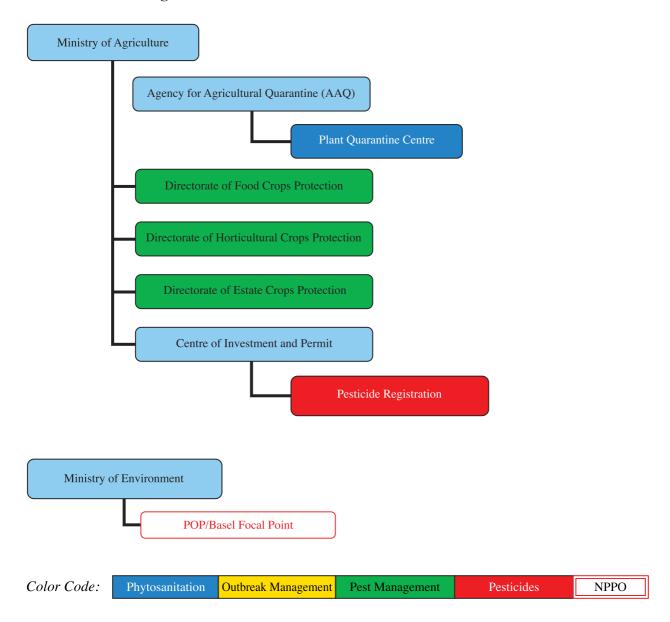
### 3.5 INDONESIA

### I. GENERAL INFORMATION

Last updated: December 2006

### **Plant Protection Organization Chart**



### **Important Contact Addresses**

### **Responsible Ministry/Ministries**

Centre for Plant Quarantine

*Mr Suwanda, Director (NPPO focal point)* 

Agency for Agricultural Quarantine (AAQ)

Ministry of Agriculture

Jl: Harsono RM No. 3 E Building (5<sup>th</sup> floor)

Pasar Minggu, Jakarta Selatan 12550, Indonesia

Tel: (+62) 21 7816482 / 7805641 ext. 1508

Fax: (+62) 21 7816481 / 7816482 / 7816483

E-mail: caqsps@indo.net.id, pusatkt@indo.net.id

Websites: http://www.karantina.deptan.go.id/

http://www.deptan.go.id/karantina/english/plant.htm

### **Responsible Department**

\_

#### **Address for nominations**

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### Operational Offices:

### **Plant Protection**

Directorate of Food Crop Protection

Ms Ati Wasiati, Director

Jl. AUP Pasar Minggu, P.O. Box 7236/Jks Pasar Minggu

Jakarta 12520, Indonesia

Tel: (+62) 21 7806213

Fax: (+62) 21 7805652

E-mail: atiwasiati@deptan.go.id; ditlin-ptp@deptan.go.id

### Directorate of Estate Crops Protection

Dr Herdradjat Natawijaya, Director

Building C, Ministry of Agriculture, Jl. Harsono RM No. 3

Ragunan, Pasar Minggu

Jakarta 12550, Indonesia

Tel: (+62) 21 7815684

Fax: (+62) 21 7815684

### Directorate of Horticulture Crop Protection

Mr Sukirno, Director

Jl. AUP Pasar Minggu, P.O. Box 7228/Jks PsM 12072

Jakarta 12520, Indonesia

Tel: (+62) 21 7819117

Fax: (+62) 21 78845628

E-mail: ditlinhor@deptan.go.id

### **Plant Quarantine**

Centre for Plant Quarantine

*Mr Suwanda, Director (NPPO focal point)* 

Agency for Agricultural Quarantine (AAQ)

Ministry of Agriculture

Jl. Harsono RM No. 3 E Building (5th floor)

Pasar Minggu

Jakarta Selatan 12550, Indonesia

Tel: (+62) 21 7816482 / 7805641 ext. 1508 Fax: (+62) 21 7816481 / 7816482 / 7816483 E-mail: caqsps@indo.net.id, pusatkt@indo.net.id

Websites: http://www.karantina.deptan.go.id/

http://www.deptan.go.id/karantina/english/plant.htm

### Surveillance, Pest Outbreaks and Invasive Species Management

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### **Pesticide Registration**

Centre for Investement and Permit

Mr Mohammad Dani, Director

Ministry of Agriculture

3<sup>th</sup> Floor, Archive Building, Ministry of Agriculture, Jl. Harsono RM No. 3

