5. Honduras

For 2000, Honduras had a population of 6,485,000 inhabitants, 5,058,300 (78.0%) of whom live in areas with environmental conditions conducive to malaria transmission.

For health purposes the country is divided into 9 health regions. This division differs from the political division, which consists of 18 departments.

Among the most important indicators that should be mentioned are: a land area of 112,492 Km², a population that is 44.6% urban and 55.4% rural, a growth rate of 2.8%, a population density of 51.1 pop./Km², life expectancy at birth of 68.8 years (66.3 years for men and 71.3 for women), and a fertility rate of 4.3 children per woman.

The socioeconomic indicators of greatest interest are: a per capita gross domestic product of US $331.6, a GDP growth rate of 3.7%, social expenditures equivalent to 3.2% of GDP, health expenditures equivalent to 26.1% of social expenditures, health expenditures of 8.3% of current expenditure, and 75.8% of households in extreme poverty (1994).

**Epidemiological Situation of Malaria**

In 1999, the health regions that contributed the highest percentage of malaria cases were: Region IV (15.4%); Region VI (36.2%); Region VII (17.3%), which together account for 69.0% of total malaria cases in the country. For 2000 the health regions with the most significant problems were I, III, VI, and VII, which account for nearly 90% of malaria cases in the entire country.

In 1999 the Metropolitan Regions V and VII accounted for 4.7% (Annex 1 Fig.5.1).

The disease is predominantly on the Atlantic Coast, with the most frequent species being *P. vivax* (97.0%) and *P. falciparum* (3.0%). Some 69.0% of cases of *P. falciparum* come from Health Region VI. The dominant vector species is *A. albimanus*; however, in Region VI there is also *A. darlingi*, which is prevalent in the summertime, alternating with *A. albimanus*, which is prevalent during the rainy season.

The age group most affected is that of persons over the age of 15, the economically active population, which possibly reflects an occupational risk.

Between 1958-1999 (Annex 1 fig.5.2) the malaria incidence rate has been rising.

The incidence of malaria is highest in the poorest municipal strata.

During the period 1958-2000 there were variations in the slide positivity rates (SPR) with the largest increase beginning in 1998, over 20.0% a year in recent years.
Among the risk factors accounting for the high incidence of malaria on the Atlantic Coast, apart from the presence of *A. albimanus* and *A. darlingi*, are the massive migrations driven by agribusiness development poles (rice, banana, cotton, citrus, in-bond assembly). This situation leads to the temporary erection of inadequate dwellings that facilitate man-vector contacts.

**PROGRESS OF THE GLOBAL STRATEGY FOR MALARIA CONTROL**

Honduras has set up certain elements of the Global Strategy for Malaria Control, as follows:

Drugs are available throughout the country and are obtainable through the volunteer network, health centers, and government hospitals.

The disease is diagnosed through a laboratory network that functions throughout the country. However, it is necessary to improve the quality of diagnosis through an ongoing training mechanism and stricter quality control, and to extend the network in order to cut the time elapsed between the taking of a sample and the diagnosis, even though the country has set up radical treatment with clinical diagnosis.

With regard to the prevention of epidemics in disaster situations, the experience of Hurricane Mitch demonstrated that the implementation of comprehensive measures effectively helped control the disease, preventing outbreaks that had been expected. These measures included mass medication in shelters, medicating patients with fever in malarial areas, chemical and biological control of the vector in high-risk areas, mass distribution of educational materials to the population, and all of the above simultaneously.

Up to December 1999, the malaria surveillance system contributed information weekly through a coordinated electronic network covering all the regions of the country. In 2000 the project that supported it expired, and the registry, tabulation, consolidation and transfer of data among the operating levels is now conducted manually, with a significant deterioration in the timeliness of these mechanisms.

The country has advanced in the stratification of its malarial areas, so that affected areas or areas at risk of transmission are now known. However, the stratification strategy has not been completed and the different risk factors affecting the transmission of the disease remain to be quantified.

The geographical areas of common interest are, chiefly, the border with Nicaragua and the Southern Zone bordering El Salvador. The Atlantic Coast is also included, given its high endemicity, the circulation of *P. falciparum*, and tourism, which affects the internationally popular Bay Islands.