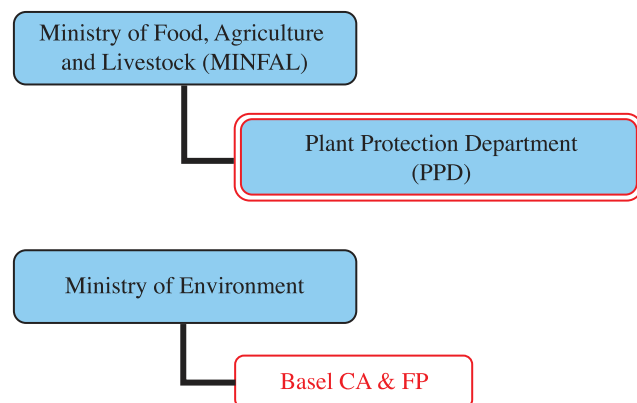


3.10 PAKISTAN

I. GENERAL INFORMATION

Last updated: December 2006

Plant Protection Organization Chart



Color Code:

Phytosanitation	Outbreak Management	Pest Management	Pesticides	NPPO
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Important Contact Addresses

Responsible Ministry/Ministries

Federal Ministry of Food, Agriculture and Livestock
Mr Muhammad Ismail Qureshi
Secretary, Ministry of Food, Agriculture and Livestock
Block – B, Pakistan Secretariat
Islamabad, Pakistan
Tel: (+92 51) 9210351
Fax: (+92 51) 9210616
Website: www.pakistan.gov.pk

Address for nominations

Office, Department of Plant Protection
Mr Allah Rakha Asi, Adviser and Director General
Ministry of Food, Agriculture and Livestock
Jinnah Avenue, Malir Halt
Karachi 75100, Pakistan
Tel: (+92 21) 9248612-15
Fax: (+92 21) 9248673
E-mail: dg1@plantprotection.gov.pk
Website: www.plantprotection.gov.pk

Operational Offices:

Plant Protection

Plant Quarantine

Pesticide Registration

Office, Department of Plant Protection
Mr Allah Rakha Asi, Adviser and Director General
Ministry of Food, Agriculture and Livestock
Jinnah Avenue, Malir Halt
Karachi 75100, Pakistan
Tel: (+92 21) 9248612-15
Fax: (+92 21) 9248673
E-mail: dg1@plantprotection.gov.pk
Website: www.plantprotection.gov.pk

Surveillance, Pest Outbreaks and Invasive Species Management

1. Department of Plant Protection
2. Agriculture Departments of Provinces

Other Useful Contact Addresses

Department of Agriculture Punjab

Office, Department of Agriculture
Mr Fiaz Bashir, Secretary Agriculture
Punjab Secretariat
Davis Road
Lahore, Pakistan
Tel: (+92 42) 9210499
Fax: (+92 42) 9211796

Department of Agriculture Sindh

Office, Department of Agriculture
Mr Muhkum Din Qadri, Secretary Agriculture
Sindh Secretariat
Toghlaque House
Karachi, Pakistan
Tel: (+92 21) 9211468
Fax: (+92 21) 9211469

International Contact Points

National Plant Protection Organization (NPPO) Contact Point (for IPPC/APPPC)

Department of Plant Protection
Mr Tasneem Ahmad, Deputy Director (Q)
Ministry of Food, Agriculture and Livestock
Jinnah Avenue, Malir Halt
Karachi 75100, Pakistan
Tel: (+92 21) 9248669 / 9248612-15
Fax: (+92 21) 9248673
E-mail: quarantine@plantprotection.gov.pk
Website: <http://www.plantprotection.gov.pk>

WTO-SPS Contact Point

Department of Plant Protection
Mr Allah Rakha Asi, Adviser and Director General
Ministry of Food, Agriculture and Livestock
Jinnah Avenue, Malir Halt
Karachi 75100, Pakistan
Tel: (+92 21) 9248612 / 9248607
Fax: (+92 21) 9248673
E-mail/Internet: dg1@plantprotection.gov.pk

Rotterdam Convention (PIC) DNA Pesticides (P)

