



Poison Free Agriculture, with Homeopathic Natural Pesticides

by

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This presentation will include the following aspects.

- 1. Agriculture Outlook.**
- 2. Current situation and main drivers for growth.**
- 3. Impact of Poisonous Pesticides.**
- 4. Burning Issues.**
- 5. Benefits of Homeopathic Natural Pesticides.**
- 6. Development/ Manufacturing of Homeopathic Natural Pesticides by WS Pharmacy and Research Center.**

1. Agriculture Outlook

Agriculture Outlook

Basic Facts

Population	158.2 Million
Cropped Area	23.13 Million Hect.
Water Availability	137.8 MAF
Irrigated Area	82%

Top 5 Crops

Million Hectares

Wheat	8.5
Cotton	3.07
Rice	2.58
Sugar Cane	1.02
Maize	1.02

Source; Ministry of Agric.
Government of Pakistan

AGROCHEMICALS MARKET 2011

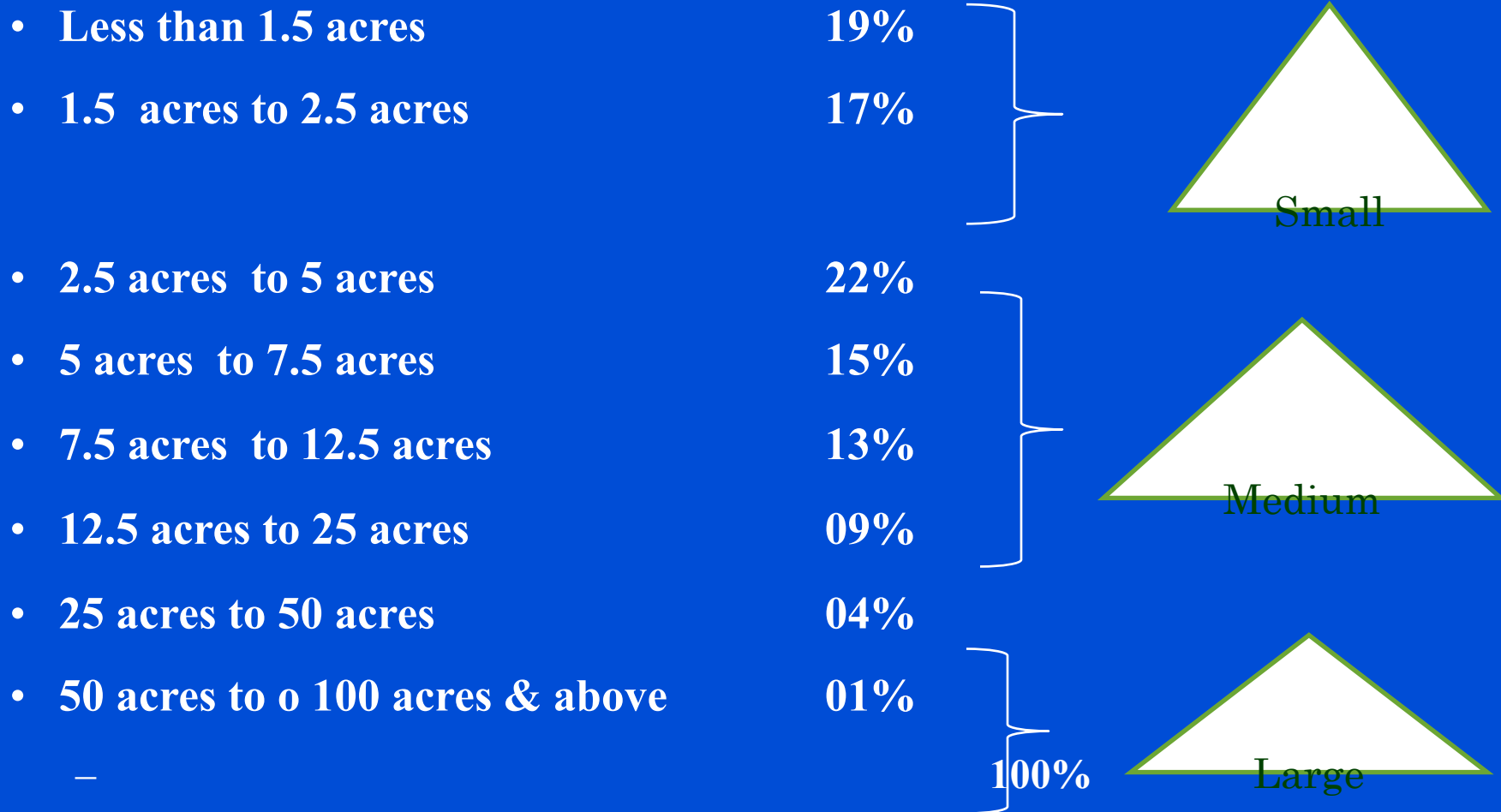
Total Value	120 Mil. US\$
Insecticides	71%
Weedicides	25%
Fungicides	4%

