Every year, around World Malaria Day (April 25), we hear about how malaria, a mosquito-borne infectious disease, mowed down thousands of adults and children. In 2011, more than 1.3 billion people in the World Health Organization’s South East Asia Region (SEAR) lived in areas at risk of malaria. Ten of the eleven Member States are endemic for the disease. Despite that, the picture is not uniformly bleak because countries are fighting back with success.

New tools and tactics being used to counter the spread of the disease and to reduce its huge economic and human costs are producing results. Maldives has been malaria-free since 1984. Many countries in the Region are making progress. Two countries which provide inspiring examples in the battle against malaria in recent years are Sri Lanka and Bhutan. Sri Lanka, an island nation, once among Asia’s worst affected nations for malaria, has since October 2012, reported zero local cases of malaria. The country’s Anti-Malaria Campaign is now working hard to prevent reintroduction of the disease and towards obtaining the Malaria-Free Certification from the WHO.

The other country on the verge of defeating malaria is the tiny Himalayan kingdom of Bhutan.
What lies behind their successes?

“In both the countries, it was political commitment and sustained efforts of the health workers which produced the impressive results. WHO has helped the national effort by providing technical support, expertise, training as well as guidance for mobilizing resources. What produced results on the ground was very good surveillance, better targeting of interventions as well as community participation,” says Dr Leonard Ortega, Regional Adviser, Malaria – Department of Communicable Diseases, WHO SEAR.

Arguably more money for interventions like indoor residual spraying and insecticide treated bed nets, rapid diagnostic tests for accurate confirmation of malaria and artemisinin-combination drug therapy for treatment — have contributed to the anti-malaria campaign. But no one factor can be cited as the definitive one for paving the way towards victory.

According to Dr Risintha Premaratne, Director of Sri Lanka’s anti-malaria campaign, “Key components in the elimination efforts included enhanced malaria parasite screening in high transmission areas through active case detection using mobile malaria clinics; early diagnosis and prompt treatment effectively reducing the parasite reservoir and the potential for transmission; and strengthening the malaria mosquito surveillance leading to evidence-based vector control.” Dr Premaratne adds, “Lately, identification of specific high-risk groups and active foci and effective interventions targeting them has assisted in consolidating these achievements. Increased vigilance for imported malaria, prompt appropriate treatment with radical cure for imported cases, characterization and screening of high-risk groups, and high level of preparedness for rapid response are among the key activities employed now for the prevention of reintroduction.”

“WHO has been a significant partner in progress throughout the malaria control and elimination efforts in Sri Lanka. The Roll-Back Malaria Initiative of WHO has been a major contributor of the decline in malaria incidence at the turn of the millennium. More recently, development of the new national malaria strategic plan for 2014–2018 focusing on prevention of reintroduction has been generously supported by WHO,” Dr Premaratne adds.

Dr Kamini Mendis, an internationally-renowned Sri Lankan malaria expert, and a former WHO official at WHO Headquarters, says, the biggest challenge facing Sri Lanka now is reintroduction of malaria into the country.

“A key issue is how to ensure that the profile of malaria stays up front in the minds of clinicians. In Sri Lanka, this is being done through constant engagement with doctors and hospitals, including those in the private sector. Sri Lanka’s surveillance system also uses data from private physicians and hospitals for a more comprehensive picture,” says Mendis.

On the colossal efforts being made to keep malaria out of the country, Dr Mendis says, “For over two years, every possible step is being taken to ensure that malaria patients entering the country are diagnosed promptly and treated effectively in order to ensure that they will not transmit the disease to others. The Anti Malaria Campaign (AMC) – at air and seaports rigorously implements surveillance, such as when our peace-keeping troops return from malaria endemic countries, or irregular would-be immigrants of Sri Lankan origin are brought back to the country. Their blood is examined for malaria, and if positive they are treated rapidly. Visitors to Sri Lanka from malaria endemic countries are informed on entry to report to the AMC in
the event of fever. Sri Lankans traveling abroad to malaria-endemic countries are a category identified as the main source of our “imported” malaria cases, and they are provided preventive treatment free-of-charge by the AMC on request, and advised on action they should take in the event of fever after returning to Sri Lanka.”

Bhutan too is pulling out all stops to eliminate malaria. In 2000, it reported more than 5000 malaria cases.

Rinzin Namgay, Chief Programme Officer of Bhutan’s Vector-Borne Disease Control Programme proudly says that Bhutan had only 19 indigenous or locally acquired malaria cases in 2014 and the country is already in the malaria elimination phase.

**How is Bhutan giving the last mile push to eliminating malaria?**

“We have strengthened surveillance in every high risk area, and malaria is now a notifiable disease, which means every single case which is detected must be reported to a designated national agency. Each and every index case, or the case detected in a particular area, is investigated, and active case detection around the 1 Km radius covering all population is mandatory. As a main prevention and control strategy use of long lasting insecticidal nets (LLIN) in high risk areas is high. Besides this, two rounds of indoor residual spraying is being implemented in high risk areas annually.

WHO has been one of the main collaborating partners in malaria control in the country, providing technical support as well as logistics and malaria capacity development through trainings. WHO provided guidance during the national malaria strategic plan development in 2012 and also inputs during the Bhutan national strategic plan 2015–2020,” adds Namgay.

Of particular significance in Bhutan’s battle against malaria is the situation in the 7 southern districts bordering India (the Indian states of West Bengal & Assam). These districts (Sarpang, Samtse, Chukha, Dagana, Zhengang, Pemagatshel and Samdrupjongkhar districts) are all “high-risk.”

“In Sarpang, Chhukha, Samdrupjongkhar and Samtse, the district hospital lies just at the entry point to the country. Everyone entering from the gate at the Border and intending to work or stay overnight in Bhutan is screened for malaria mandatorily and admitted to the hospital, if diagnosed positive to ensure adequate treatment before proceeding to interior of Bhutan, says Namgay.

“Sarpang and Chhukha in Phuentsholing also have private clinics that conduct malaria screening. The Vector-borne Disease Control Programme (VDCP) in collaboration with the hydroelectricity project authority carry out mass malaria screening every year during transmission season in summer and once in all mega-hydroelectricity project areas. All positive cases are treated on site and followed up till the 28th day,” Namgay adds.

Dr. Tashi Tobgay, Director, Human Resource and Planning in Bhutan’s Khesar Gyalpo University of Medical Sciences, Bhutan, points out that throughout the land-locked Himalayan nation, access to malaria diagnosis has been expanded. “Artemisinin-based combination therapy was introduced and there is increased coverage of high risk areas with Indoor Residual Spraying and long lasting insecticidal nets and community involvement, and enhanced surveillance systems, all help malaria elimination says Tobgay.
Tobgay appreciates WHO’s catalytic role in the malaria control efforts. “WHO’s unwavering support has provided both technical and financial support in all the endeavours that the program has initiated. WHO has also played a pivotal role in helping Bhutan obtain grants from the Global Fund to Fight AIDS, Tuberculosis and Malaria which have boosted the much needed funding for malaria elimination in Bhutan,” adds Tobgay.

In both countries, the message is clear. In the battle against malaria, collaborations are critical. The best results are when the health system teams up with other government departments and external agencies.

Summarising the factors that led to the success against malaria in the two countries. Dr Ortega says, “All the interventions were at the right place at the right time. WHO provided technical support, and helped the countries obtain much-needed funds. At the country level, there was lots of hard work. In Sri Lanka, for example, various agencies of the government came together – the health ministry worked with other sectors- agriculture, forestry, mining in carrying out the interventions.”