Department of Plant Protection

Mr Allah Rakha Asi, Adviser and Director General

Ministry of Food, Agriculture and Livestock

Jinnah Avenue, Malir Halt

Karachi 75100, Pakistan

Tel: (+92 21) 9248607

Fax: (+92 21) 9248673

E-mail: dg1@plantprotection.gov.pk

Stockholm Convention (POP) National Focal Point

Ministry of Environment

Joint Secretary and Director General (Environment)

Islamabad, Pakistan

Tel: (+92 51) 9202574

Fax: (+92 51) 9202211

Basel Convention Competent Authority (CA) and Focal Point

Ministry of Environment

Joint Secretary and Director General (Environment)

Islamabad, Pakistan

Tel: (+92 51) 9202574

Fax: (+92 51) 9202211

E-mail: ahameed1951@hotmail.com

Montreal Protocol Focal Point

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Selected Country Statistics

Agricultural Population	67.5 million	Agricultural Land	22.1 million ha
GDP \$130 000 million	Agric. GDP: 22%	GNI per capita: \$847	Undernourishment: 23%
Main crops grown:			

GDP = Gross Domestic Product; GNI = Gross National Income; Hunger = Population below minimum energy requirement

II. PLANT QUARANTINE

Last updated: December 2006

List of Key Legislation/Regulations/Rules

1976 Pakistan Plant Quarantine Act

1967 Pakistan Plant Quarantine Rules

2005 Biosafety Rules and Biosafety Guidelines

Web source for further information: –

Policies (regarding plant quarantine)	Yes	No
Does phytosanitary legislation cover domestic quarantine?	x	
Does phytosanitary legislation cover import quarantine?	x	
Does phytosanitary legislation cover export quarantine?	x	
Does phytosanitary legislation cover living modified organisms?		x
Is plant quarantine a separate organization from animal quarantine?	x	
Other policy initiatives (under review/progress)		
<i>Revision and updating of Pakistan Plant Quarantine Act and Rules</i>		
Web source for further information: www.plantprotection.gov.pk		

Organization of Plant Quarantine Functions	Responsible Organizational Unit (Ministry/Department/Unit)
Pest Risk Analysis	MINFAL/PPD/PLANT QUARANTINE
National standards development	MINFAL/PPD/PLANT QUARANTINE
International notifications	MINFAL/PPD/PLANT QUARANTINE
<i>Import:</i>	
Import permits	MINFAL/PPD/PLANT QUARANTINE
Import inspections	MINFAL/PPD/PLANT QUARANTINE
Emergency action	MINFAL/PPD/PLANT QUARANTINE
<i>Export:</i>	
Phytosanitary certificates	MINFAL/PPD/PLANT QUARANTINE
Treatment of commodities	MINFAL/PPD/PLANT QUARANTINE

Infrastructure	Year: 2005-2006
Number of plant quarantine officers authorized to inspect/certify	22
Total qualified personnel for plant pest risk analysis	2
No. of quarantine offices	
Entry points (sea/air/land/mail = total)	13
post-entry plant quarantine containment facilities	10
Other offices	
No. of quarantine service diagnosis laboratories	4
In-country recognized specialist capacity to analyze samples (incl. universities, etc.)	
No. of laboratories for insect/mite (arthropod) samples	9*
No. of laboratories for bacteria samples	02
of laboratories for virus samples	01
of laboratories for fungus samples	9*
of laboratories for mycoplasma samples	01
of laboratories for nematode samples	03
No. of laboratories for plant/weed samples	9*
of laboratories for other pests (snail, slug, rodents, etc.)	01

* four Agriculture Universities and five (one NARC) agriculture research institutes and PPD

Pest-Free Areas According to ISPM 10	Responsible Organizational Unit (Ministry/Department/Unit)	
Overall management	—	
– surveillance	—	
– management	—	
– certification	—	
List of target pest species and crops ISPM 4	Number of sites in [year]	
<i>Fruitfly (Mango, citrus, guava, melon etc.)</i>	—	
<i>Bollworm (Cotton)</i>	—	
<i>Powdry Mildew (Mango, citrus, melon etc.)</i>	—	
<i>Weeds (Rice, wheat and cotton)</i>	—	
List of target pest species and crops ISPM 10	Number of sites in [year]	

