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The current situation of pesticides use in developing countries: problems and solutions.

Pesticide use is growing and poses a real threat to human and animal health and the environment. There are considerable losses of yield as a result of pest attacks. A recent study estimated current losses for cotton, coffee and rice at 40-50% of the potential yield, whilst likely losses in the absence of pest control were estimated at 70-80%. Thus, some pest control is essential.

The problem with pesticides is not simply one of reducing use, in Africa for example the average amount applied is around 100g/ha, compared to use in Europe or the US where figures of kg/ha are commonplace. However, overuse is a considerable part of the problem - in South East Asia for example an estimated US\$114m were spent in 1992 on insecticides for the protection of rice alone. The farmer response to pest problems is often to increase pesticide use, an approach fuelled by subsidies and pesticide companies. The general consensus among researchers is that systematic treatment is not necessary and that targeted or preventive use is better. In practice this requires farmer training and pesticide regulation.

Reliable commercial data are difficult to obtain but it can be concluded that intensification of agriculture leads to an increased use, or indeed overuse, of inputs. Analysis shows that the products used in developing countries are often the cheaper, non-specific, generic pesticides which may be of doubtful quality and contain highly toxic contaminants. Equally, a large proportion of the pesticides themselves are highly toxic (Classes Ia and Ib, WHO).

Generally, studies indicate that we can expect increased rather than decreased use of pesticides. The immediate concern is therefore controlling this use. A recent audit prepared by the European Commission by experts from African countries concluded that it is more realistic to rationalise the use of pesticides rather than adopt a strategy of rapid implementation of IPM.

In the same vein the IPHYTROP consortium favours the concept of "step-by-step" implementation of IPM which we consider totally compatible with the approach of other major IPM initiatives. The most basic need, whichever approach is taken, is for information and training. The European Commission has already been active in this respect, funding the development by IPHYTROP of a database on pesticides and the environment for the six ASEAN countries which is widely used on simple desktop computers. A parallel database for north and west Africa, developed as a mainframe application, is currently being converted to a desktop format to increase its utility. The European Commission is also supporting other initiatives in line with the "step-by-step" approach, with projects in the pipeline concerning the rational use of pesticides (Cote d'Ivoire), pesticides research (Algeria) and the destruction of obsolete stocks (Sahel).

The pesticide sector in developing countries is often badly organised and the FAO Code of Conduct often abused. Donors and national administrations, often responsible for up to 50% of local pesticide markets, must respond to this situation.

Trends indicate pesticide use is increasing, while aid is decreasing and the sale of agrochemicals is becoming more and more privatised. The farmers are obliged to make primarily economic choices in crop protection. Again, donors and national administrations should make efforts to ensure that the farmers are properly informed of the available alternatives. The pesticides market cannot be left to its own devices, the success or otherwise of IPM depends on its effective control.