that the base map for arable farmland was out of date, which is a problem, because it is often in recently settled farmland that conflict is most severe. It was suggested that just using overlap between elephant range (excluding protected areas) and high densities of human population would be more useful.

## **OBJECTIVES**

The objective of this study is to develop a descriptive GIS model of human-elephant conflict, and to use it to predict areas where conflict is likely to become more severe in the future.

## DISCUSSION

A serious problem with attempting to predict areas of human-elephant conflict is that some level of conflict occurs in almost all areas where elephant range overlaps with human settlement. Even if there is no agriculture, there is likely to be some conflict over resources such as water. At present we have no standard measures of the intensity of conflict, and very little quantitative data on conflict at all, we will not be able to take a rigorous approach, and the model will have to be for illustrative purposes only.

The general approach to be used will be to vary the parameters used to predict areas of conflict in countries for which there is good information, until there is a good match with the known situation on the ground. These parameters will then be applied to countries for which there is less information, and can be commented on by representatives of these countries at the next AfESG meeting. As a result of this either modifications may be made to the range maps, or to the parameters in the

model. Once we have agreed on the parameters, then we can repeat the process, using human population projections based on known rates of increase to predict areas where conflict is likely to get worse.

The other approach that we should be taking is to look for good, simple measures of intensity of conflict. At a district! provincial level we are not going to be able to get direct measures, such as total economic cost, or the proportion of total crops destroyed by elephants, but data on human deaths due to elephants may be more reliably recorded and may be related to other indices of conflict. If there are enough data available, we might be able to do a multiple regression of human deaths caused by elephants (per thousand people per year) against human population and elephant population on a district/province basis. If there is a relationship, then one could use this to predict death rates and hence intensity of conflict. One problem with this approach is whether to include elephants within protected areas. If they are not included, the model may generate some odd results if deaths are caused by animals which spend the daylight hours (when they are counted) inside protected areas (PAs), but on the other hand, the majority of elephants inside PAs will not be involved in conflict. There will also be problems in administrative regions with a gradient in human population density, and with elephants only in part of the area, as well as where the input zones for elephant densities are different from the administrative units used for human deaths and human population density.

At this stage of development, the Task Force can do no more than see how much data there are, and decide what to do next.

## DISCUSSION OF DRTF TERMS OF REFERENCE AND MEMBERSHIP

The Data Review Task Force (DRTF) is concerned with all issues relating to the management of data on elephant populations and numbers collected by, stored by, managed by, or disseminated by the African Elephant Specialist Group (AfESG). In particular, it oversees the African Elephant Database (AED) on behalf of the members of the AfESG.

As agreed to by the Group, the DRTF members are suggested by the AfESG Chair and presented to the members of the Specialist Group for approval each

triennium or meeting. All DRTF members must have appropriate technical expertise in survey work and/ or GIS technology. If the need arises, the Chair can appoint an acting DRTF member until the time arises when the acting member's services are no longer required. While there is no formal Chair for the DRTF, the AfESG Secretariat is responsible for organising and co-ordinating all meetings and communications for the Task Force, and the AfESG Programme Officer is specifically charged with serving as the Secretary to the Task Force.

The membership of the Task Force is as follows:

Holly Dublin Chris Thouless

Richard Barnes Colin Craig Greg Overton - Secretary

## DISCUSSION OF THE DATA DISSEMINATION POLICY

From the inception of the African Elephant Database, there has been discussion amongst members of the Group as to who should have access to the raw or digital data from the AED. Due to the sensitive nature of the data contained in the AED, and the fear among some countries that their data may be manipulated incorrectly and used against them, the DRTF drafted

a policy to determine to whom and how data from the AED can be disseminated in digital form This draft policy was presented to the membership of the AfESG, discussed and approved. This policy will now guide all requests for dissemination of digital versions of the AED and can be obtained from the AfESG Secretariat on request for the AED data.