Ragunan, Pasar Minggu Jakarta 12550, Indonesia

Tel: (+62) 21 7815380 ext. 6314, 7812162

Fax: (+62) 21 7818205

#### **Official International Contact Points**

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

Centre for Plant Quarantine

*Mr Suwanda, Director (NPPO focal point)* 

Agency for Agricultural Quarantine (AAQ)

Ministry of Agriculture

Jl. Harsono RM No. 3 E Building (5<sup>th</sup> floor)

Pasar Minggu

Jakarta Selatan 12550, Indonesia

Tel: (+62) 21 7816482 / 7805641 ext. 1508 Fax: (+62) 21 7816481 / 7816482 / 7816483

E-mails: pusatkt@indo.net.id; caqsps@indo.net.id

Website: http://karantina.deptan.go.id/

### **WTO-SPS Contact Point**

Agency for Agricultural Quarantine (Badan Karantina Pertanian)

Ministry of Agriculture

Ged. E. Lt. V. Jl. Harsono RM No. 3, Ragunan-Pasar Minggu

Jakarta Selatan 12550, Indonesia

Tel: (+62) 21 781 6480

Fax: (+62) 21 781 6481 / 781 6483

E-mail: cagsps@indo.net.id

Website: http://karantina.deptan.go.id/

### **Rotterdam Convention (PIC) DNA Pesticides**

Pesticide Committee

Dr Ato Suprapto, Chairman

Ministry of Agriculture

8th Floor, Building D Jl. Harsono RM No. 3

Jakarta 12520, Indonesia Tel: (+62) 21 781 91 17

Fax: (+62) 21 7883 76522

### **Stockholm Convention (POP) National Focal Point (S)**

Ministry of Environment

Mr Moh Gempur Adnan, Deputy for Environmental Pollution

5<sup>th</sup> Floor, Building A

Jl. D.I. Panjaitan, Kebon Nanas

Jakarta 13410, Indonesia

Tel: (+62) 21 858 0110 / 0067

Fax: (+62) 21 852 0763 / 851 8135

E-mail: haruki@indo.net.id

### Basel Convention Competent Authority (CA) and Focal Point

Ministry of Environment

Dr Yanuardi Rasudin, Deputy Minister for Hazardous and Toxic Wastes Management

Jl. D.I. Panjaitan, Kebon Nanas

Jakarta 13410, Indonesia Tel: (+62) 21 85 90 56 37

Fax: (+62) 21 85 90 56 37 or 85 90 49 32

E-mail:db3@menlh.go.id

### **Selected Country Statistics**

Agricultural Population	93.0 million	Agricultural Land	33.7 million ha		
GDP \$208 311 million	Agric. GDP: 17.5%	GNI per capita: \$810 Undernourishmen			
Main crops grown:					
Paddy, Maize, Crude Palm O	il, Rubber, Cocoa, Coffea				

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

1961 Exportation from the Territory of the Republic of Indonesia of Plant Propagating Materials on Regulation of the Minister of Agriculture No. 6/PMP/1961.

- 1984 Importation into the Territory of the Republic of Indonesia of Plants Used as Packing on DOMOA No. 796/Kpts/TP.830/10/1984.
- 1984 Importation into the Territory of the Republic of Indonesia of Plant Growing Media on DOMOA No. 797/Kpts/TP.830/10/1984.
- 1985 Plant Quarantine Requirements for the Importation of Plant Propagating Materials of Coconut, Oil Palm, Cocoa, Rubber, Coffee, Tea, Sugarcane, and Tobacco on DOMOA No. 559/Kpts/KB.630/8/1985.
- 1985 Domestic Plant Quarantine on DOMOA No. 809/Kpts/LB.710/12/1985.
- 1989 Prevention on the Introduction into the Territory of the Republic of Indonesia of South American Leaf Blight of Hevea on DOMOA No. 861/Kpts/LB.720/12/1989.
- 1989 Eradication for Khapra Beetle (Trogoderma granarium Everts) on DOMOA No. 799/Kpts/LB.710/10/1989.
- 1990 Plant Quarantine Requirements and Actions in relation to the Importation into the Territory of the Republic of Indonesia of Plants and Plant Propagating Materials on DOMOA No. 38/Kpts/HK.310/1/1990.
- 1992 Law No. 16 of 1992 concerning Animal, Fish, and Plant Quarantine.
- 1995 Importation into the Territory of the Republic of Indonesia of Biological Agents on DOMOA No. 411/Kpts/TP.120/6/1995.
- 1995 Formation of Biological Agent Commission on DOMOA No. 412/Kpts/KP.150/6/1995.
- Actions and conditions of quarantine plant for the entry of plant and seedling into the territory of the Republic of Indonesia, lastly amended by the decree of the Ministry of Agriculture Number: 211/Kpts/HK.310/2001 on DOMOA No. 469/Kpts/HK.310/8/200.
- 2002 Government Regulation of the Republic Indonesia No. 14 of 2002, concerning Plant Quarantine.
- 2006 Decree of the Minister of Agriculture No. 38 of 2006 concerning Plant Quarantine Pests Group I Category A1 and A2, and Group II Category A1 and A2; their hosts, carriers and countries of distribution.
- 2006 Minister of Agriculture Regulation No. 37 of 2006 concerning Importation of Fresh fruits and vegetables.
- 2006 Concerning requirements and guideline for Quarantine Installation Establishment for Private on DOMOA No. 05/Permentan/HK.060/3/2006.
- 2006 Concerning requirements and guidelines for the Implementation of Plant Quarantine action by third party on DOMOA No. 271/Kpts/HK.310/4/2006.
- 2006 Concerning the Implementation of Plant Quarantine action conducted import and exit points on DOMOA No. 18/Permentan/OT.160/5/2006.
- 2006 Concerning addition requirements on DOMOA No. 52/Permentan/OT.140/10/2006.