Key Situation Indicators

International Trade		Year: 2005-2006
Main Import Plant Commodities	Main countries/areas of origin	Quantity (tons)
Lint Cotton	Central Independent States (CIS), USA, Egypt etc.	29 252
Pulses	Australia, Malaysia, China, India, Iran, USA and Canada etc.	
Medicinal Herbs	Indonesia, Sri Lanka, China, Thailand and India	
Vegetables Seeds	Europe, Egypt, etc.	
Main Export Plant Commodities	Main destination countries	
Rice	United Arab Emirates, African countries, Iran, China, Bahrain, Oman, Kuwait	69 379
Fresh and dry Fruits	Middle East, European Countries and Russia	
Fresh Vegetables	Middle East and European Countries	
Medicinal Herbs	Indonesia, Sri Lanka	

Cooperation Projects			
Title (Purpose/Target)	Donor	Amount	Years (start-end)
None			
Title of government follow-up programmes		Amount	Years (start-end)
None			

Key Operation Indicators

Institutional Functions	Year: 2005-2006
No. of import permits issued	13 862
Number of import inspections carried out	1
No. of emergency phytosanitary treatments taken on imports	
No. notifications of non-compliance	
No. of conventional phytosanitary certificates issued	69 379
No. of electronic phytosanitary certificates issued	0

Number of quarantine pests intercepted		Year:
Top three commodities	Top three pest/commodity	# of interceptions

Lists of Regulated Pests	Year of last update	Insects	Pathogens	Plants
Number of quarantine pests	1994*	59	68	–
Number of regulated non-quarantine pests	1994*	14	57	3
Number of regulated import articles			15**	
Web source for further information:				

* All the pests included in the A-1 List of the Asia and Pacific region are quarantine pests of Pakistan. Lists A-1 & A-2 of the Asia Pacific Plant Protection Agreement. Compiled as per the recommendation of the working group for A-1 & A-2 Pests in the 18th Session of APPPC. Pp. 181

** Pakistan Plant Quarantine Rules elaborates details of these plants

Pest Risk Analysis	Insects	Pathogens	Plants
No. of PRA completed and documented (according to ISPM)			
<i>Note: A total of 08 PRA of different crops including Apple, citrus, grapes, mango, onion, potato, rice and wheat are completed for different insects and pathogens but they are being made in conformity ISPM</i>			
Web source for further information:			

Progress and Constraints

Main Progress in Recent Years (legislation, policies, infrastructure, investments, training, etc.)
Pakistan Plant Quarantine Rules are under revision. Central Plant Quarantine Laboratory and three regional labs are being completed. Equipment is being installed and recruitment of personnel is under process. A total of 08 PRA of different crops including Apple, citrus, grapes, mango, onion, potato, rice and wheat are completed for different insects and pathogens but they are being made in conformity ISPM.
Main Constraints (personnel, infrastructure, administrative, operational, raining, etc.)
Lack of trained personnel is the major constraints for PRA preparation. Training of personnel is required in collection of information and preparation of different PRA's according to ISPM.