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Writers Estimates
Import values, for retail , Plz. add 70%

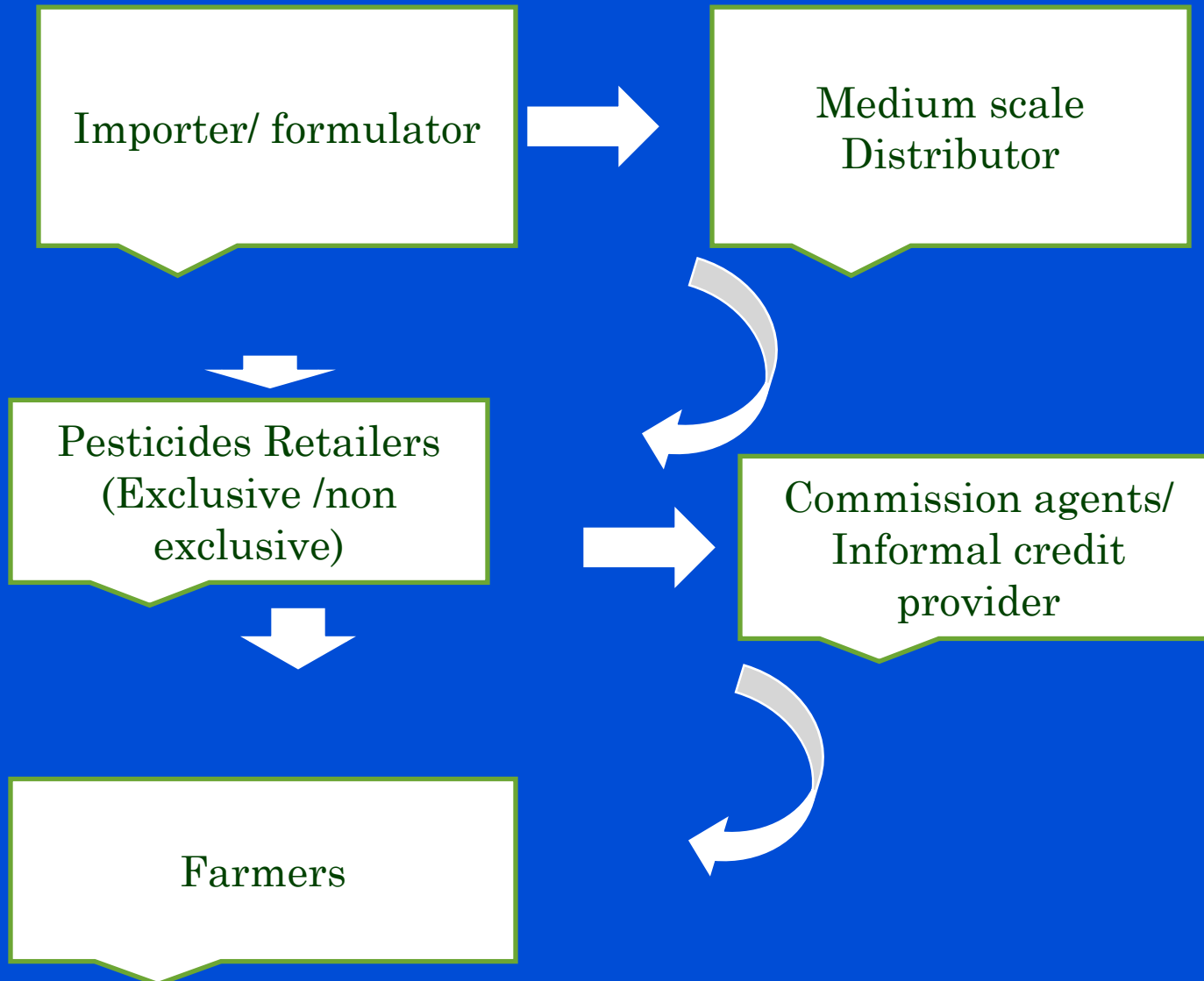
2. Current situation and main drivers for growth