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)		
Web source for further information:		
http://www.karantina.deptan.go.id/		

Organization of Plant Quarantine Functions	Responsible Organizational Unit (Ministry/Department/Unit)
Pest Risk Analysis	Center for Plant Quarantine
National standards development	MOA/AAQ/Centre for Plant Quarantine
International notifications	MOA/AAQ
Import:	
Import permits	DGs of Food Crops, DG of Estate Crops, DG of Horticulture, DG of Livestock
Import inspections	Centre for Plant Quarantine
Emergency action	Centre for Plant Quarantine
Export:	
Phytosanitary certificates	MOA/AAQ/Centre for Plant Quarantaine
Treatment of commodities	Centre for Plant Quarantaine, Plant Protection

Infrastructure	Year: 2006
Number of plant quarantine officers authorized to inspect/certify	356
Total qualified personnel for plant pest risk analysis	17
Number of quarantine offices	43
entry points (sea/air/land/mail = total)	>200
post-entry plant quarantine containment facilities	5
other offices	
Number of quarantine service diagnosis laboratories	6
In-country recognized pest diagnostics capabilities	
(incl. universities, etc.)	
Number of laboratories for insect/mite (arthropod) samples	45
Number of laboratories for bacteria samples	15
Number of laboratories for virus samples	4
Number of laboratories for fungus samples	15
Number of laboratories for mycoplasma samples	1
Number of laboratories for nematode samples	15
Number of laboratories for plant/weed samples	45
Number of laboratories for other pests (snail, slug, rodents, etc.)	1

Pest-Free Areas According to ISPM 10	Responsible Organizational Unit (Ministry/Department/Unit)			
Overall management	Directorate of Plant Protections of 1	related DG/AAQ		
– surveillance	Directorate of Plant Protections of 1	related DGs		
<ul><li>management</li></ul>	Directorate of Plant Protections of related DGs			
<ul><li>certification</li></ul>	N/A			
List of target pest species and crops ISPM 4		Number of sites in [year]		
To be determined				
List of target pest species and crops ISPM 10		Number of sites in [year]		
To be determined				

# **Key Situation Indicators**

International Trade		Year: 2005
Main Import Plant Commodities	Main countries/areas of origin	Quantity (tons)
Wheat	Australia, USA, Canada, China,	261 136 575 262
	Argentina, Belgia	
Soybean	USA, India	2 209 255 290
Fruits	Australia, USA, China	425 033 075
Main Export Plant Commodities	Main destination countries	
Crude palm oil	Viet Nam, China	1 124 440 748
Rubber	USA, Argentina, Africa, Brazil,	261 831 055
	Netherland, England, Canada	
Living plants (ornamentals)	Korea, Netherlands, Japan, USA	9 604 045

<b>Cooperation Projects</b>			
Title (Purpose/Target)	Donor	Amount	Years (start-end)
Fruitfly Management	ACIAR	A\$124 000	2004-2008
Title of government follow-up programmes		Amount	Years (start-end)