Implementation of ISPM	Relevance			Implementation				Planned/Actual Year of full implementation
	Low	medium	high	none	partial	most	Full	
ISPM 01 Principles of plant quarantine as related to international trade			x			x		
ISPM 02 Guidelines for pest risk analysis		x				x		
ISPM 03 Code of conduct for the import and release of exotic biological control agents		x				x		
ISPM 04 Requirements for the establishment of pest free areas	x				x			
ISPM 05 Glossary of phytosanitary terms			x			x		
ISPM 06 Guidelines for surveillance		x				x		
ISPM 07 Export certification system			x			x		
ISPM 08 Determination of pest status in an area		x			x			
ISPM 09 Guidelines for pest eradication programmes	x				x			
ISPM 10 Requirements for the establishment of pest free places of production and pest free production sites		x			x			
ISPM 11 Pest risk analysis for quarantine pests			x			x		
ISPM 12 Guidelines for phytosanitary certificates			x			x		
ISPM 13 Guidelines for the notification of noncompliance and emergency action		x			x			
ISPM 14 The use of integrated measures in a systems approach for pest risk management		x			x			
ISPM 15 Guidelines for regulating wood packaging material in international trade		x			x			
ISPM 16 Regulated non-quarantine pests: concept and application		x			x			
ISPM 17 Pest reporting		x			x			
ISPM 18 Guidelines for the use of irradiation as a phytosanitary measure	x			x				
ISPM 19 Guidelines on lists of regulated pests		x			x			
ISPM 20 Guidelines for a phytosanitary import regulatory system			x			x		
ISPM 21 Pest risk analysis for regulated non-quarantine pests		x			x			
ISPM 22 Requirements for the establishment of areas of low pest prevalence		x			x			
ISPM 23 Guidelines for inspection		x				x		
ISPM 24 Guidelines for the determination and recognition of equivalence of phytosanitary measures		x			x			
ISPM 25 Consignments in transit		x			x			
ISPM 26 Establishment of pest free areas for fruit flies (Tephritidae)		x				x		
ISPM 27 Diagnostic protocols for regulated pests		x			x			
Comments/Constraints Many areas are identified for full implementation of all ISPM, however, lack of resources/personnel few areas are not fully implemented.								

III. SURVEILLANCE, PEST OUTBREAKS AND INVASIVE SPECIES MANAGEMENT

Last update: December 2006

List of Key Legislation/Regulations/Rules for surveillance, pest reporting and emergency actions

Pest reporting is made on weekly and fortnightly basis during the crop season and farmers are advised for rational use of pesticides for controlling of pests.

Web source for further information: –

Policies (regarding invasive/migratory species management)	Yes	No
National strategy to control serious field pest outbreaks?	x	
National strategy to control migratory or periodically occurring pests?	x	
National strategy to eradicate serious newly invaded exotic pests?		x
Other policies: (e.g. subsidies, etc.) <i>Pest outbreaks are managed by Provincial Agriculture Departments. However, Federal Government extends advice for controlling these outbreaks.</i>		
Web source for further information:		

Organization of Outbreak Management Functions	Responsible Organizational Unit (Ministry/Department/Unit)
<i>Field/Storage Pest Outbreaks</i>	(e.g. BPH, bollworm, etc.)
Response strategy/plans	Provincial Agriculture Departments
Surveillance	Provincial Agriculture Departments
Control	Provincial Agriculture Departments
<i>Migratory Pest Outbreaks</i>	(e.g. Locusts, birds, armyworm)
Response strategy/plans	MINFAL/PPD
Surveillance	MINFAL/PPD/Locust
Control	MINFAL/PPD/Locust
<i>New Exotic Pest Eradication</i>	(e.g. Coconut beetle)
Response strategy/plans	MINFAL/PPD/ Provincial Agriculture Departments
Surveillance	MINFAL/PPD/ Provincial Agriculture Departments
Control/eradication	MINFAL/PPD/ Provincial Agriculture Departments
Reporting to bilateral or international organizations	MINFAL/PPD

Infrastructure	Year: 2006
Number of permanent personnel for surveillance of field pests of national importance	~900
Number of permanent personnel for surveillance of migratory and periodically occurring pests	43
Number of permanent personnel for surveillance of invasive species	–
Number of designated staff for control of field pests of national importance	1 500
Number of designated staff for control of migratory and periodically occurring pests	43
Number of designated staff for eradication of invasive species	–

Key Situation and Operation Indicators

(Outbreaks and invasions in the past 3 years)

Newly detected invasive species	Insects	Pathogens	Weeds
Total number for year:	—	—	—
Total number for year:	—	—	—
Total number for year:	—	—	—

Give details on eradication or internal quarantine actions against economically important species			
Name of species			
Year of first discovery			
Passway			
Location of first discovery			
Area affected [ha]			
Area treated [ha]			
Control method			
Expenditures			

Pest Outbreak Actions	Outbreak 1	Outbreak 2	Outbreak 3
Name of species			
Year of outbreak			
Area affected [ha]			
Estimated damage \$			
Area treated by government [ha]			
Expenditures by government [\$]			
Control method			
More information			

