

1. Computerisation of the beneficiaries list
2. Sustained BCC activities through Gaon Kalyan Samitis using the contributory fund
3. Innovative monitoring and evaluation mechanism to track the use and study the impact of LLIN

Taking clues from the learning of first phase LLIN distribution, the State is now confident to upscale such intervention without much difficulty. The State is also planning to conduct impact evaluation soon after the transmission season is over involving like ICMR and other institutes.