# **Key Operation Indicators**

Institutional Functions	Year: 2005
Number of import permits issued	>120
Number of import inspections carried out	>43 726
Number of emergency phytosanitary treatments taken on imports	0
Number notifications of non-compliance	5
Number of conventional phytosanitary certificates issued	>58 935
Number of electronic phytosanitary certificates issued	0

Number of quarantine pests intercepted		Year: 2005
Top three commodity	Top three pest/commodity	# of interceptions
Wheat	Abisidia sp.	Australia
Soybean		
Fruits	Abisidia sp.	China

Lists of Regulated Pests	Year of last update	Insects	Pathogens	Plants
Number of quarantine pests	2006	221	357	>100
Number of regulated non-quarantine pests				
Number of regulated import articles				
Web source for further information: –				

Pest Risk Analysis	Insects	Pathogens	Plants	
No. of PRA completed and documented (according to ISPM)				
Web source for further information: PRA conducted base on country and commodity not base on pests,				
411				

the number of PRA conducted are 20.

### **Progress and Constraints**

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

In 2006 AAQ has successfully issued 6 new Minister of Agriculture Decrees concerning plant quarantine. Four of the Decrees are in process of socialization to stake holders. Another activity was Training in PQ which produced about 60 PQ inspectors. While PQ infrastructures funded by the Government was designed to fulfill the needs of PQ stations throughout the country.

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

The main constraint is the recruitment of PQ officers as the Government allows the recruitment for only certain amount of personnel per year.

Implementation of ISPM	R	Relevance		Implementation				Planned/Actual
International Measures	low	medium	high	none	partial	most	full	Year of full implementation
ISPM 01 Principles of plant quarantine as related to international trade			Х			X		2008
ISPM 02 Guidelines for pest risk analysis			X				Х	2006
ISPM 03 Code of conduct for the import and release of exotic biological control agents			Х				х	2000
ISPM 04 Requirements for the establishment of pest free areas			Х	Х				2009
ISPM 05 Glossary of phytosanitary terms			X			X		
ISPM 06 Guidelines for surveillance			X		X			2007
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		х		Х				2007
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			х			X		2002
ISPM 14 The use of integrated measures in a systems approach for pest risk management	х			х				2008
ISPM 15 Guidelines for regulating wood packaging material in international trade			х				х	2006
ISPM 16 Regulated non-quarantine pests: concept and application			Х	х				2007
ISPM 17 Pest reporting			х			Х		
ISPM 18 Guidelines for the use of irradiation as a phytosanitary measure			х	х				2008
ISPM 19 Guidelines on lists of regulated pests			X				х	
ISPM 20 Guidelines for a phytosanitary import regulatory system			X			X		
ISPM 21 Pest risk analysis for regulated non-quarantine pests			Х					2008
ISPM 22 Requirements for the establishment of areas of low pest prevalence		х			х			
ISPM 23 Guidelines for inspection			Х			Х		2007
ISPM 24 Guidelines for the determination and recognition of equivalence of phytosanitary measures		х			х			
ISPM 25 Consignments in transit		Х				X		
ISPM 26 Establishment of pest free areas for fruit flies (Tephritidae)			X	Х				
ISPM 27 Diagnostic protocols for regulated pests			X			х		

### Comments/Constraints

The applications of ISPM involve many different institutions. It needs some periods of time to be harmonized and applied. Changing of MOA internal position also results in different policies of new decision-maker.

Note:

### III. SURVEILLANCE, PEST OUTBREAKS AND INVASIVE SPECIES MANAGEMENT

Last updated: December 2006

# List of Key Legislation/Regulations/Rules for Surveillance, Pest Reporting and Emergency Actions

Law No. 16 of 1992 and Government Regulation No. 14 of 2002

Web source for further information: –

Policies (regarding invasive/migratory species management)		No
National strategy to control serious field pest outbreaks?		
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.)		
Web source for further information: –		

Organization of Outbreak Management Functions	Responsible Organizational Unit (Ministry/Department/Unit)
Field/Storage Pest Outbreaks	(e.g. BPH, bollworm, etc.)
Response strategy/plans	MOA
Surveillance	Related Directorate of Plant Protection
Control	Related Directorate of Plant Protection
Migratory Pest Outbreaks	(e.g. locusts, birds, armyworm)
Response strategy/plans	MOA
Surveillance	Related Directorate of Plant Protection
Control	Related Directorate of Plant Protection
New Exotic Pest Eradication	(e.g. coconut beetle)
Response strategy/plans	MOA
Surveillance	Related Directorate of Plant Protection/AAQ
Control/eradication	Related Directorate of Plant Protection/AAQ
Reporting to bilateral or international organizations	NPPO/Centre of Plant Quarantine