Progress and Constraints

Main Progress in Recent Years (legislation, policies, infrastructure, investments, training, etc.)
Survey of fruit fly in different provinces is being undertaken to identify the pests and its distribution. Plant Quarantine Rules are being updated to accommodate surveillance and eradication of different economic pests. Plant Quarantine Lab are strengthen with new equipment. Three projects for establishment of post-entry quarantine, disinfestations of mango fruit fly through vapour heat treatment and recruitment of qualified staff for these projects. It will enhance the capability of the department in surveillance, preparation of PRA and eradication of target pests.
Main Constraints (personnel, infrastructure, administrative, operational, training, etc.)
There is shortage of qualified trained personnel for surveillance and PRA preparation.

IV. PEST MANAGEMENT

Last update: December 2006

List of Key Legislation/Regulations/Rules for Pest Management

1997 Punjab Agriculture Pest Ordinance

Web source for further information: www.agripunjab.gov.pk

Policies (regarding pest management)	Yes	No
Do you have policies encouraging organic or low-pesticide use production	x	
Is IPM specifically mentioned in laws or policy documents?	x	
Do you have official Good Agricultural Practice (GAP) or any other relevant food safety (ecofood, etc.) standards for pest management?		
Is pest management extension separate from general extension?	x	
Other policies: (subsidies, production inputs, etc.) <i>encouragement of biopesticide and banning of extremely hazardous pesticides.</i>		
Web source for further information: –		

Organization of Plant Protection Functions	Responsible Organizational Unit (Ministry/Department/Unit)
Policy development	MINFAL
Pest management research	NARC + Prov. Agriculture Departments
Control recommendations	MINFAL/PPD + Prov. Agriculture Departments
Pest management extension	Prov. Agriculture Departments/Extension Dept.
IPM training	NARC + Prov. Agriculture Departments
GAP training	Prov. Agriculture Departments

Infrastructure	Year: 2006
Number of technical officers for pest management	~150
No. of central, regional, provincial or state offices	5
No. of district and village level field offices	150
No. of field/extension agents for pest management advice	~1 500
No. of field/extension agents trained in IPM-FFS facilitation	627
No. of government biocontrol production/distribution facilities	–
Number of government biopesticide production/distribution facilities	8
Number of general extension staff involved in pest management	3 500
Number of designated plant protection technical officers for extension	1 500

Key Situation and Operation Indicators

Pest Management	Yes	No
Does the country have a National IPM Programme? <i>If yes, give Name and Address of IPM Programme:</i> Dr Iftikhar Ahmad, Dep. Dir. NARC, Park Road, Islamabad	x	
Does the country have specific IPM extension programmes? <i>If yes, in which crops?:</i> Cotton	x	
Does the country have specific IPM research programmes? <i>If yes, in which crops?:</i>	x	
Does the country have specific GAP extension programmes? <i>If yes, in which crops?:</i>		
Does the country have specific GAP research programmes? <i>If yes, in which crops?:</i>		

Market shares (estimated value, volume or area under control; or percent)	Year: 2005
Size of chemical pest control market	\$173 Million
Size of biopesticides market	\$30 Million
Size of biological control agents market	

Major pest control requiring crops (requiring most pesticide applications)	1 st	2 nd	3 rd
Affected crop	Cotton	Rice	Sugarcane
Name(s) of pest(s)	<i>Helicoverpa armigera</i> <i>Earias insulana</i> <i>Earias vittella</i> <i>Pectinophora gossypiella</i>	<i>Scirpophaga incertulas</i> <i>Scirpophaga nivella</i>	<i>Scirpophaga</i> spp. <i>Pyrilla</i> spp.
Estimated crop loss	5-10%	2-3%	2-3%
Affected area	3 million ha	2.5 million ha	1.07 million ha
Number of pesticide applications or amount of pesticide used	6 (200-1 000 ml/ application)	2 (10 kg/ application)	1 (10 kg/ application)
Government action taken	Continuous weekly pests survey reports, guidance to farmers about weather and pests/diseases, availability of pesticide to the farmers and advised for rational use of pesticides.		

