

## **Reasons for success in a public health programme**

International SOS was contracted by Nam Theun 2 Hydropower Project (NT2), Laos for overseeing its public health action plan and to mitigate any adverse health impacts. The company decided in January 2005 to transfer me from Papua, Indonesia to Laos to take up the challenge. It occurred to me that starting a workable public health programme in rural settings in Laos was an opportunity to try something new, which could be sustainable.

As the first step, the Public Health Action Plan (PHAP) outlined in the Health Impact Assessment developed by a team of international experts was reviewed for its feasibility. The plan was quite workable with the exception of insufficient importance given to maternal and child health and the plan for data collection and the suggested methodology. The health team spent first three months to make necessary adjustments for the PHAP to be feasible.

It took another two years to ensure that the recommendations outlined in PHAP were adhered to and implemented. Bottom-up approach was used to strengthen the primary health care system in the four districts impacted by the project. Chronic diseases like malaria, dengue and HIV/AIDS were addressed by supporting national health programmes and through health education. Details of the PHAP implementation, along with the methodology and the project monitoring system are in the website under Blog > Collaboration with Government Services.

Sixteen villages with about 8000 people were resettled in Nakai district. Housing, safe water and sanitary needs of the population were addressed as outlined in the NT2 Social Development Plan (SDP) by providing a new house with a toilet and a hand pump for five households. Each family was also allocated 0.6 hectare of agricultural land along with designated pastures for cattle grazing.

At the end of the project in 2013, Under-5s' mortality had fallen from 121/1000LB to 50/1000LB and Infant Mortality from 105/1000LB to 46/1000LB; 97% of children under two years were fully immunized; stunting among Under-5s had fallen by 18% in male and 21% among female; among women 15-49 Yrs., 74% of were receiving skilled antenatal care and 58% of women delivered under skilled supervision; and 14% increase in using modern methods of contraception was observed.

The Minister of Health and the Governor of Nakai Province considered the project as a model for other health programmes in the country. Government appointed independent Panel of Experts greatly appreciated the health programme on their annual reviews; International Financial Institution recommended that the programme methodology and reasons for its success should be documented and made available to other projects. The health programme also won an internationally contested EDF Sustainable Development Trophy in June 2010.

**Significant factors responsible for the success of the programme are briefly described here.**

### **Collaboration with Government Health Services**

Perhaps the most important factor for success was the collaboration with the government to strengthen the existing health care delivery system rather than creating an alternative services for project area. Conventional approaches to health care in large development projects are generally through company run health clinics for illness care for workers and their families, without addressing the population approach for primary health care and/or preventive services. Collaborating with the existing government run health services in the project area, with the aim of strengthening the services, ensures sustainability.

With provincial health services approval, decision was made that projects support will be limited to technical support for training and supervision to the health facilities and any financial assistance for new services and for constructing new health facilities as outlined in the PHAP. No assistance for additional staff was entertained to ensure sustainability.

### **Information and its Importance**

The need for timely and complete information was critical for implementation and monitoring of the PHAP. In addition, the project was required to demonstrate improvements in the health of the impacted population at the end of the project. In the absence of any data available at primary health care level, developing a system that would provide necessary information was crucial.

The PHAP had recommended health checks for the whole relocated population. This was an opportunity to develop a database for the resettled population, which will not only provide baseline health status but also a tool to provide primary care to the whole population and help in monitoring the success of the plan being implemented.

Health checks and survey was conducted for all the sixteen relocated villages at the start of the project. The district and health centre staff were trained to conduct the survey under the supervision of the NT2 health team. Data was collected on paper and then computerised for analysis and further use. The age-sex register thus created was regularly updated for births and deaths and formed the basis for complete population coverage and future assessment for any improvements or deterioration in health of the people. The process was repeated through mid-term and the final surveys. The system provided all the data for indicators used in monitoring the health status of the population over the life of the project; and possibly for years to come if sustained.

NT2 management trust in public health team

The health team was fortunate to have full management's trust and the freedom to take technical decisions. Both the directors of SDP and the NT2 CEOs, three each during 2005-2013, provided full support to the team and took extraordinary interest in the progress of the project. This helped to boost the morale of the health team and encouraged them to work with greater enthusiasm.

### **Austerity for sustainability**

It was essential for a sustainable programme to be austere. Every effort was made to decrease the expenses of the health programme; not only to have a low cost programme for the company but for it to be sustainable after the project comes to an end. Per diem payment rates for training sessions were limited to food and travel expenses for the attendees rather than the trends for exceptionally high rates setup by the international agencies. On purchase of several vehicles by NT2, the supplying company provided one motor cycle for each vehicle purchased. The health team convinced the chief operating officer to let the health programme have these bikes for distribution to all health centres in the project area. Subsidised charges were made for distribution of bed nets for malaria control and a revolving fund created for sustainability. In house data entry, analysis and report writing was the norm for all the surveys rather than contracting it out. At the end the health programme cost was estimated to be lower than 0.05% of the total cost of the project.

### **Maternal and Child Health (MCH)**

MCH, although discussed at length, was not given priority in the PHAP. The health team was of the opinion that women and children are the most vulnerable in any large project because of the wide ranging impacts of the project. This was further verified by the poor health state of women and children in the health checks and survey; the baseline survey. Moreover improvements in women and children can be demonstrated over a comparatively shorter period of time by improving MCH services in a population in contrast with chronic diseases like tuberculosis or HIV infection; although

these conditions also improve by having standard MCH services in place. Measuring MCH and the improvements was also made easier with the help of the live database emerging from the health checks and survey as baseline data.

The health centres in the project area conducted monthly MCH clinics in each village, especially providing growth monitoring, advice to women on better care during and after pregnancy and family planning, child care and nutrition among other things. A MCH review was conducted quarterly by the NT2 Health Team to monitor the programme and ensure that progress was being made.

### **Health education for Prevention**

Most of the health problems are associated with poor knowledge and misconceptions about illness and health. Importance of health education was emphasised in all training programmes for health workers and it became an essential aspect of service provision. HIV/AIDS, malaria and dengue prevention awareness programmes were made a public event and combined with popular festivities to maximise the impact.

### **Reporting on Health Programme**

The project was monitored by National and international agencies at regular intervals, where NT2 was expected to report on the progress of the project. Panel of Experts, International Financial Institutions (World Bank), the major stakeholder EDF in the project and many others visiting the project. Health team made good use of this opportunity to demonstrate the success and difficulties by producing quality reports for the visiting experts.

Reporting and sharing the programme made it possible for neighbouring provinces to come on board and use the methodology. At the end of the project in 2013, three provinces were using the methodology developed in the NT2 Health Programme. The NT 2 Health project had hosted a number of national and international masters and PhD students from IFMT, Vientiane, Shepherds School of Public Health France, London School of Public Health, UK, Princeton University, New Jersey, USA and Swiss Public Health and Tropical Institute, Basel, Switzerland. The health programme was presented at the annual conference of International Association of Impact Assessment in Perth in 2008. Project was also presented as an example at WHO workshop in Chapel Hill, North Carolina on Health Impact Assessment in October 2010.

Above all the dedication of the health team and unconditional support of the NT2 management was responsible for the success of the NT2 Health Programme in Laos.

Some glimpse of the programme in the gallery below: