

## **I. General information**

**Updated: On 11.07.2024**

### **Overall executive summary**

#### **Introduction**

The Directorate of Plant Protection Quarantine and Storage located at Faridabad, Haryana is the National Plant Protection Organization of India. It is headed by the Plant Protection Adviser to the Government of India. The Directorate is responsible for the implementation of plant protection policies and programmes of Department of Agriculture and Farmers welfare, Ministry of Agriculture, Government of India.

Major activities are exclusion of exotic pests, surveillance and monitoring and control of locusts, registration of pesticides and monitoring of their availability and quality, promotion of integrated pest management approach in plant protection, development of the human resources in plant protection and monitoring of pesticide residues in agricultural commodities.

#### **Plant Quarantine:**

The Directorate of Plant Protection, Quarantine & Storage, Department of Agriculture & Farmers welfare administer the Destructive Insects & Pests Act, 1914 (2 of 1914). Plant Quarantine (Regulation of Import into India) Order 2003 issued under the said Act, and amended from time to time, regulates the imports of agricultural commodities and the wood packaging material. Being the National Plant Protection Organization, the Directorate is responsible for implementation of the phytosanitary certification programme. More than 208 plant protection specialists from all over the country have been authorized by NPPO to issue Phytosanitary certificates, in accordance with the requirements of importing countries as per IPPC (list of phytosanitary certificate issuing authorities is available at ([blob: https://pqms.cgg.gov.in/2c95cdde-129f-47b2-a7c0-094debdd733c](https://pqms.cgg.gov.in/2c95cdde-129f-47b2-a7c0-094debdd733c)). 5,62,696 phytosanitary certificates were issued during 2023-24. More than three thousand pest risk analyses have been carried out so far. 1447 number of quarantine pests had been intercepted in the imported consignments and notifications sent to the exporting countries during 2023-24.

#### **Integrated Pest Management (IPM) Cum Locust Division:**

Integrated Pest Management (IPM) approach aims at management of Pest population below Economic Threshold Level (ETL). Govt. of India has adopted Integrated Pest Management (IPM) as cardinal principle and main plank of plant protection in the overall Crop Production Programme since 1985. IPM is an eco-friendly approach which encompasses cultural, mechanical, biological and need based chemical control measures. IPM programme is based on crop based Farmers' Field School approach. 109 IPM packages on major Agricultural/Horticultural crops have been developed. The Government of India encourages the use of bio-control agents. 361 bio-control laboratories are in operation. During 2023-24, 206 Farmers Field Schools (FFSs) were conducted in which 7210 farmers were trained. A total of 98 two-days Human Resource Development Programmes were conducted in which 5876 number of state extension officers, pesticide dealers and farmers were oriented about Integrated Pest Management. A total of 10 five-days Human Resource Development Programmes were conducted in which 416 number of state extension officers, were oriented about Integrated Pest Management. 2 Nos. of Season Long Training Programme (SLTP) were conducted on Cotton

& Mango Crop during 2023-24 in which 80 Nos. of State Agriculture Department officers were trained as master trainer for dissemination of IPM technologies in cotton and mango crop for effective pest management.

