2.15 PAKISTAN

I. GENERAL INFORMATION

Last updated: December 2008

Overall Executive Summary

During the period 2007-2008, Pakistan has made steady progress in all areas of plant protection.

Under the supervision of the Ministry of Food and Agriculture (MINFA), the Department of Plant Protection (DPP) now consists of four divisions including Plant Quarantine, Locust Survey & Control, Pesticide Registration and Management and Aerial Spray.

As regards the plant quarantine, in 2008, the number of phytosanitary inspections amounted to 70 244. The country's international trade in 2008 increased significantly with the export of rice amounting to 2.7 million metric tons while the export of fresh and dry fruits amounted to almost 600 000 metric tons. The number of conventional phytosanitary certificates which were issued amounted to 70 244.

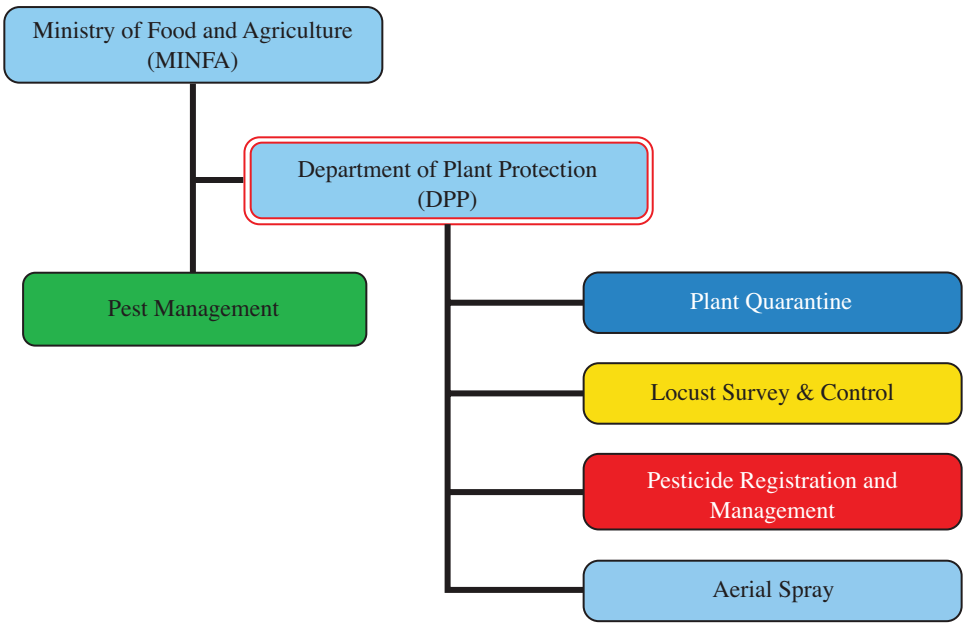
Pakistan Plant Quarantine Act and Rules are being revised. The Central Plant Quarantine Laboratory and three regional labs are being completed. Equipment is being installed and recruitment of personnel is under process. A total of 8 PRA of different crops are completed for 52 insects, 72 pathogens and 8 plants but they are being made in conformity of ISPM 4.

The main constraint faced by the country is lack of trained personnel for PRA preparation. Training of personnel is also required in collection of information and preparation of different PRA's according to ISPM and surveillance lab analysis.

In relation to the implementation of ISPMs, although many areas have been identified for full implementation, few are not fully implemented, mainly due to lack of resources and personnel.

Plant Protection Organization Chart

Last updated: December 2008



Color Code: Phytosanitation | Outbreak Management | Pest Management | Pesticides | NPPO

Important Contact Addresses

Responsible Ministry/Ministries

Federal Ministry of Food and Agriculture
Mr Muhammad Zia-ur-Rehman
Secretary, Government of Pakistan, Ministry of Food and Agriculture
B-Block, Pakistan Secretariat, Islamabad
Tel: 092-051-9210351
Fax: 092-051-9210616
Website: www.pakistan.gov.pk

Address for nominations

Department of Plant Protection
Dr Tasneem Ahmad, Adviser and Director General
Ministry of Food and Agriculture
Jinnah Avenue, Malir Halt
Karachi 751000
Tel: 0092-021-9248607 & 092-021-9248612-15
Fax: 092-021-9248673
E-mail: dg1@plantprotection.gov.pk
Website: www.plantprotection.gov.pk

Operational Offices:

Plant Protection

Plant Quarantine

Office, Department of Plant Protection
Mr Zafar Ali, Deputy Director (Quarantine)
Ministry of Food and Agriculture
Jinnah Avenue, Malir Halt
Karachi 751000
Tel: 092-021-9248612-15
Fax: 092-021-9248673
E-mail: quarantine@plantprotection.gov.pk
Website: www.plantprotection.gov.pk