Current situation FARMER'S STATISTICS

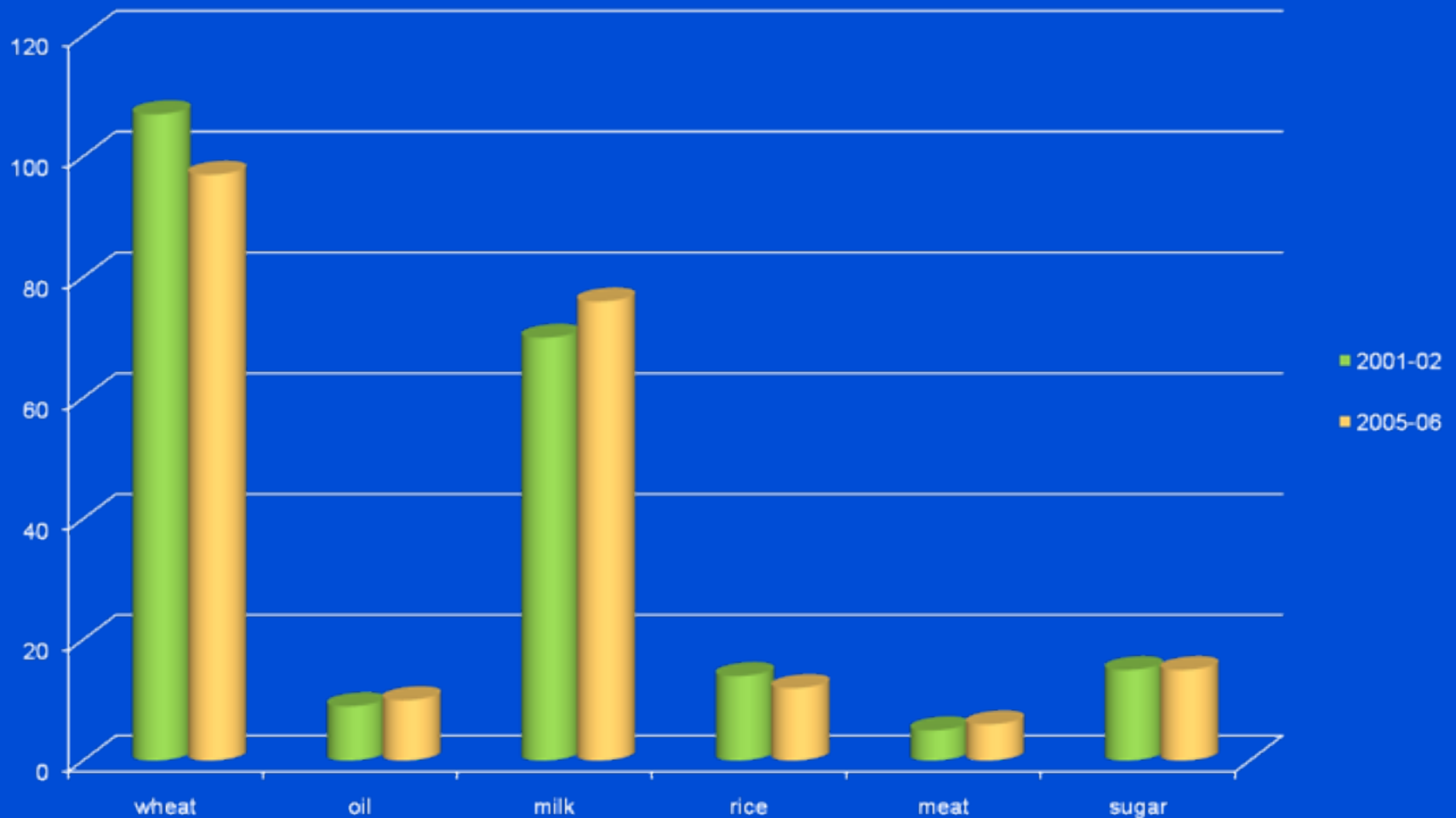


Pesticides industries in running business keeping in view the increased profitability of medium to small farmers.