Cooperation Projects			
Purpose/Target	Donor	Amount	Years (start-end)
FAO-EU IPM Programme for Cotton in Asia	EU	US\$0.66 m	2000-2004
Cotton IPM Programme	ADB	US\$0.40 m	2000-2004
Purpose/Target of government follow-up programmes		Amount	Years (start-end)
National IPM Project	GOP	US\$3.30 m	2004-2009
Community IPM Project for Cotton, Punjab	GOP	US\$3.35 m	2004-2008
Pest Management Plan, SOFWM, Sindh	WB	US\$0.55 m	2004-2008
FFS/Farm Services Centres, NWFP	GOP	US\$0.65 m	2004-2009

Pest Management Extension	Year:
Number of farmers trained in IPM during the year	1224
Number of IPM-FFS conducted during the year	
Number of farmers trained in GAP standards during the year	
Area under IPM/low pesticide management [ha]	
Crops in which successful IPM technologies are implemented:	Cotton
Area under organic/pesticide-free management [ha]	
Crops grown organic/pesticide-free:	

Progress and Constraints

Main Progress in Recent Years (legislation, policies, infrastructure, investments, training, etc.)
Federal Government with the coordination of provincial agriculture departments has devised different strategies for pest management of cotton, wheat and rice crop. IPM project is being implemented in cotton in Punjab and Sindh Provinces. A record production of 14.6 million bales of cotton was obtained during 2004-05.
Main Constraints (personnel, infrastructure, administrative, operational, training, etc.)
Cotton leaf curl virus and mealy bug are becoming main constraints in production of cotton which is spreading on all the varieties throughout cotton growing areas.

V. PESTICIDE MANAGEMENT

Last updated: December 2006

List of Key Legislation/Regulations/Rules

1971 & 73 Pesticide Ordinance and Rules.

1992 Amendment in Pesticide Ordinance; relaxation in pesticide import:

i. Introduction of generics

ii. Import of Pesticide registered in the country of origin.

1997 Amendment in the Pesticide Ordinance to strengthen the punishment provision for pesticide adulteration.

2006 Review of Pesticide Ordinance & Act and Rules for adoption.

Web source for further information: www.plantprotection.gov.pk

Policies (regarding pesticide management)	Yes	No
Do you have national pesticide reduction targets? <i>If yes, what is the target: _____</i>		x
Have you ratified the Rotterdam (PIC) Convention?	x	
Have you ratified the Stockholm (POP) Convention?		x
Have you ratified the Basel Convention? (hazardous wastes)		x
Have you ratified the Montreal Protocol? (MeBr phasing-out)		
Have you reported the observance of the Code of Conduct to FAO according to Art. 12 of the Code?	x	
Have you adopted Good Laboratory Practices (GLP)?		
Pesticide Registration		
Do you require pesticides to conform to relevant FAO or WHO specifications?	x	
Do you allow the “me-too” registration and sale of generic pesticides?	x	
Do you require data on product equivalence for generic registration?	x	
Do you conduct country-specific risk assessments for...		
occupational risks?		
consumer risks?		
environmental risks?		
Have you adopted the Global Harmonized System (GHS) for pesticides hazards evaluation and labelling?	x	
Do you accept evaluation results from other countries?	x	
Do you accept field studies conducted in other countries?	x	
Do you require environmental fate studies?	x	
Incentives/Disincentives		
Do you have a special tax on pesticides to cover externality costs?		x
Do you subsidize or provide low-cost pesticides?		x
Do you subsidize or provide low-cost biopesticides?		x
Other policies:		
Web source for further information:		

Organization of Plant Protection Functions	Responsible Organizational Unit (Ministry/Department/Unit)
Legislation	MINFAL
Registration	MINFAL/PPD
Licensing of shops	Agriculture Departments/Provincial
Licensing of field applicators	–
Enforcement/inspections	Federal/Provinces/District Government
Testing of pesticide efficacy	Agriculture Departments/Provincial
Development of pesticide use recommendations	Federal/Provinces/District Government
Safe use training/extension	Public/Private sector
Food residue monitoring	
Environmental monitoring	Federal/Provincial
Health monitoring	Federal/Provincial
<i>Other Stakeholders:</i>	
Pesticide Industry Association	Private sector
Civil Society Organizations (NGO, etc.)	