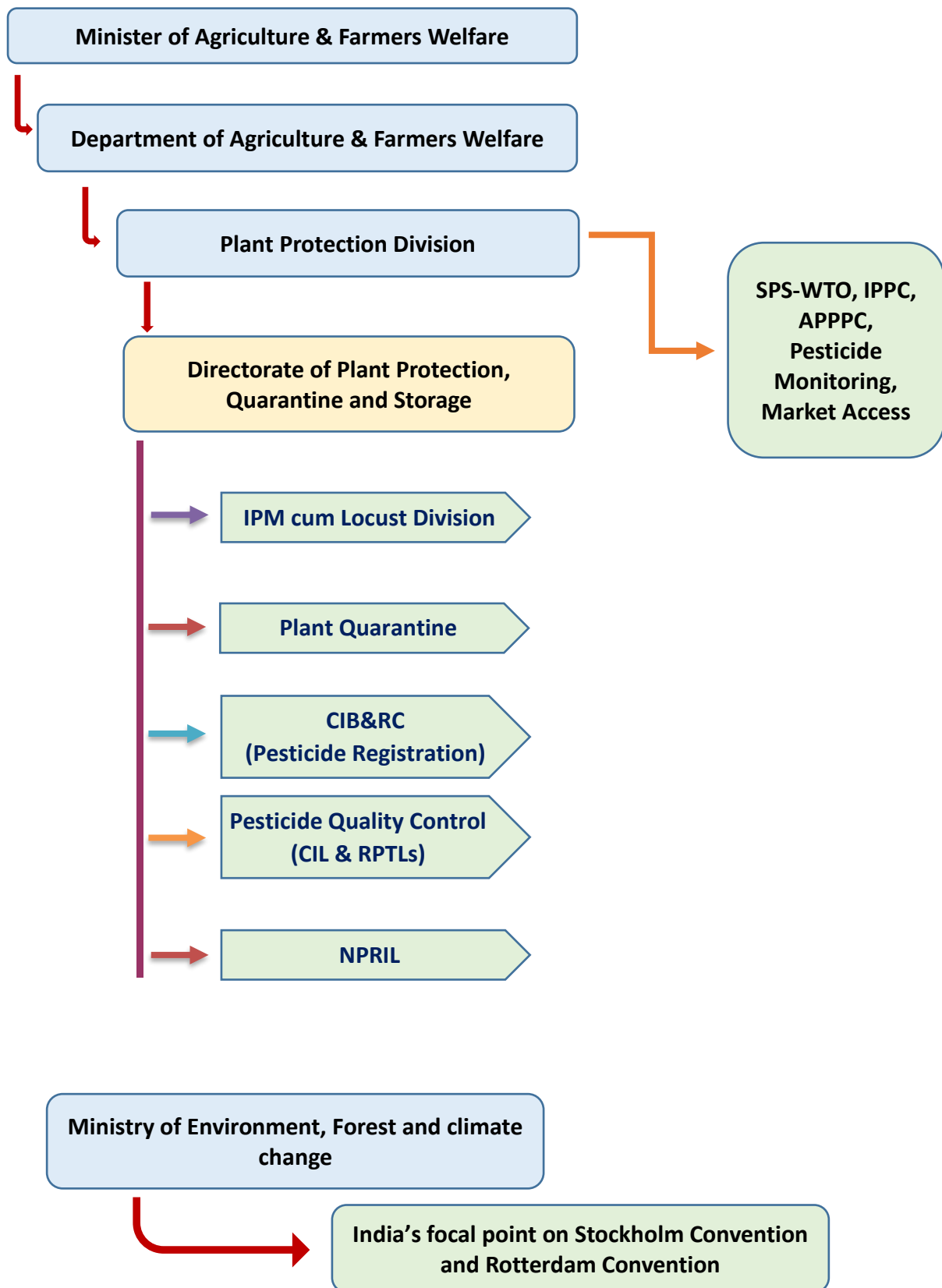
Apart from conducting FFS, the CIPMCs carry out pest/disease monitoring, production, release and conservation of bio-control agents. During 2023-24, the pest and disease situation was surveyed covering 1163.665 thousand hectares area. A total of 3689.063 million bio-control agents were mass produced in laboratories and released against targeted insect-pests in various crops. Augmentation and conservation was taken up in 1038.49 thousand hectares. Locust division is responsible for monitoring, survey and control of Desert Locust in Scheduled Desert Areas. The main function of this organization at that time was to keep surveillance in the Thar Desert area and issue of warning to the then Indian States about the possibility of the desert locust swarms incursion, movement and breeding. During 2023-24, Locust units surveyed covering 167.08 lakh ha Scheduled Desert Areas and conduct locust control operation on 836 ha area.

### **Pesticide Management:**

India is a signatory to FAO code of conduct on the distribution and use of pesticides and is implementing its provisions. The Insecticides Act, 1968 regulates the import, manufacture, sale, transport, distribution and use of pesticides with a view to prevent risk to the human beings, animals and the environment. The Central Insecticides Board set up under the Act advises the Government on all aspects relating to management of pesticides. Registration Committee constituted under the Act registers pesticides after satisfying itself regarding claims for bio-efficacy, safety and other parameters. Up to March, 2024, 946 pesticide formulations of 339 molecules have been registered for use in India. The details of registered pesticides as well as banned pesticides are available at <http://ppqs.gov.in/divisions/cib-rc/registered-products>.

The State Governments issue licenses for setting up manufacturing facilities of pesticides. There is a system for regular drawal of pesticide samples from manufacturing facilities as well as from the market and their testing in the State Pesticide Testing Laboratories (SPTLs - 70) and the Regional Pesticide Testing Laboratories (RPTLs – 2). In case of dispute in analysis, the samples are referred to the Central Insecticide Laboratory (CIL) for re-analysis

**Plant protection organisation chart:-**



# Organization Structure of National Plant Protection Organization

Hon'ble Minister of Agriculture & Farmers Welfare

Hon'ble Minister of State for Agriculture

Secretary (A& FW)

Additional Secretary (Plant Protection)

Joint Secretary (Plant Protection)

Plant Protection Adviser, DPPQ&S

Directorate of Plant Protection, Quarantine & Storage

IPM cum  
Locust  
Division

6- RCIPMCs,  
27-CIPMCs  
1-RLCIPMC  
12- LCIPMC  
1-L&IPMRC  
Total -47

Plant  
Quarantine

7 RPQS & 66 PQS  
Total-73

CIB&RC  
(Pesticide  
Registration)

Pesticide Quality  
Control  
(CIL & 2 RPTLs)

NPRIL

## Important contact addresses

### **Responsible ministry/ministries**

Ministry of Agriculture and Farmers welfare

### **Responsible department**

Department of Agriculture & Farmers welfare

### **Plant protection (policy, regulations, pesticide registration, overall management)**

*Shri Faiz Ahmed Kidwai, Additional Secretary (Plant Protection)*

Government of India

Ministry of Agriculture & Farmers welfare

Department of Agriculture & Farmers welfare,

Room no. 153, A Wing, Krishi Bhawan, Rajendra Prasad Road

New Delhi 110001, India

Tel: (+91) 11-23070306 / (+91) 11-23070916 Fax: (+91) 11-23070306

Email: [fa.kidwai@nic.in](mailto:fa.kidwai@nic.in)

Websites: <http://www.ppqqs.gov.in>; <https://pqms.cgg.gov.in/pqms-angular/home> ;

<http://www.cibrc.gov.in>, <https://agriwelfare.gov.in/>.