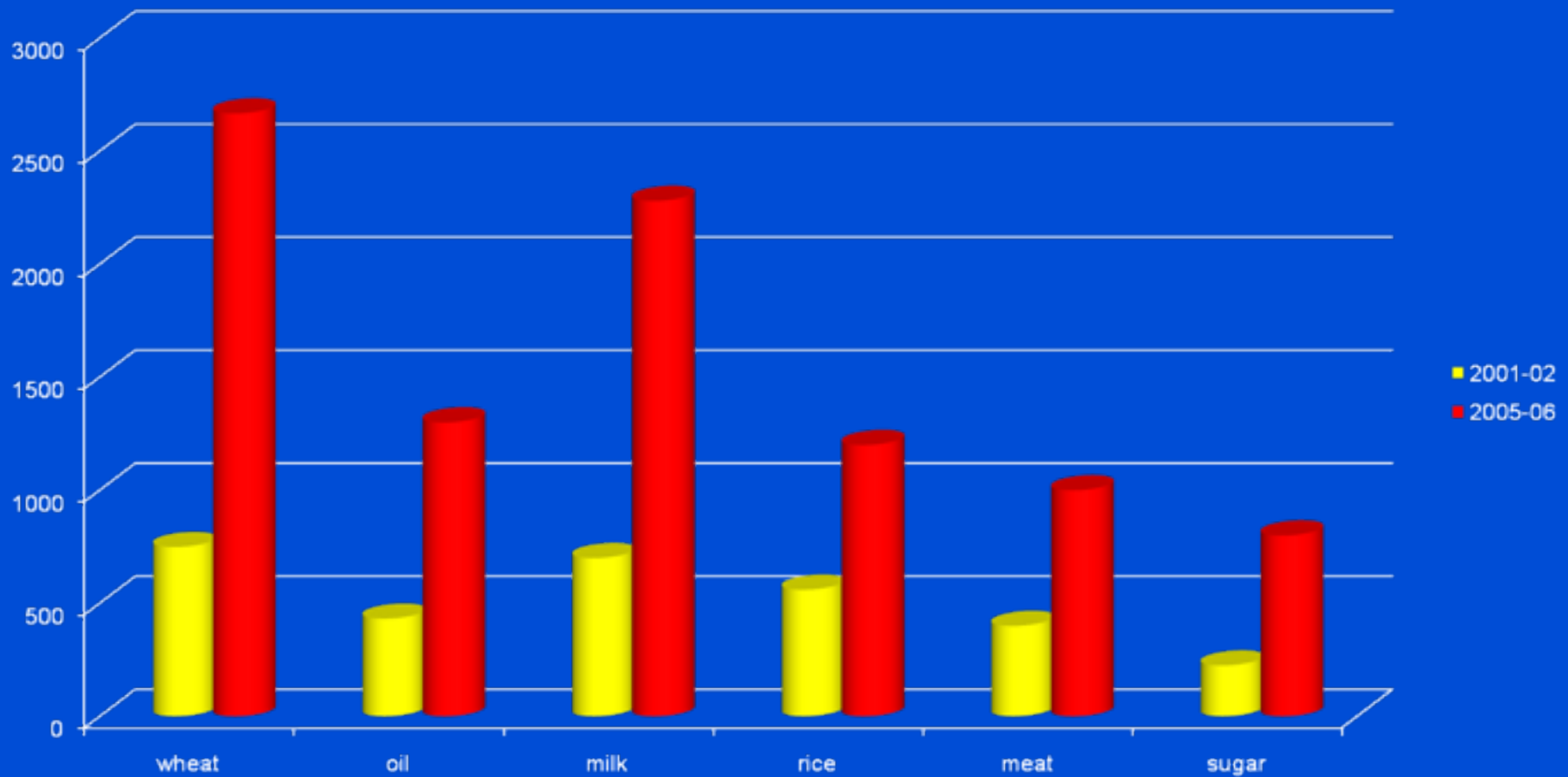
FARMING INPUT SUPPLY CHAIN



CONSUMPTION/CAPITA/ANNUM (KGS)



EXPENSES/ CAPITA/ ANNUM (Rupees.)



TRENDS OF CONSUMPTION

- **Prices are increasing regularly**
- **Consumption trend is almost constant**
- **More income is being spent to meet both ends**
- **No improvement in quality nutrition**

TWO CROPPING SEASONS

- Kharif Season – Planting in May/ June and harvesting in October / November
- Rabi season – Planting in November / December and harvesting in April / May

KHARIF SEASON – EXPORT FOCUSED

– Cotton

– Production 12 million bales, erratic production figures, ranging from 11 – 14 million bales

– Currently facing serious issue of Cotton Leaf Curl

Virus and Sucking Insect Pests

– Consumes 65% of pesticides, mainly insecticides

KHARIF SEASON –EXPORT FOCUSED

- **Rice**
- **Production 6.2 MMT, local consumption of 2.5 MMT.**
- **Hybrid of coarse grain have started getting popular - 22% of total market.**
- **Currently no Hybrid of Basmati.**
- **Next major focus is on long grain, non aromatic parboiled varieties.**

Major Pests

- **Stem Borers.**
- **Leaf Folders.**
- **Bacterial Leaf Blight.**
- **Brown Leaf Spot**

RABI SEASON- DOMESTIC FOOD SECURITY

- **Wheat 8.5 Million Hectares**
- **Sugar cane 1.02 million Hectares**
- **Corn 1.02 Million Hectares**
- **Oil Seed 0.5 million Hectares**

RABI SEASON – DOMESTIC FOOD SUPPLY

- Wheat acreage 8.5 million hectares.
- We need 7.4 million hectares (average of 3.1 MT/H) to produce 23 m ton of wheat. Good enough for local consumption and hectares shortfalls.

