

Support Provided to the Programme

IDVC project provided sustained technical support to the National Vector Borne Disease Control Programme at the Centre and in the states for control of malaria and other vector borne diseases. Some examples are given below:

1. Monitoring of insecticide susceptibility in malaria vectors. This information helped the NVBDCP in making evidence based decisions in the use of insecticides for IRS.
2. Monitoring of drug resistance in the malaria parasites. This work has resulted in updating the anti-malaria drug policy.
3. Large areas of the country have switched over to the bioenvironmental malaria control and IRS is used in high risk areas. Examples are the States like Maharashtra, Karnataka, Gujarat, Andhra Pradesh, Goa, etc. The programme is under expansion and for the first time an alternate strategy has become available for sustainable malaria control in the country.
4. Insecticide-treated bednet programme has expanded to large parts of the country, e.g. in the north eastern states and on the main land. ITNs produce more impact in curtailing transmission than IRS due to some inherent problems in IRS.
5. Health Impact Assessment and simultaneous implementation of remedial measures in 760 km stretch of Konkan Railway is a shining example of collaborative research demonstrating preventive malaria control in large projects.
6. Extremely high malaria endemicity in Betul, Madhya Pradesh was a serious concern to the state government. The malaria situation was not responding to IRS. In this difficult terrain, successful malaria elimination was demonstrated in the entire district. Indigenous malaria control has been achieved by simple and doable strategies.
7. Effectiveness of DDT in the control of *An. culicifacies* and *An. minimus* and malathion in *An. culicifacies* was assessed through a multi-centre study. The findings were submitted to the DDT Mandate Committee of the Government of India.
8. A number of outbreaks of malaria, dengue, JE and more recently chikungunya were investigated at the instance of the Central and/or State Health departments, and technical support for containment was provided.
9. Biolarvicides— *Bti* and *Bs*, were field-tested and introduced in the rural and urban areas for control of disease vectors.
10. Neem oil was evaluated as mosquito and sandfly repellent. This product is in use in the country.
11. Dipsticks were tested and compared with microscopy in the diagnosis of malaria. Based on the work done in MRC, dipstick method was adopted by the NVBDCP in the diagnosis of malaria at the periphery and in the hospitals.
12. Clinical trials of the antimalaria artemisinin drug α - β arteether were jointly carried out by the MRC and the CDRI. The drug has been introduced in the treatment of malaria by the NVBDCP and in the private sector.
13. Technical support was provided in disaster affected areas such as tsunami in Andaman & Nicobar Islands, as well as an earthquake, cyclones and flash floods in Gujarat.

14. Teaching of malaria was introduced for 10+2 students in Goa and every year 50,000 students take malaria as an optional subject.
15. A large number of video-films, pamphlets, exhibitions and other awareness literature were prepared from time-to-time and disseminated. This literature is very useful in observance of malaria month of the NVBDCP.
16. Situation analysis of districts selected for the implementation of WHO's Roll Back Malaria campaign was undertaken and results provided to the NVBDCP.
17. Role of larvivorous fishes, blister packs of anti-malarials and insecticide-treated nets in different parts of the country were evaluated for the NVBDCP.
18. MRC Hqs and its field units participated in the training, re-training and refresher training programmes of the NVBDCP in the Hqs and at the field units. Several workshops and conferences were organised with the support of NVBDCP, WHO and ICMR. Human resource development is a continuing programme at all the field units.
19. Assisted the national programme in preparation of annual and 5-yearly plans of programme implementation and periodic reviews.
20. MRC scientists participated in the in-depth evaluations of the NVBDCP at several occasions and contributed in the planning of malaria control.
21. MRC scientists studied in-depth the vector biology and ecology and provided scientific basis to the NVBDCP for decision making.