Surveillance, Pest Outbreaks and Invasive Species Management

1. Department of Plant Protection
2. Provincial Agriculture Departments

Agriculture Department, Punjab

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

Agriculture Department, Sindh

Office, Department of Agriculture
Mr Sabhago Khan Jattoi, Secretary Agriculture
Sindh Secretariat
Toghlaqe House
Karachi, Pakistan
Tel: (+92 21) 9211468
Fax: (+92 21) 9211469

Agriculture Department, NWFP

Office, Department of Agriculture
Mr Atta Ullah Khan, Secretary Agriculture
Civil Secretariat, N.W.F.P.
Peshawar, Pakistan
Tel: 0092-091-9210025

Agriculture Department, Balochistan

Office, Department of Agriculture
Mr Iktiar Khan, Secretary Agriculture
Civil Secretariat, Balochistan
Quetta, Pakistan
Tel: 0092-081-9201261

Official International Contact Points

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

Department of Plant Protection
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Karachi
Tel: (+92 21) 9248072 / 9248612-15
Fax: (+92 21) 9248673
E-mails: quarantine@plantprotection.gov.pk & zafarali_khan@hotmail.com
Website: http://www.plantprotection.gov.pk

WTO SPS Contact Point

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Rotterdam Convention (PIC) DNA Pesticides (P)

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Fax: (+92 21) 924 8673
E-mail: dg1@plantprotection.gov.pk

Stockholm Convention (POP) National Focal Point

Joint Secretary and Director General (Environment)
Ministry of Environment
Islamabad
Tel: (92 51) 920 25 74
Fax: (92 51) 920 22 11

Basel Convention Competent Authority (CA) and Focal Point

Joint Secretary and Director General (Environment)
Ministry of Environment
Islamabad
Tel: (92 51) 920 25 74
Fax: (92 51) 920 22 11
E-mail: ahameed1951@hotmail.com

Selected Country Statistics:

Agricultural Population	67.5 million	Agricultural Land	22.1 million ha
GDP $148 000 million	Agric. GDP: 22%	GNI per capita: $925	Hunger: 23%
Main crops grown:			

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

II. PLANT QUARANTINE

Last updated: December 2008

List of Key Legislation/Regulations/Rules

1. Pakistan Plant Quarantine Act, 1976
2. Pakistan Plant Quarantine Rules, 1967
3. Bio-Safety Rules, 2005 and Bio-Safety Guidelines

Web source for further information: –

(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) *Revision and updating of Pakistan Plant Quarantine Act and Rules according IPPC/SPS*		
Web source for further information: www.plantprotection.gov.pk		

Organization of Plant Protection Functions	Responsible Organizational Unit (Ministry/Department/Unit)
Pest Risk Assessment	DPP/PLANT QUARANTINE, MINFA
Standards development	DPP/PLANT QUARANTINE, MINFA
International notifications	DPP/PLANT QUARANTINE, MINFA
Import permits	DPP/PLANT QUARANTINE
Import inspections	DPP/PLANT QUARANTINE
Emergency action	DPP/PLANT QUARANTINE
Phytosanitary certificates	DPP/PLANT QUARANTINE
Treatment of commodities	DPP/PLANT QUARANTINE

Infrastructure	Years: 2008-2009
Total number of plant quarantine officers	22
Total qualified personnel for plant pest risk assessment	3
No. of quarantine offices/stations	14
Entry points (sea/air/land/mail = total)	13
Post-entry plant quarantine containment facilities	10
Other Offices	24
No. of quarantine service diagnosis laboratories	4
In-country specialist capacity to analyze samples (incl. universities, etc.)	12
No. of laboratories for insect/mite (arthropod) samples	9*
No. of laboratories for bacteria samples	2
of laboratories for virus samples	1
of laboratories for fungus samples	9*
of laboratories for mycoplasma samples	1
of laboratories for nematode samples	3
No. of laboratories for plant/weed samples	9*
of laboratories for other pests (snail, slug, rodents, etc.)	1

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

Pest Free Areas	Responsible Organizational Unit (Ministry/Department/Unit)
Overall management	Department of Plant Protection/Provincial Agriculture Department
– surveillance	DPP, Plant Protection
– management	DPP, Plant Protection
– certification	DPP, Plant Protection

List of target pest species and crops		Number of sites in [year]
Fruitfly (Mango, citrus, guava, melon etc.)		–
Boll worm (Cotton)	(Mealy Bug)	–
Powdry Mildew (Mango, citrus, melon etc.)		–
Weeds (Rice, wheat and cotton)	(Kernal Bunt)	–