CORN – ANOTHER IMPORTANT GRAIN

- **Currently we are producing 3 MMT.**
- **Our poultry feed being major consuming (65%) increasing at 10%**
- **Animal feed industry is expected to grow because of rising demand of milk.**
- **We grow non GMO corn which is highly demanded by European market so huge potential of wet milling exist in the country.**
- **Prices are expected to rise because of alternate use of biofuel**

3. Impact of Poisonous Pesticides

Impact of Poisonous Pesticides

- ☀ **Pesticide residues in food chain**
- ☀ **Contamination of water**
- ☀ **Public health**
- ☀ **Development of pest resistance**
- ☀ **Elimination of natural enemies**
- ☀ **Extinction of wild life**
- ☀ **Degradation of cropland soil**
- ☀ **Loss of Pollinators/crop loss**



Pesticide Related Health Problems

*Exposure during application at farm level	- Households affected per season	63%
#Exposure during cotton harvest	- Pickers experienced sickness	87%
+Exposure at local pesticide refilling facilities	- Laborers experiencing sickness	50%

***Estimated for 217 million households of 9 major cotton districts in Punjab**

#Estimated for 5127 thousand tons of cotton picked by 2.6 million women

+Estimated for 1000 laborers working at 25 plants in Multan City

Pesticide Residues in food and the Environment

Type of Sample	% of samples contaminated	% of samples
Vegetables (brinjal, okra, bitter gourd, gourd)	100	60
Fruits (apples)	100	60
Cotton seed oil	100	65
Cotton seed cake	100	65
Shallow ground water	100	30
Soil	100	-