### **Address for nominations**

*Shri Faiz Ahmed Kidwai, Additional Secretary (Plant Protection)*

Government of India

Ministry of Agriculture & Farmers welfare

Department of Agriculture & Farmers welfare,

Room no. 153, A Wing, Krishi Bhawan, Rajendra Prasad Road

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Websites: <http://www.ppqqs.gov.in>; <https://pqms.cgg.gov.in/pqms-angular/home> ;

<http://www.cibrc.gov.in>, <https://agriwelfare.gov.in/>.

### **Operational Offices:**

#### **Plant protection:**

#### **Plant quarantine, Surveillance, pest outbreaks and invasive species management**

*Dr. J.P. Singh, Plant Protection Adviser*

Directorate of Plant Protection, Quarantine & Storage,

N.H-IV., Faridabad – 121 001 (Haryana), India

Tel: (+91) 129-2413985; 129-2418506 Fax: (+91) 129-2412 125

Email: [ppa@nic.in](mailto:ppa@nic.in)

Website: <https://pqms.cgg.gov.in/pqms-angular/home>

<https://ppqqs.gov.in>

#### **Pesticide registration:**

Registration Committee, Directorate of Plant Protection, Quarantine and Storage

*Dr. Archana Sinha, Secretary*

Central Insecticide Board and registration committee,

Directorate of Plant Protection, Quarantine & Storage,

N.H-IV., Faridabad – 121 001 (Haryana), India

Tel: (+91) 0129-2413002; 0129-2476210

Email: [cibsecy@nic.in](mailto:cibsecy@nic.in)

Website: <https://cropuser.cgg.gov.in>

## **Official international contact points**

### **National Plant Protection Organization (NPPO) contact point (for IPPC/APPPC)**

*Shri Faiz Ahmed Kidwai,*

Additional Secretary (Plant Protection)  
Ministry of Agriculture & Farmers welfare,  
Department of Agriculture & Farmers welfare  
Room no. 153, A Wing, Krishi Bhawan, Rajendra Prasad Road  
New Delhi 110001, India  
Tel: (+91) 11-23070306 / (+91) 11-23070916  
Fax: (+91) 11-23070306  
Email: fa.kidwai@nic.in

### **Alternate NPPO Contact Point**

*Dr. J.P. Singh*

Plant Protection Adviser  
Directorate of Plant Protection, Quarantine & Storage,  
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Tel: (+91) 129-2413985; 129-2418506  
Fax: (+91) 129-2412 125  
Email: [ppa@nic.in](mailto:ppa@nic.in)  
Website: <https://pqms.cgg.gov.in/pqms-angular/home>  
<https://ppqs.gov.in>

### **WTO-SPS contact point**

*Shri Faiz Ahmed Kidwai*

Additional Secretary (Plant Protection)  
Ministry of Agriculture & Farmers welfare,  
Department of Agriculture & Farmers welfare  
Room no. 153, A Wing, Krishi Bhawan, Rajendra Prasad Road  
New Delhi 110001, India  
Tel: (+91) 11-23070306 / (+91) 11-23070916  
Fax: (+91) 11-23070306  
Email: fa.kidwai@nic.in

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

*Dr. J.P. Singh*

Plant Protection Adviser  
Directorate of Plant Protection, Quarantine & Storage,  
N.H-IV., Faridabad – 121 001 (Haryana), India  
Tel: (+91) 129-2413985; 129-2418506  
Fax: (+91) 129-2412 125  
Email: [ppa@nic.in](mailto:ppa@nic.in)  
Website: <https://pqms.cgg.gov.in/pqms-angular/home>  
<https://ppqs.gov.in>

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

*Mr. Ved Prakash Mishra*

Director  
Ministry of Environment, Forests & climate change  
Paryavaran Bhavan  
CGO Complex, Lodhi Road  
New Delhi – 110003, India  
Tel: (+91) 11 20819236  
Fax: (+91) 11 2436 3577  
Email: [mishra.vp@gov.in](mailto:mishra.vp@gov.in)

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

Ministry of Environment Forests & climate change Secretary to the Government of India CGO Complex, Lodi Road New Delhi 110 003, India Tel: (+91)11 24360721 or 24361896 Fax: (+91) 11 24 36 27 46	Hazardous Substances Management Division <i>Mr. Naresh Pal Gangwar,</i> Additional Secretary Ministry of Environment Forests & climate change Paryavaran Bhavan CGO Complex, Lodi Road New Delhi 110 003, India Tel: (+91) 11 20819247 Fax: (+91) 11 24 36 35 77 Email: <a href="mailto:asnpg.mefcc@gov.in">asnpg.mefcc@gov.in</a>
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## **Selected country statistics:**

Last updated: June 2024

Agricultural Population 765.28 million	Agricultural Land 194.4 million ha
GDP 173.82 lakh crore	Agric. GDP: 17.4 %
Main crops grown: rice, wheat, millets, pulses, tea, coffee, sugarcane, oil seeds, cotton, jute, Mango, Banana, Grapes, Onion, Chilli, Cut flowers, Tobacco, Spices, citrus, Tomato, Potato etc.	