Key Situation Indicators

International Trade		Year: 2008
Main Import Plant Commodities	Main countries of origin	No. of phytosanitary inspections
Lint Cotton	Central Independent States (CIS), USA, Egypt etc.	70 244
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, U.K., African countries, Iran, China, Bahrain, Oman, Kuwait	2 749 566 m. tons
Fresh and dry Fruits	Middle East, European Countries and Russia, Far East	599 866 m. tons
Fresh Vegetables	Middle East and European Countries	
Medicinal Herbs	Indonesia, Sri Lanka	

Cooperation Projects			
Title (Purpose/Target)	Donor	Amount	Years (start-end)
			[year – year]
Title of government follow-up programmes		Amount	Years (start-end)

Key Operation Indicators

Institutional Functions	Year: 2008
No. of import permits issued/inspections	16 137
No. of import inspections carried out	16 137
No. of emergency phytosanitary treatments taken on imports	
No. notifications of non-compliance	1
No. of conventional phytosanitary certificates issued	70 244
No. of electronic phytosanitary certificates issued	None

Lists of Regulated Pests	Year of last update	Insects	Pathogens	Plants
Number of regulated quarantine pests	1994*	59	68	–
Number of regulated non-quarantine pests	1994*	14	57	3
Number of regulated import commodities		15**		

* 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 th Session of APPPC. Pp. 181

** Pakistan Plant Quarantine Rules elaborates details of these plants

Pest Risk Assessments	Insects	Pathogens	Plants
No. of PRA completed and documented (according to ISPM). *A total of 8 PRA of different crops including Apple, citrus, grapes, mango, onion, potato, rice, date and wheat are completed for different insects and pathogens but they are being made in conformity ISPM 4*	52	72	8
Web source for further information: www.plantprotection.gov.pk			

Progress and Constraints

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

Pakistan Plant Quarantine Act and 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 8 PRA of different crops including Apple, citrus, grapes, mango, onion, potato, rice, date and wheat are completed for different insects and pathogens but they are being made in conformity ISPM. Disinfestation fruit by hot water treatment plant.

Main Constraints (personnel, infrastructure, administrative, operational, training, 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, surveillance lab

Implementation of ISPM	Relevance			Implementation				Planned/Actual Year of full implementation
International Measures	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			
ISPM 28 Phytosanitary treatments for regulated pests								
ISPM 29 Recognition of pest free areas and areas of low pest prevalence								
ISPM 30 Establishment of areas of low pest prevalence for fruit flies (Tephritidae)								
ISPM 31 Methodologies for sampling of consignments								

Comments/Constraints

Many areas are identified for full implementation of all ISPM. However, due to lack of resources/personnel, few areas are fully implemented.

III. SURVEILLANCE, PEST OUTBREAKS AND INVASIVE SPECIES MANAGEMENT

Last updated: December 2008

List of 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.

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.) Pest outbreaks are managed by Provincial Agriculture Departments. However, Federal Government extends advice for controlling these outbreaks.		
Web source for further information: –		

Organization of Plant Protection Functions	Responsible Organizational Unit (Ministry/Department/Unit)
Field Pest Outbreaks	(e.g. BPH, boll worm, etc.)
Response strategy/plans	Provincial Agriculture Departments
Surveillance	Provincial Agriculture Departments
Control	Provincial Agriculture Departments
Migratory Pest Outbreaks	(e.g. locusts, birds, armyworm)
Response strategy/plans	DPP
Surveillance	DPP/Locust Control
Control	DPP/Locust Control
New Exotic Pest Eradication	(e.g. coconut beetle)
Response strategy/plans	DPP/Provincial Agriculture Departments
Surveillance	DPP/Provincial Agriculture Departments
Control/eradication	DPP/Provincial Agriculture Departments
Reporting to bilateral international organizations	DPP

Infrastructure	Years: 2008-2009
Number of permanent personal for **surveillance** of field pests of national importance	~ 900
Number of permanent personal for **surveillance** of migratory and periodically occurring pests	43
Number of permanent p≠rsonal 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)

New exotic species found established in country	Insects	Pathogens	Weeds
Total number for year:	–	–	–
Total number for year:	–	–	–
Total number on record	–	–	–

Eradication or internal quarantine actions taken against economically important species			
Name of species			
Year of first discovery			
Location of first discovery			
Area affected [ha]			
Area treated by government [ha]			
Control method			

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]			
Control method			
Add more if necessary			

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 being strengthened 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 are under implementation. It will enhance the capability of the department in surveillance, preparation of PRA and eradication of target pests. Huge investment in establishment atmosphere control store, heat treatment, cold treatment for export of fruit.
Main Constraints (personnel, infrastructure, administrative, operational, training, etc.)
There is shortage of qualified trained personnel for surveillance and PRA preparation.