Health Hazards of Conventional Pesticides

- Cotton which is the major fiber crop of Pakistan consumes about 80 % of the pesticides
- On average, the number of sprays are 8 – 12.
- 95 % of the farmers have less than 25 acres of land so spraying is manual which increases exposure of spray man.
- Almost 100% picking is done by female workers, increasing the risk of poisoning and Breast Cancer.

4. Burning ISSUES

Burning ISSUES

- 1. LEAF CULRL VIRUS ON COTTON.**
- 2. FRUIT FLY IN MANGO & CITRUS ORCHARDS.**
- 3. GUMOSIS IN MANGO AND CITRUS ORCHARDS.**
- 4. QUICK DECLINE OF MANGO AND CITRUS ORCHARDS.**
- 5. BACTERIAL LEAF BLIGHT ON RICE**
- 6. WHITEFLY AND SUGARCANE PYRILLA OF SUGARCANE**

5. Benefits of Homeopathic Natural Pesticides

Benefits of homeopathic natural Pesticides

- **Non-Toxic and Non-Harmful to human being and beneficial fauna**
- **Environment friendly**
- **Economical and safe**
- **Preserve natural ecology including predators, Parasites and micro organisms in soil**
- **Pollution factors is zero**
- **Ideal for aerial spray**

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- **Also acts as growth regulator**
- **No residue in plants/ crops**
- **No harmful effect on soil chemistry**
- **No harmful effect on Groundwater**
- **No foreign exchange involved (locally manufactured)**
- **Easy to store/ handling because of not inflammable**
- **It can also reverse damage of soil due to excessive use of fertilizer and conventional pesticides**

6. Development / Manufacturing Homeopathic Natural Pesticides by WS Pharmacy and Research Center, Lahore, Pakistan

Introduction:

WS Pharmacy and Research Center Lahore, Pakistan, besides Manufacturing, Medicines for Human beings is also conducting research for the last 16 years on Insect Pests and Diseases control with Homeopathic Pesticides and has been able to develop/ manufacture a series of products as insecticides, fungicides, bactericides, anti virus growth promoters for safe and proper control of plant diseases and insect pests as detailed in the next slide

Name of the Product	Insecticide, Bactericide, Fungicide or antivirus	Crop	Pests/ Disease
Rigorous Plus	Insecticide + Fertilizer + Growth Regulator	Wheat, All Vegetables, Fruits	Wheat Aphid, Sucking Insect Pests etc.
Black Warrant	Insecticide	Cotton	Whitefly
Ventage	Insecticide	Cotton	Mealy bug
Frantic	Insecticide	Cotton	Jassid
Surrounder	Insecticide	Cotton, Cauliflower, Brinjal, Rice etc.	Bollworms and Stem Borers

Name of the Product	Weather Insecticide, Bactericide, Fungicide or antivirus	Crop	Pests/ Disease
Vampire	Fungicide and Bactericide	Citrus, Vegetables and other Fruit Plants etc.	Seed born Diseases
Faline	Nematicide	Citrus	Nematode
Vega-Plus	Growth Tonic	All Crops, Vegetables, Fruit Plants	-
Shield	Fungicide	All Vegetable etc.	Seed Born and Soil Born Diseases
Shield Plus	Medicine to secure Dengue Disease/ Insecticide to control Dengue Mosquito	-	Against Dengue Mosquito

Name of the Product	Weather Insecticide, Bactericide, Fungicide or antivirus	Crop	Pests/ Disease
Shield Forte	Insecticide to control Dengue Mosquito	-	Dengue Mosquito
Axiom	Seed Treatment	Cotton	Against CLCV
Rigorous	Insecticide	Wheat	Wheat Aphid
Fierce	Insecticide	Cotton, Vegetable and Fruit plants	Thrips, Mites

THE END

THANKS