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

Source: Press note- Ministry of Statistics & Programme Implementation government of India  
<https://agriwelfare.gov.in/en/Dept>

## II. Plant quarantine

Last updated: Upto July 2024

### Executive summary

#### List of key legislation/regulations/rules

1914 Destructive Insects & Pests Act

2003 Plant Quarantine (Regulation of import into India) Order (effective: 1.1.2004) and amendments thereto issued from time to time

Web sources for further information:

<https://pqms.cgg.gov.in/pqms-angular/home>

<http://agricoop.nic.in>

Policies regarding plant quarantine	Yes	No	Don't know
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) The DIP Act is in the process of being amended but is not likely to result in altered import phytosanitary conditions.			
Web source for further information: <a href="https://pqms.cgg.gov.in/pqms-angular/home">https://pqms.cgg.gov.in/pqms-angular/home</a>			

Organization of plant quarantine functions	Responsible organizational unit* (Ministry/Department/Unit)
Pest Risk Analysis	MA&FW/DA&FW/DPPQ&S/NBPGR
National standards development	MA&FW/DA&FW/DPPQ&S
International notifications	MA&FW/DA&FW/
<i>Import:</i>	
Import permits	MA&FW/DA&FW/DPPQ&S / NBPGR
Import inspections	MA&FW/DA&FW/DPPQ&S /NBPGR
Emergency action	MA&FW/DA&FW/DPPQ&S
<i>Export:</i>	
Phytosanitary certificates	MA&FW/DA&FW/DPPQ&S / Notified State Government Authorities/ ICAR/ SAUs.
Treatment of commodities	MA&FW/DA&FW/DPPQ&S / NBPGR/ Accredited Agencies.

DA&FW- Department of Agriculture and Farmers welfare, DPPQ&S- Directorate of Plant Protection, Quarantine & storage, NBPGR- National Bureau of Plant Genetic Resources, ICAR- Indian council of Agriculture Research, SAUs- State Agriculture Universities



Infrastructure	Year: Upto July, 2024
Number of plant quarantine officers authorized to inspect/certify	358
Total qualified personnel for pest risk analysis	272
Number of quarantine offices	07 RPQS + 66 PQS=73
entry points (sea/air/land/mail = total)	121
post-entry plant quarantine containment facilities	320
other offices	-
Number of quarantine service diagnosis laboratories	69
In-country recognized pest diagnostics capabilities (incl. universities, etc.)	
Number of laboratories for insect/mite (arthropod) samples	61
Number of laboratories for bacteria samples	65
Number of laboratories for virus samples	68
Number of laboratories for fungus samples	65
Number of laboratories for mycoplasma samples	68
Number of laboratories for nematode samples	63
Number of laboratories for plant/weed samples	63
Number of laboratories for other pests (snail, slug, rodents, etc.)	56

Pest-free areas according to ISPM 4 & ISPM 10	Responsible organizational unit* (Ministry/Department/Unit)
Overall management	MA&FW/DA&FW
- surveillance	MA&FW/DA&FW/DPPQ&S / ICAR/ State Agricultural Universities/State Department of Agriculture /Horticulture
- management	MA&FW/DA&FW/assisted by DPPQ&S
- certification	MA&FW/DA&FW/PPD/ DPPQ&S/ ICAR
List of target pest species and crops ISPM 4	
Stone weevil and pulp weevil on mango	Uttar Pradesh State
List of target pest species and crops ISPM 10	

### Key situation indicators

International trade		Year: 2023-2024
Main import plant commodities	Main countries/areas of origin	Quantity (M tons)
Cereals and Cereal products	USA/ South Africa/Ukrain/ Australia/ Sudan / Myanmar/ Thailand/Portugal /Nepal/	
Pulses and Pulse products	Turlkey/ Australia/USA/Canada/ Kyrgyzstan/ Mozambique/ Russian Federation/ Myanmar/ Tanzania	
Timber	Germany/ Costa Rica/ Cote d'ivoire/Indonesia/ Tanzania/USA/Surinam/Panama/ Czech Republic/Russian Federation/Mexico/Laos/Brazil/ Argentina/ Papua New Guinea/ New Zealand	

Fresh fruits and vegetables	SouthAfrica/USA/China/Egypt/Turkey/Vietnam/Poland/Italy	
Dry Fruits and Nuts	Chile/USA/ Afghanistan/Benin/ Cote d'ivoire/Togo/Ghana/ Turkey/ Tanzania	
Main export plant commodities	Main destination countries	Quantity (M tons)
Fresh Fruits: Banana, Mango, Grapes, Pomegranate	UAE/UnitedKingdom/Bangladesh/Netherlands/Nepal/Iran/Iraq	
Cereals: Rice/Basmati Rice, Wheat, Maize	USA/United Kingdom/Nepal/Saudi Arabia/Iraq/Qatar/Benin/Singapore	
Fibre Crops: Cotton	Bangladesh/China/Vietnam/	
Oil Seeds: Groundnut, Soybean/Sesame	Indonesia/Vietnam/Malaysia/Afghanistan/Nepal/Japan/ Afganistan/United Arab Emirates/Australia	
Vegetables: Potato/Onion/Tomato/Okra	Nepal/Philippines/Malaysia/Sri Lanka/United Arab Emirates/Vietnam/Bangladesh/Germany	
Sugarcane	Djibouti/ United Arab Emirates/USA/ Somalia/Yamen/ Ethiopia/ Saudi Arabia/Nepal/Sudan	
Spices: Cumin, Coriander, Chilli, Turmeric	China/Indonesia/Malaysia/Sri Lanka/United Arab Emirates/USA	
Beverages and Narcotics: Tobacco, Tea, Coffee	Australia/China/Germany/Russian Federation/United Arab Emirates/USA/Australia/Belgium/Italy/Germany/Egypt/	