IV. PEST MANAGEMENT

Last updated: December 2008

List of legislation/regulations/rules for pest management:

Punjab Agriculture Pest Ordinance

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

(regarding pest management)	Yes	No
Do you have policies encouraging organic or low-pesticide 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.) Encouragement of biopesticide and banning of extremely hazardous pesticides		
Web source for further information: –		

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

Infrastructure	Years: 2008-2009
Number of technical officers for pest management	~ 150
Number of central, regional, provincial or state offices	5
Number of district and village level field offices	150
Number of field/extension agents for pest management advice	~ 1 500
Number of field/extension agents trained in IPM-FFS facilitation	627
Number of government biocontrol/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? *If yes, give Name and Address of IPM Programme:* Dr. Iftikhar Ahmad, Dep. Dir., NARC, Park Road, Islamabad.	x	
Does the country have specific IPM extension programmes? *If yes, in which crops?:* Cotton, Wheat, Rice, Mango, Apple, Citrus, Tomato, Okra, Onion, Peaches.	x	
Does the country have specific IPM research programmes? *If yes, in which crops?:* Cotton, Wheat, Rice, Mango, Apple, Citrus, Tomato, Okra, Onion.	x	
Does the country have specific GAP extension programmes? *If yes, in which crops?:*		
Does the country have specific GAP research programmes? *If yes, in which crops?:*		

Market shares (estimated value, volume or area under control)	**Years: 2008-2009**
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)	**1st**	**2nd**	**3rd**
Affected crop	Cotton	Rice	Sugarcane
Name(s) of pest(s)	*Helicoverpa armigera* *Earias insulana* *Earias vittella* *Pectinophora gossypiella*	*Scirpophaga incertulas* *Scirpophaga nivella*	*Scirpophaga* spp. *Pyrilla* 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	EU	US$0.660 m	2000-2004
Cotton IPM Programme	ADB	US$0.400 m	2000-2004
Purpose/Target of government follow-up programmes		Amount	Years (start-end)
National IPM Project	GOP	Rs. 197.4 mill	2004-2009
Community IPM Project for Cotton, Punjab	GOP	Rs. 201.0 mill	2004-2008
Pest Management Plan, SOFWM,	WB	Rs. 33.1 mill	2004-2008
FFS/Farm Services Centres, NWFP	GOP	Rs. 38.8 mill	2004-2009

Pest Management Extension	**Year:**
Number of farmers trained in IPM during the year	1 224
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 2004-2005.
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 2008

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: www.plantprotection.gov.pk

(regarding pesticide management)	Yes	No
Do you have national pesticide reduction targets? *If yes, what is the target: encouragement of biopesticide and banning of extremely hazardous pesticides*	x	
Have you ratified the Rotterdam (PIC) Convention?	x	
Have you ratified the Stockholm (POP) Convention?	x	
Have your ratified the Basel Convention? (hazardous wastes)	x	
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)?	x	
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?	x	
consumer risks?	x	
environmental risks?	x	
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: To encourage IPM		
Web source for further information: www.plantproection.gov.pk		

Organization of Plant Protection Functions	Responsible Organizational Unit (Ministry/Department/Unit)
Legislation	MINFA
Registration	MINFA/DPP
Licensing of shops	Agriculture Departments/Provincial
Licensing of 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	Provincial
Environmental monitoring	Federal/Provincial
Health monitoring	Federal/Provincial
Other Stakeholders:	
Pesticide Industry Association	Private sector
Civil Society Organizations	

Infrastructure	Years: 2008-2009
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: 2008-2009	Tons	$ '000 Value
Imports	43 577	98 000
Export	0	0
Domestic Use/Sales	80 000	132 525
Pesticide Use Profile: 2008-2009	**Tons**	**$ '000 Value**
Agriculture	60 000	132 525
Chem. Insecticides	94%	
Chem. Fungicides	2%	
Chem. Herbicides	5%	
Chem. Others: e.g. mollusicide, acaricide	0%	
e.g. Amamectin, Bt, Neem		
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 services 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?	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	Years: 2008-2009	
	a.i.*	Trade Name
Number of registered pesticide products	220	
Number of registered biopesticides	10	
Number of restricted-use pesticides	0	
Number of banned pesticides	25	
Number of licensed outlets	~ 2 600	
Number of licensed applicators	–	
Number of licensing violations reported during year	145 [2008]	
Number of quality control analyses conducted during year	27 90 [2008]	
Number of food samples analyzed for pesticide residues during year		
Number of samples exceeding MRL		
Number of environmental samples analyzed for pesticide residues		

* active ingredient

Pesticides Restricted in Recent Years	
Year	Name of active ingredient or hazardous formulation
2008	Nil

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 2008

Genetically Modified Crops	
Name of GMO Crops	Area under Cultivations [ha]
Not yet, registered	