

### **Current Malaria Situation:**

Malaria is one of the first causes of death in Cambodia and about 2.1m of the population are at risk, with a 0.14m (2006) of cases being reported by the public health facilities each year. Drug resistance is a major problem with a constant worsening in all over the country. The burden of malaria has been steadily declining during the last 10 years and yearly reduction in **mortality and morbidity** was 8.4% and 9.7% respectively as on today.

### **Total number of cases by the end of 2007:**

The number of malaria treated cases is 59,848 as against 100,943 in 2006 (40.7% decrease). The incidence rate is 4.2 per 1000 (7.2 in 2006). The number of malaria deaths is 241 (396 in 2006). Malaria mortality rate has been dropped down slightly from 2.81 (2006) to 1.68 (2007) per 100,000. However, case fatality rate of severe malaria from referral hospitals has gradually risen to 8.3% in 2007 from 7.9% in 2006. The number of confirmed cases has shown a rapid decrease from 78,696 cases in 2006 to 42,518 in 2007. The proportion of confirmed cases among treated cases has been decreased slightly from 78% in 2006 to 71% in 2007. The figures of overall proportion of different parasite species in 2007 has been nearly the same compared with the previous year (*PF* 74%, *PV* 23%, and Mixed infection 3%). The male adults between 15 and 49 years old have been more affected than any other group. The case fatality rate among severe cases in the referral hospitals has increased to 8.3% in 2007 from 7.9% in 2006. The situation is varied from province to province in the country and it can be attributed to differences in geographical conditions including terrain, rainfall, forest density and population movement and also the malaria control activities. The proportion of confirmed cases among treated cases increased rapidly from 42% to 78% for the period of 2002 to 2006 and decreased gradually to 71% in 2007.

### **Total Population at risk:**

1.6M people living within 1 km of the forest, including 0.3M temporary forest goers, as well as another 0.513M people at elevated risk living from 1 to 2 km from the forest and the vulnerable sub-groups (pregnant women and children under 5) are included in this risk group. It is estimated that by 2010, to reach full coverage by LLINs of the total population (2.13M) at risk in the 3,296 endemic villages within 2 km distance from the forest, as well as availability of LLH Nets to those individuals exposed to malaria while working in the forest. Due to full coverage of ITNs and access to drugs, it is anticipated that the population living in endemic villages above 5% endemicity level will decrease at least by 5% per year which will translate into a parallel 5% reduction per year of endemic villages where VMWs are working. Bed nets (LLINs) for subsidised price will be available for all others who are living away from 2 Kms from the forest.

### **Current treatment and diagnosis policy:**

According to the new National Malaria Treatment Guidelines, the treatment is to be based on age, weight and dose categories and combination regimen A + M1 is newly added and A+M5 replaced the A+M4 of the old guidelines while A+M2 and A+M3 were retained in the new guidelines. To treat for *P. Vivax* use of G6PG test and primaquine drug if that is available in those areas will be practised. Use of Chloroquine tablet in place of Chloroquine Syrup to harmonize with IMCI standards for treatment will be in vogue. Medications for temporary migrants and international travelers as well were included.

### **Vector control policy and coverage + existing quality assurance for diagnostics or vector control:**

The main focus of the NMCP is to strengthen clinical management of malaria cases, provide surveillance and health education and promote the use of ITNs (LLINs). The NMCP attempts to increase access to early diagnosis and treatment through the adoption of a three-pronged Approach with (i) standardized malaria diagnosis and treatment based on rapid diagnostic tests or microscopy and prepackaged A+M combination treatment in the public health system; (ii) provision of rapid diagnostic tests and ACT in remote hyper endemic communities through local village malaria workers and (iii) social marketing of rapid diagnostic tests and ACT through the private sector. ITNs are the mainstay of malaria prevention in Cambodia. By 2007, the ITN and small portion of LLINs (started in 2007 only) coverage was 54.2% in areas at risk of malaria in 3296 villages of 20 endemic provinces.

**Existing organizational structure-whether vertical or integrated:**

Currently, the programme is shifting implementation responsibilities to the provincial level. It is integrated both structural and functional and activities move in a cascading mode with regular monitoring and evaluation.

**M&E activities and existing manpower complement at the national and regional levels:**

The over all approach to ME is prioritizing data collection through Baseline, Mid term and end line both qualitative and quantitative surveys. Data relating to project processes are collected through quarterly reports by provincial malaria supervisors. Epidemiological information is based primarily on passive case detection data collected daily and reported on a monthly basis by public sector health facilities and VMWs.

Plans are on to support data management in all 43 endemic districts with the aim of better managing data from endemic villages and providing support and feedback to all Health centers (#274) and HP (#89) situated in endemic provinces (#20) and reporting on a timely basis to PHD and CNM.

Capacity building of peripheral staff to manage malaria control and public health activities is in the offing.

Strengthening the HIS in order to consolidate malaria information is on the anvil and there is still a need to go beyond the HIS to better capture data generated either by VMWs/VHV in all the endemic villages.

**Involvement in policy development related to strategies implemented by the program:**

Over the past several years, the NMCP has built strong partnerships with USAID, the World Bank, and the United Kingdom Department for International Development, the GFATM and WHO at the national level and in the provincial level coordination meetings with national level personnel will continue to be organized with increasing support from provinces to OD through R2, 4 and 6.