9: VL AND THE RESEARCH SCIENTIST

9.1 Is more research on VL needed (applied, basic)?

Further research is needed both at the basic and the applied levels.

9.2 If so, what are the recommended research objectives?

The priority research needs in VL research are:

(a) The development of new therapies (for example drugs, or immunological therapies) for human VL, preferably drugs that can be given orally in single or few doses at an affordable price and with no significant side effects.

(b) The production of simple, specific, fast, inexpensive, and highly sensitive, antibody detection test for the diagnosis of VL, preferably for field use.

(c) The production of effective vaccines for VL.

(d) The identification of the most sustainable vector control strategy (evaluation of insecticide impregnated bednets).

(e) Cost-effective analysis of VL control strategies.

(f) Methods for the improved diagnosis and treatment of PKDL.

(g) Identification and quantification of the risk factors involved in the acquisition of VL.

(h) Evaluation of the impact of the elimination of dogs (parasitologically and/or serologically positive) on VL transmission.

(i) The development of vector population density indicators for use in endemic areas and in epidemics.

(j) An understanding of the mechanisms of drug resistance in *Leishmania*.

(k) An understanding of the mechanisms of epidemics.

9.3 What is the order of priority of the research objectives?

The order of priority varies according to the needs of each country. Each country has to establish an order of research priorities to best fit the needs of that country.

Overall the research priorities and those which will have greatest impact on the control of VL are: the development of new drugs, new diagnostics and new vaccines together with studies to analyse the most cost-effective interventions. Overall research priorities are therefore considered to be as listed in 9.2 above.

9.4 **What are the sources of funding for such research?**

Examples of known sources of funding are:

- Individual governments and government agencies.

- Commission of the European Communities
  Rue de la Loi 200
  B-1049 Brussels
  BELGIUM

- International Development Research Centre
  P. O. Box 8500
  Ottawa, K1G 3H9
  CANADA

- National Institutes of Health
  Bethesda, Maryland 20892-0425
  U. S. A.

- Overseas Development Administration
  94 Victoria Street
  London, SW1E 7JL, U.K.

- Special Programme for Research and Training
  in Tropical Diseases (TDR)
  World Health Organization
  CH-1211 Geneva 27
  SWITZERLAND

- The Wellcome Trust
  183 Euston Road
  London, NW1 2BE, U.K.

There are many other potential sources of finance, including local charities, commercial sponsors, and other non-governmental international organizations, which should be explored to obtain funding for priority research.