Infrastructure	Year: 2006
Number of designated staff for <b>surveillance</b> of field pests of national	3 000
importance	
Number of designated staff for <b>surveillance</b> of migratory and periodically	3 000
occurring pests	
Number of designated staff for <b>surveillance</b> of invasive species	
Number of designated staff for <b>control</b> of field pests of national importance	3 000
Number of designated staff for <b>control</b> of migratory and periodically	3 000
occurring pests	
Number of designated staff for <b>eradication</b> of invasive species	

# **Key Situation and Operation Indicators**

(Outbreaks and invasions in the past 2 years)

New exotic species found established in country	Insects	Pathogens	Weeds
Total number for year: 2005			
Total number for year: 2004 and before			
Total number on record			

Eradication or internal quarantine actions taken against economically important species			
Name of species	None	None	None
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	None	None	None
Year of outbreak			
Area affected [ha]			
Estimated damage \$			
Area treated by government [ha]			
Expenditures by government [\$]			
Control method			
More information			

#### **Progress and Constraints**

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

### IV. PEST MANAGEMENT

Last updated: December 2006

### List of Key Legislation/Regulations/Rules for Pest Management

- 1992 Law No. 12 on Crop Cultivation System (incl. IPM).
- 1995 Regulation of Indonesian government/Government Decree No. 6 on Plant Protection.
- 1997 Agricultural Ministerial Decree No. 887/Kpts/OT/9/1997 on Guideline of Pest Control.
- 1999 Law No. 22 on Autonomy.
- 1999 Regulation No. 25 on Decentralization.
- 2000 Law No. 25 on Conduct of Autonomy.

Web source for further information: –

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

Organization of Plant Protection Functions	Responsible Organizational Unit (Ministry/Department/Unit)
Policy development	MOA/Directorates of Plant Protection/AAQ
Pest management research	MOA/Directorates of Plant Protection
Control recommendations	
Pest management extension	MOA/Directorates of Plant Protection
IPM training	MOA/Directorates of Plant Protection
GAP training	

Infrastructure	Year: 2006
Number of technical officers for pest management	
Number of central, regional, provincial or state offices	
Number of district and village level field offices	
Number of field/extension agents for pest management advice	
Number of field/extension agents trained in IPM-FFS facilitation	
Number of government biocontrol production/distribution facilities	
Number of government biopesticide production/distribution facilities	
Number of general extension staff involved in pest management	
Number of designated plant protection technical officers for extension	

### **Key Situation and Operation Indicators**

Pest Management	Yes	No
Does the country have a National IPM Programme?	X	
If yes, give Name and Address of IPM Programme:		
Does the country have specific IPM extension programmes?	X	
If yes, in which crops?: Estates Crops		
Does the country have specific IPM research programmes?		
If yes, in which crops?:		
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)	Year:
Size of chemical pest control market	
Size of biopesticides market	
Size of biological control agents market	

Major pest control requiring crops (requiring most pesticide applications)	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>
Affected crop	Cacao	Tea	
Name(s) of pest(s)	Cacao Pod Borer	Helopeltis	
Estimated crop loss			
Affected area			
Number of pesticide applications or			
amount of pesticide used			
Government action taken			

Cooperation Projects			
Purpose/Target	Donor	Amount	Years (start-end)
Purpose/Target of government follow-up pr	ogrammes	Amount	Years (start-end)

Pest Management Extension	Year: 2005
Number of farmers trained in IPM during the year	1 048 564
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]	
Area under organic/pesticide-free management [ha]	
Crops in which IPM or other ecology friendly programmes are successful	lly implemented:
Crops grown organic/pesticide-free:	

## **Progress and Constraints**

Main Progress in Recent Years (legislation, policies, infrastructure, investments, training, etc.)
Main Constraints (personnel, infrastructure, administrative, operational, training, etc.)

### V. PESTICIDE MANAGEMENT

Last updated: December 2006

### List of Key Legislation/Regulations/Rules

- 1973 Pesticide Regulation No. 7.
- 1996 Joint Decree of the Minister of Health and Minister of Agriculture No. 881/MENKES/ SKB/8/1996 on Pesticides Maximum Residues No. 711/Kpts/TP.270/8/1996.
- 2001 Ministry of Agriculture Decree No. 434.1/Kpts/TP.270/7/2001: Pesticide Registration.
- 2002 Ministry of Agriculture Decree No. 517/Kpts/TP.290/9/2002 Supervision of storage, use and the distribution of pesticides.