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

### Key operation indicators

Institutional functions	Year: 2023 - 2024
Number of import permits issued	179
Number of import inspections carried out	134802
Number of emergency phytosanitary treatments taken on imports	18564
Number notifications of non-compliance	2763
Number of conventional phytosanitary certificates issued	220972
Number of electronic phytosanitary certificates issued	341724

Number of quarantine pests intercepted		Year 2023- June 2024
Top commodity	Top three pest/commodity	No. of interceptions
Timber (Teak logs, Sal/Selanganbatu, Yemane wood , <i>Eucalyptus grandis</i> ,	<i>Ips calligraphus</i>	45
	<i>Cryptolestes ferrugineus</i>	15
	<i>Ahasverus advena</i>	18

Mersawa/Kaung wood, Oak, Pinus spp.)	<i>Xyleborus emarginatus</i>	25
Cashew	<i>Ahasverus advena and Ahasverus sp.</i>	668
	<i>Cryptolestes ferrugeneus</i>	209
	<i>Ephestia sp., Ephestia keuhniella and Ephestia cautella</i>	393
Pulses	Weed - <i>Raphanus raphanistrum</i>	32
	<i>Bruchidius spp.</i>	3
	<i>Acanthoscelides obtectus</i>	4
Coffee	<i>Hypothenemus hampei</i>	27
	<i>Cryptolestes ferrugineus</i>	12
Broom Stick	<i>Ahasverus advena</i>	31

List of regulated pests	Year of last update	Insects & mites	Pathogens	Plants	Nematode & Snails
Number of quarantine pests	2024	588	7	57	50
Number of regulated non-quarantine pests	2024	-			
Number of regulated import articles	2023-2024	1267			
<b>Web source for further information:</b>					
<a href="https://pqms.cgg.gov.in/pqms-angular/home">https://pqms.cgg.gov.in/pqms-angular/home</a>					
Note: India regulates import seeds and consumption plant species, not pests					

Pest risk analysis (PRA)	Insects	Pathogens	Plants
Number of PRA completed and documented (according to ISPM) 2023-24	-	-	37
<b>Web source for further information:</b>			
Details are available in website- <a href="https://pqms.cgg.gov.in/pqms-angular/home">https://pqms.cgg.gov.in/pqms-angular/home</a>			

### Progress and constraints

Main progress in recent years (legislation, policies, infrastructure, investments, training, etc.)
<ul style="list-style-type: none"> <li>• PRA based and continually updated PQ regulation has been put in effect, i.e. Plant Quarantine (Regulation of Import into India) Order, 2003 and amended time to time.</li> <li>• SPS principles and transparency requirements being met by scientific PRA, Notification of draft regulations in WTO-SPS portal &amp; notification of final regulation in the Gazette of India publishing in public domain of PQMS.</li> <li>• Uniform Phytosanitary Certification system through online portal Plant Quarantine Management System (PQMS) with advanced features and helps in verification of Phytosanitary Certificate.</li> <li>• National Phytosanitary Standards, protocols and guidelines developed in a number of key phytosanitary activities.</li> <li>• Emphasis on capacity building; training and human resource development through National Institute of Plant Health Management, Hyderabad and Capacity Building Unit of DPPQ&amp;S.</li> <li>• 164 numbers of registered the pack houses for Export of Fruits, vegetables, cut flowers, mangoes and pomegranate Fruits/arils.</li> </ul>

- 672 numbers of registered processing units for export- Rice, Peanut, Dry chilli and Niger seeds.
- 845 numbers of accredited treatment providers in line with the requirement of ISPM-15.
- 12 Numbers of Standard Operating Procedure and 25 NSPM has been developed for strengthening the smooth trade facilitation.
- Involvement Private Entity in Phytosanitary Inspection of Plants/ Plant Products & other Regulated Articles in Export process by accredited registered Phytosanitary Service Agency and Phytosanitary Service Provider.
- Quarantine treatment facilities using VHT (12 nos.), irradiation (04 nos.) and Hot water immersion treatments for mango (51 nos.), heat treatment to Niger seed (02 nos.) were developed and accreditation/ certification systems developed for these facilities.
- Developed the guidelines for the establishment of Pest Free Area, undertaken survey and surveillance programmes for maintenance of pest free areas.
- Pest free area notified Stone weevil and pulp weevil on mango in Uttar Pradesh.

