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Workshop on Pesticides

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PESTICIDES USE IN MEXICO1

by

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^{1/} The views and opinions expressed in this paper are those of the author and do not necessarily reflect the views of the secretariat of UNIDO. This document has been reproduced without formal editing.

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The use of insecticides, the improvements in irrigation fields, the new crop varieties and the increase of fertilizers use permits Mexican agriculture to develop its production and to participate in the Green Revolution, especially in the areas under irrigation.

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One of the most important crops is cotton; we are reducing the crop area, but simultaneously we are increasing our crop yield, and our actual national average is approximately 2.5 bales per crop hectare on about 500,000 has.

Improved irrigation facilities are increasing the new crop areas. The nation has a territory of 190 million has; and only could consider it possible to irrigate in the future 8 million has. Actually, we have 4 million under irrigation. The climatic conditions do not produce enough rain in a lot of areas, since they are desert and mountain areas.

Nevertheless, the country has 200,000 kilometres of roads. Each kilometre is very expensive, because of the need to go through the mountains to build it and develop new crop areas.

Our agriculture production is around US\$4.5 billion and the cotton crop represents US\$320,000,000.

The pesticide industry is important and it is growing. The insecticides uses have been developed according to up-to-date research recommendations and we receive from the multinational companies new technologies and the know-how to use them. Thus we depend on their innovations and we have an efficient technical personnel applying their knowledge to obtain better results in pest control, according to our conditions.

We import 7.6 million dollars of technical material and the value of the productions is around US350 million.

The majority of the pesticide uses is in cotton, and the most important consumption areas are in the west of the country.

We export around 500 million dollars of different agricultural products such as sugar, cotton, tomatoes, coffee, vegetables and fruits.

In Mexico we manufacture: DDT, BHC and toxaphene. Guanos y Fertilizantes de Mexico, a Government company, started a parathion plant (methyl and ethyl) last year.

The most important <u>multinational companies</u> that are working in Mexico are the following: Dupont, CIBA, Geigy, Diamond Chemicals, Bayer, Union Carbide, Velsicol, Delanco and Dow.

All of them import the technical material to produce insecticides and other pesticides in the form of dust or liquids.

Mexico produces herbicides 2.4 D to 2.4.5. T. The other new herbicides are also imported.

All the companies transfer their technology of application and their personnel have been in a high proportion of Mexican technicians.

The Green Revolution is working in Mexico and the basic limitations for its integral success in the whole country are credit and the temporary labour areas.

We are working in research to investigate and produce new varieties of corn, wheat and barley; this work is being accomplished together with foreign institutions. Nexico has a very good staff that covers other areas like rice, corn, scybean, cotton, sesame gad flower, sorghum, sugar, coconut, potatoes and other crops.

The most prestigious institutions that provide specialists in pest control are the following:

Escuela Nacional de Agricultura Instituto Tecnologico y de Estudios Superiores de Monterrey Universidad CD. de Sonora.

On the other hand, the Universidad Nacional Autonoma de Mexico provides veterinarys and the Escuela Nacional de Agricultura provides technicians in animal husbandry.

In the West Pacific of the country, we have the most important experimental stations. These stations give help to farmers in the cultivation of their lands.

The name of each one of these institutions is: CIANO, CIAB, CIAC, CIASE, etc. These stations are doing good work, but they have not enough personnel to do a better job.

We are not self-sufficient in wool and lamb meat, and we import US\$1.5 million in wool and 2 million in lamb meat.

and 120 million chickens per year.

One of the most important difficulties is the appearance of insect resistance or immunity. Very frequently the service inspection to determine the pest control is made by unqualified personnel and quite often the companies are moved by their interest in sales. It is necessary that they carry out more experiments to determine the best recommendations according to the special situation of each country. The situation leads to the use of new insecticides that are more expensive and each day we are depending on a new foreign technology. For instance 10 years ago we used DDT and the price was US\$0.40 per litre, and US\$100.00 per metric tonne; now the new insecticides are 20 per cent more expensive than in the past, and the indiscriminate use of the insecticide has resulted in the need to use two or three times more volume.

The problem of the world is the need to increase production, but if the cost increases further, the world could not pay the high price of crops and clothes. We are sure that the multinational companies are thinking of this and how to help us, because they need more markets and more sales, and we are sure that they are thinking of how to keep their consumers.

It is necessary if they are thinking of helping ug to invest in our countries with local capital and transfer technology and develop new industries according to the possibilities to produce and to have more reasonable prices for the new insecticides.

The Mexican President, Mr. Luis Echeverria, appointed the Environmental Control Vice-Minister that I represent, and my area is to avoid the contamination of soil, water and air. We are making studies to prevent the contamination by agro-chemicals and we are sure that the knowledge that we obtain in this Congress will help us to accomplish this work, since here are the best scientists in this area of the world.



