

Concluding Remarks

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Ladies and Gentlemen, Distinguished Guests and Participants,

At the end of the Symposium on Pesticide Use in Developing Countries – Present and Future –, I would like to express my gratitude to all the participants, in particular to those who came from overseas, for contributing so significantly to the success of the symposium.

In their presentations, all the speakers recognized that the damage caused by diseases and pests as well as weeds was one of the major constraints to crop production, regardless of the differences in the conditions prevailing in the respective countries. Also, they emphasized the importance of the use of pesticides for crop protection so as to improve production, and they anticipated that in the future the demand for pesticides would certainly increase worldwide.

Recently the use of pesticides has indeed registered a considerable increase in every country and this trend has been beneficial to crop production. However, it is also necessary to carry out research on the selection of the most effective pesticide against a definite target, and on the improvement of methods and timing of application in order to achieve an ever better protection of the crops against pests, diseases and weeds.

On the other hand, the continuous use of pesticides has often been associated with a great number of problems, the most important one being the hazard to human health, animals and the environment which may appear after the use of pesticides. Particularly, since humans are likely to absorb pesticides in the form of residues present in various foodstuffs, research on pesticide safety to humans as well as monitoring studies of pesticide residues in the environment is indeed of paramount importance.

And since practically every country has set up standards for the safe use of pesticides in relation to their residual toxicity, pesticide use should definitely conform to these rules for the sake of human health.

Pesticide use may also lead to undesirable side-effects on non target living organisms, in particular fresh water fish and natural enemies of pests and when intensive agricultural systems are being adopted, some non target crops may be injured by pesticide sprays.

Repeated use of the same pesticide may induce the development of resistance to the pesticide in target pests. The resultant decline in efficacy of such pesticides could become a major problem for pest control. To alleviate this situation, it is essential to devise methods so as to prevent the development of resistance to pesticides by the pest since it is becoming increasingly difficult to develop new pesticides. In other words, it is important to avoid using the same pesticide more than necessary, based on forecasts of outbreaks of pests and diseases. It is also recommended that alternative pesticides with negatively correlated cross-resistance be used. Moreover, great hopes should be placed in the future on research on integrated pest management whereby pesticides are not used solely but in combination with resistant crop varieties, natural enemies and improved methods of crop cultivation. On the other hand, the use of herbicides requires surveys placing emphasis on economic aspects.

To solve the serious problems posed by the use of pesticides which have been outlined previously, it is essential that in the future a close cooperation between the governments, the research organizations, agricultural experts, pesticide manufacturers and users be further promoted in the respective countries.

In this regard, the information and the results of the investigations carried out in each country which were reported for the last three days should contribute significantly to promote a more effective and safer use of pesticides in the respective countries.

I sincerely hope that technical information will be exchanged among these countries in the future.

Once more, I should like to thank all the participants for their interesting presentations and for their active role in the discussions which took place during the symposium.

Thank you.