Implementation of ISPMs	Relevance			Implementation				Planned/actual year of full implementation
	low	medium	high	none	partial	most	full	
<b>International measures</b>								
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 ( <i>Tephritidae</i> )			X		X			
ISPM 27 Diagnostic protocols for regulated pests			X				X	
ISPM 28 Phytosanitary treatments for regulated pests			X				X	
ISPM 29 Recognition of pest free areas and areas of low pest prevalence			X				X	
ISPM 30 Establishment of areas of low pest prevalence for fruit flies ( <i>Tephritidae</i> )			X				X	
ISPM 31 Methodologies for sampling of consignments			X				X	
ISPM 32 Categorization of commodities according to their pest risk			X				X	
ISPM 33 Pest free potato ( <i>Solanum</i> spp.) micropropagative material and minitubers for international trade			X				X	
ISPM 34 Design and operation of post-entry quarantine stations for plants			X				X	

ISPM 35 Systems approach for pest risk management of fruit flies ( <i>Tephritidae</i> )			X				X	
ISPM 36 <u>Integrated measures for plants for planting</u>			X				X	
ISPM 37 <u>Determination of host status of fruit to fruit flies (<i>Tephritidae</i>)</u>			X				X	
ISPM 38 <u>International movement of seeds</u>			X				X	
ISPM 39 <u>International movement of wood</u>			X				X	
ISPM 40 <u>International movement of growing media in association with plants for planting</u>			X				X	
ISPM 41 International movement of used vehicles, machinery and equipment	X					X		
ISPM 42 <u>Requirements for the use of temperature treatments as phytosanitary measures</u>			X				X	
ISPM 43 <u>Requirements for the use of fumigation as a phytosanitary measure</u>			X				X	
ISPM 44 <u>Requirements for the use of modified atmosphere treatments as phytosanitary measures</u>		X					X	
ISPM 45 <u>Requirements for national plant protection organizations if authorizing entities to perform phytosanitary actions</u>			X				X	
ISPM 46 <u>Commodity-specific standards for phytosanitary measures</u>			X				X	
ISPM 47 <u>Audit in the phytosanitary context</u>			X				X	
Comments/constraints: 25 National standards on various Plant Quarantine activities have been adopted: Details at <a href="https://pqms.cgg.gov.in/pqms-angular/home">https://pqms.cgg.gov.in/pqms-angular/home</a>								

### III. Surveillance, Pest Outbreaks and Invasive Species Management

#### Executive summary

List of key legislation/regulations/rules for surveillance, pest reporting and emergency actions  
DIP Act 1914 and Plant Quarantine (Regulation of Import into India) Order, 2003

Web source for further information: <https://agriwelfare.gov.in>, [www.ppq.gov.in](http://www.ppq.gov.in)

Policies regarding invasive/migratory species management	Yes	No	Don't know
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.) IPM cum Locust Division, DPPQ&S through the 47 RCIPMCs & CIPMCs, RLCIPMC's & LCIPMC's			
Web source for further information: <a href="http://www.agriwelfare.gov.in">www.agriwelfare.gov.in</a> / <a href="http://www.ppq.gov.in">www.ppq.gov.in</a>			

Organization of functions related to surveillance pest outbreaks and invasive species management	Responsible organizational unit* (Ministry/Department/Unit)
Field/storage pest outbreaks	(e. g. BPH, bollworm, etc.)
Response strategy/plans	MOA&FW/DA&FW/PPQ&S / CIPMC/ LCIPMC/ State Government/ ICAR and SAUs
Surveillance	MOA&FW/DA&FW/PPQ&S /CIPMC/ State Governments
Control	MOA&FW/DA&FW/ State Government./PPQ&S/ LCIPMC/ CIPMCs/ ICAR/ SAUs/ Pesticide Industry
Migratory pest outbreaks	(e.g. locusts, birds, armyworm)
Response strategy/plans	MOA&FW/DA&FW/PPQ&S/LCIPMC (/ RLCIPMC)
Surveillance	MOA&FW/DA&FW/PPQ&S// RLCIPMC /CIPMC/ State Governments
Control	MOA&FW/DA&FW/ State Government. / PPQ&S// RLCIPMC / CIPMCs/ ICAR/ SAUs/ Pesticide Industry
New exotic pest eradication	(e.g. coconut beetle)
Response strategy/plans	MOA&FW/DA&FW/PPQ&S/ CIPMC/ State Government/ ICAR and SAUs
Surveillance	MOA&FW/DA&FW/ PPQ&S/ CIPMC/ State Governments/ICAR/SAU
Control/eradication	MOA&FW/DA&FW/ State Government./ PPQ&S/ CIPMCs/ ICAR/ SAUs/ Pesticide Industry
Reporting to bilateral or international organizations	MOA&FW/DA&FW/PPD

Infrastructure	Year: 2023-24
Number of designated staff for surveillance of field pests of national importance	341 No. of technical officials (Central Government) and State Agriculture Officials
Number of designated staff for surveillance of migratory and periodically occurring pests	110 No. of technical officials (Central Government) and State Agriculture Officials
Number of designated staff for surveillance of invasive species	341 No. of technical officials (Central Government) and State Agriculture Officials
Number of designated staff for control of field pests of national importance	341 No. of technical officials (Central Government) and State Agriculture Officials
Number of designated staff for control of migratory and periodically occurring pests	110 No. of technical officials (Central Government) and State Agriculture Officials
Number of designated staff for eradication of invasive species	341 No. of technical officials (Central Government) and State Governments Plant protection Officials

### Key situation and operation indicators

(Outbreaks and invasions in the past 2 years)