Web source for further information: –

Policies (regarding pesticide management)	Yes	No
Do you have national pesticide reduction targets?	X	
If yes, what is the target:		
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 your ratified the Montreal Protocol? (MeBr phasing-out)	X	
Have you reported the observance of the Code of Conduct to FAO according to Art. 12 of the Code?		
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?		
Do you require data on product equivalence for generic registration?		
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?		
Do you accept evaluation results from other countries?		
Do you accept field studies conducted in other countries?		
Do you require environmental fate studies?		
Incentives/Disincentives		
Do you have a special tax on pesticides to cover externality costs?		
Do you subsidize or provide low-cost pesticides?		
Do you subsidize or provide low-cost biopesticides?		

Organization of Plant Protection Functions	Responsible Organizational Unit (Ministry/Department/Unit)
Legislation	Pesticides Committee
Registration	MOA/Centre of Investment & Permit/Pesticide Registration
Licensing of shops	Pesticides Committee
Licensing of field applicators	Pesticides Committee
Enforcement/inspections	DG of Crops, DG of Horticulture, DG of Estate DG/Ministry of Environment
Testing of pesticide efficacy	Centre for Plant Quarantine/DG of Crops, DG of Horticulture, DG of Estate DG
Development of pesticide use recommendations	
Safe use training/extension	
Food residue monitoring	Ministry of Health/DG of Crops, DG of Horticulture
Environmental monitoring	DG of Crops, DG of Horticulture, DG of Estate DG/Ministry of Environment
Health monitoring	Ministry of Health
Other Stakeholders:	
Pesticide Industry Association	
Civil Society Organizations (NGO, etc.)	

Infrastructure	Year: 2006
Number of registration officers	8
Number of enforcement officers	3 000
Number of department quality control laboratories	5
Number of quality control laboratory personnel	≥12
Number of department residue analysis laboratories	5
Number of residue laboratory personnel	≥10

## **Key Situation Indicators**

Pesticide Trade: 2004	Tons	\$ '000 Value
Imports	50 305	
Manufacture		
Export	48 759	
Domestic Use/Sales		
Pesticide Use Profile: 2004	Tons (a.i./formulation to be specified)	\$ '000 Value
Agriculture		
Chem. Insecticides		
Chem. Fungicides		
Chem. Herbicides		
Chem. Others: e.g. molluscicide, acaricide		
Other		
e.g. Avamectrin, Bt, Neem		
Other purposes		
TOTAL		

# **Post Registration Monitoring**

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

Health and Environmental Information		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?		X
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	X	
quantities of left-over pesticides?		
Do you have an inventory of outdated and obsolete pesticides in the country?	X	
(e.g. banned and no longer traded, but still in storage)		
Do you have illegal trade in pesticides?	X	
if yes: what is the estimated amount:		
Source for more information: –		

# **Key Operation Indicators**

Registration/Regulation/Monitoring	Year: 2006		
Registration/Regulation/Monitoring	a.i.*	Trade Name	
Number of registered pesticide products		1 158	
Number of registered biopesticides (Avamectrin, Bt, Neem, etc.)	8	>25	
Number of restricted-use pesticides/formulations	4		
Number of banned pesticides	36		
Number of licensed outlets			
Number of licensed field applicators (professional and/or farmers)			
Number of licensing violations reported during year			
Number of quality control analyses conducted during year			
Number of food samples analyzed for pesticide residues during year			
Number of samples exceeding MRL			
Number of environmental samples analyzed for pesticide residues			

<sup>\*</sup> 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			

<b>Cooperation Projects</b>			
Purpose/Target	Donor	Amount	Years (start-end)
Purpose/Target of government follow-up pr	Amount	Years (start-end)	

### **Progress and Constraints**

Main Progress in Recent Years (legislation, policies, infrastructure, investments, training, etc.)				
Main Constraints (personnel, infrastructure, administrative, operational, training, etc.)				

## VI. ADDITIONAL ISSUES OF INTEREST

Last updated: December 2006

<b>Genetically Modified Crops</b>	
Name of GMO Crop	Area under Cultivation [ha]
Cotton	>550 ha