Infrastructure	Year: 2006
Number of registration officers	3
Number of enforcement officers	621
Number of department quality control laboratories	8
Number of quality control laboratory personnel	~50
Number of department residue analysis laboratories	1
Number of residue laboratory personnel	7

Key Situation Indicators

Pesticide Trade: 2005	Tons	\$ '000 Value
Imports	104 433	173 000
Manufacture		
Export	0	0
Domestic Use/Sales	80 000	132 525
Pesticide Use Profile: 2005	Tons (a.i./formulation to be specified)	\$ '000 Value
Agriculture	80 000	132 525
Chem. Insecticides	94%	
Chem. Fungicides	2%	
Chem. Herbicides	5%	
Chem. Others: e.g. molluscicide, acaricide	0%	
Other e.g. Avamectrin, Bt, Neem		
Other purposes		
TOTAL	80 000	132 525

Post Registration Monitoring

Testing, Quality Control and Effects in the Field	Yes	No
Do you have significant problems with low-quality pesticides in the market?		x
Do you have significant problems with pesticide resistance?		x
Do you have a list of pesticides under close observation for problems		
Source for more information: –		

Health and Environmental Information	Yes	No
Do you maintain data on pesticide poisoning cases?		x
Do you have a system to monitor pesticide residues in food?		x
Do you have a system to monitor pesticide residues in the environment?		x
Do you have significant problems of environmental contamination from pesticides?		
Do you have data on pesticides effects on wildlife and ecosystems?		x
Source for more information: –		

Pesticide Disposal	Yes	No
Do you have system to collect and safely dispose of used containers and small quantities of left-over pesticides?	x	
Do you have an inventory of outdated and obsolete pesticides in the country? (e.g. banned and no longer traded, but still in storage)	x	
Do you have illegal trade in pesticides? if yes: what is the estimated amount: _____		x
Source for more information: –		

Key Operation Indicators

Registration/Regulation/Monitoring	Year: 2005	
	a.i.*	Trade Name
No of registered pesticide products	220	
No. of registered biopesticides (Avamectrin, Bt, Neem, etc.)	10	
No of restricted-use pesticides/formulations	1	
No. of banned pesticides	25	
No. of licensed outlets	~ 2 600	
No. of licensed field applicators (professional and/or farmers)		
No of licensing violations reported during year	232	
No. of quality control analyses conducted during year	5 485	
No. of food samples analyzed for pesticide residues during year		
No. of samples exceeding MRL		
No. of environmental samples analyzed for pesticide residues		

* active ingredient

Pesticides Restricted in Recent Years	
Year	Name of active ingredient or hazardous formulation

Pesticides Banned in Recent Years

Year	Name of active ingredient
2005	Monocrotophos and Methamidophos

Cooperation Projects

Purpose/Target	Donor	Amount	Years (start-end)
Purpose/Target of government follow-up programmes	Amount	Years (start-end)	

Progress and Constraints**Main Progress in Recent Years (legislation, policies, infrastructure, investments, training, etc.)**

Agriculture Pesticides Ordinance is revised and ready to place before the Parliament for its approval. Agriculture Pesticides Rules have been amended and two new rules are added viz. pre-shipment inspection of pesticides in the country of origin and waiving of condition of sample analysis in registration of generic pesticide from the source/manufacturer already registered with the department.

A new pesticide lab is established in Balochistan province for quality check of agriculture pesticides.

Main Constraints (personnel, infrastructure, administrative, operational, training, etc.)

Manufacturing of pesticides in the country is still in infancy and country has to be dependent on import from China and other countries. This has resulted in shortage of pesticides during epidemic situation.

Application of pesticides at appropriate stage of crop in proper dosage on vulnerable stage of pest is also needed to be guided to the farmers. Training of farmers and extension workers is required for proper application of pesticides.

VI. ADDITIONAL ISSUES OF INTEREST

Last updated: December 2006

Genetically Modified Crops

Name of GMO Crop	Area under Cultivation [ha]
—	—