New exotic species found established in the country	Insects	Pathogens	Weeds
Total number for 2023-24 [Most recent] Outbreak	1	-	-
Total number for 2022-23 [Year before] Outbreak	1	1	-
Total number on record	2	1	-

Eradication or internal quarantine actions taken against economically important species			
Name of species			
Year of first discovery			
Pathway			
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	<i>Thrips parvispinus</i>	<i>Southern Rice Black Streaked Dwarf Virus (SRBSDV)</i>	Pink Bollworm
Year of outbreak	2022-23	2022-23	2023-24
Area affected [ha]			
Estimated damage \$			



Area treated by government [ha]			
Expenditures by government [\$]			
Control method	Integrated approach	Integrated approach	Integrated approach
More information	On Chilli crop in Andhra Pradesh, Telangana & Karnataka.	On Rice crop in Haryana & Punjab	On Cotton Crop in Punjab, Rajasthan & Maharashtra

### Progress and Constraints (During Last Year)

Main progress in recent years (legislation, policies, infrastructure, investments, training, etc.)
<ul style="list-style-type: none"> <li>• During 2023-24 IPM Division conducted 206 No of FFS, 98 No of Two Days HRD Programmes, 10 No of Five Days HRD Programmes, 2 Nos. of Season Long Training Programme (SLTP), 317 Nos. of Seed Treatment campaigns Kharif &amp; Rabi 2023-24.</li> <li>• During 2023-24, IPM Division conducted survey in 1163.67 thousand hectares area, a total of 3689 million bio-control agents were mass produced in laboratories and released against targeted insect-pests in various crops. Augmentation and conservation was taken up in 1039.13 thousand hectares</li> <li>• Collaborated with FAO project “Global Action for FAW control” for FAW management in India. In this regard Regular surveys, surveillance and monitoring were conducted by the Central Integrated Pest Management Centres (CIPMCs) in collaboration with State Departments of Agriculture, SAUs and ICAR etc. Awareness cum training programmes were conducted on management of FAW in different States</li> <li>• Total of 11 No of Advisories /Forewarnings were issued.</li> <li>• Developed Technical booklet on South East Asian thrips management in Chilli crop &amp; A guide for facilitators of FFS on maize for FAW management in association with FAO.</li> <li>• Conducted locust survey on area of 167.08 lakh ha.</li> </ul>

## IV. Pest management

### Executive summary

List of key legislation/regulations/rules for pest management: Insecticides Act, 1968, Insecticides Rules, 1971

Web source for further information: <https://cropuser.cgg.gov.in> , [www.ppqqs.gov.in](http://www.ppqqs.gov.in)

Policies regarding pest management	Yes	No	Don't know
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?	x		
Is pest management extension separate from general extension?		x	
Other policies: (subsidies, production inputs, etc.)			
<ul style="list-style-type: none"> <li>○ Increase in financial support for IPM</li> <li>○ Phasing out subsidies on chemical pesticides</li> <li>○ Emphasis on bio-control agents, bio-pesticides and pheromones</li> <li>○ Phasing out, banning or restricting hazardous chemical pesticides</li> </ul>			
Web source for further information: <a href="http://www.dacnet.ppin.nic.in">www.dacnet.ppin.nic.in</a>			

Organization of pest management function	Responsible organizational unit* (Ministry/Department/Unit)
Policy development	MOA&FW/DA&FW
Pest management research	MOA&FW/DA&FW/ ICAR & PPQ&S/SAUs
Control recommendations	MOA&FW/DA&FW/ ICAR & PPQ&S/SAUs
Pest management extension	States/ PPQ&S
IPM training	States/ PPQ&S
GAP training	

Infrastructure	Year: 2023-24
Number of technical officers for pest management	341 No. of technical staff of IPM Division, DPPQ&S and state Agriculture officers/staff
Number of central, regional, provincial or state offices	47 Nos of Central IPM Centres including LCIPMCs
Number of district and village level field offices	
Number of field/extension agents for pest management advice	341 No. of technical staff of IPM Division, DPPQ&S and state

	Agriculture officers/staff
Number of field/extension agents trained in IPM-FFS facilitation	-
Number of government bio-control production/distribution facilities	220
Number of government bio-pesticide production/distribution facilities	220
Number of general extension staff involved in pest management	476
Number of designated plant protection technical officers for extension	

### Key situation and operation indicators

Pest management	Yes	No	Don't know
Does the country have a National IPM program? If yes, give Name and Address of IPM Programme: Strengthening and Modernisation of Pest Management Approach	x		
Does the country have specific IPM extension programs? If yes, in which crops?: Vegetables & fruits, cereals, pulses, oilseeds, cotton, sugarcane etc.	x		
Does the country have specific IPM research programs? If yes, in which crops?: Several crops	x		
Does the country have specific GAP extension programs? If yes, in which crops?:	x		
Does the country have specific GAP research programs? If yes, in which crops?:	x		

Market shares (estimated value, volume or area under control)	Year: 2022-23
Size of chemical pest control market	
Size of bio-pesticides market	
Size of biological control agents market	

Major crops requiring most pesticide applications	1st	2nd	3rd
Affected crop	Cereals	Pulses	Oilseeds
Name(s) of pest(s)			
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 programmes		Amount	Years (start-end)

Pest management extension	Year: 2023-24
Number of farmers trained in IPM during the year	12670
Number of IPM-FFS conducted during the year	206
Number of farmers trained in GAP standards during the year	57657
Area under IPM/low pesticide management [ha]	
Area under organic/pesticide-free management [ha]	
Crops in which IPM or other ecology friendly programmes are successfully implemented: 103 IPM packages developed	
Crops grown organic/pesticide-free: --	

### Progress and constraints

Main progress in recent years (legislation, policies, infrastructure, investments, training, etc.)
<ul style="list-style-type: none"> <li>• During 2023-24 IPM Division conducted 206 No of FFS, 98 No of Two Days HRD Programmes, 10 No of Five Days HRD Programmes, 2 Nos. of Season Long Training Programme (SLTP), 317 Nos. of Seed Treatment campaigns Kharif &amp; Rabi 2023-24.</li> <li>• During 2023-24, IPM Division conducted survey in 1163.67 thousand hectares area, a total of 3689 million bio-control agents were mass produced in laboratories and released against targeted insect-pests in various crops. Augmentation and conservation was taken up in 1039.13 thousand hectares</li> <li>• Collaborated with FAO project “Global Action for FAW control” for FAW management in India. In this regard Regular surveys, surveillance and monitoring were conducted by the Central Integrated Pest Management Centres (CIPMCs) in collaboration with State Departments of Agriculture, SAUs and ICAR etc. Awareness cum training programmes were conducted on management of FAW in different States</li> <li>• Total of 11 No of Advisories /Forewarnings were issued.</li> <li>• Developed Technical booklet on South East Asian thrips management in Chilli crop &amp; A guide for facilitators of FFS on maize for FAW management in association with FAO.</li> <li>• Conducted locust survey on area of 167.08 lakh ha.</li> </ul>

## V. Pesticide Management

### Executive summary

#### List of key legislation/regulations/rules about pesticide management

##### *Ministry of Agriculture & Farmers Welfare, Department of Agriculture & Farmers Welfare*

1968 Insecticides Act

1971 Insecticides Rules.

##### *Ministry of Environment Forest & Climate Change*

1986 Environment Protection Act.

##### *Ministry of Health & Family Welfare*

2006 Food Safety & Standards Act (residue monitoring, MRLs).

##### *Ministry of Labour*

1948 Factories Act.

Web source for further information: <https://agriwelfare.gov.in>, <http://ppqs.gov.in>,  
<https://cropuser.cgg.gov.in>

Policies regarding pesticide management	Yes *	No *	Don't know
Do you have national pesticide reduction targets? If yes, what is the target:_____		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 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?	x		
Have you adopted Good Laboratory Practices (GLP)?	x		
<b>Pesticide registration</b>			
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		
<b>Incentives/disincentives</b>			
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 bio-pesticides?			x	
Other policies: Pesticide Management Bill 2020 has been under consideration for replacing existing Insecticides Act, 1968				
Web source for further information: <a href="http://ppqs.gov.in">http://ppqs.gov.in</a>				
Organization of pesticide management function	Responsible organizational unit* (Ministry/Department/Unit)			
Legislation	MOA&FW/DA&FW			
Registration	MOA&FW/DA&FW/CIB&RC/DPPQ&S			
Licensing of shops	State Governments			
Licensing of field applicators	State Governments			
Enforcement/inspections	States, Central Task Force			
Testing of pesticide efficacy	RC, IARI, PLT, ICAR, SAUs			
Development of pesticide use recommendations	RC			
Safe use training/extension	MOA&FW/DA&FW/DPPQ&S/NIPHM			
Food residue monitoring	MOA&FW/DA&FW/PPD & DOH			
Environmental monitoring	DOC/ DBT			
Health monitoring	DOH			
<b>Other Stakeholders:</b>				
Pesticide Industry Association	Crop Life India, Crop Care Federation of India, Pesticides Manufacturers & Formulators Association of India, Agro Chem Federation of India, Biological Agri. solutions Association of India (BASAI) etc.			
Civil Society Organizations (NGO, etc.)	Center for Science and Environment (CSE), Alliance For Sustainable & Holistic Agriculture (ASHA), PAN Asia Pacific (PAN AP)			

Infrastructure	Year: 2023-24
Number of registration officers	>16
Number of enforcement officers	>11,000
Number of department quality control laboratories	Central Referral – 1; Regional Labs – 2; State Labs. - 70
Number of quality control laboratory personnel	>250
Number of department residue analysis laboratories	>35 Central Govt. and State Govt. laboratories
Number of residue laboratory personnel	> 150

### Key situation indicators

Pesticide trade: 2022-23 \a	Metric Tons*	Value in Lakh Rs*
Imports	133807	1431026
Manufacture	258130	-
Export	629606	4316438
Domestic Use/Sales	24978	-
Pesticide use profile: 2022-23	Metric Tons (a.i./formulation to be specified)	US\$ '000 Value
Agriculture		

Chem. Insecticides	8843	
Chem. Fungicides	7551	
Chem. Herbicides	4449	
Chem. Rodenticides	404	
Chem. Plant Growth Regulators	122	
Chem. Others:	613	
Other E.g. Avamectrin, Bt, Neem	2996	
Other purposes	24978	
TOTAL		

\a Or for most recent year for which data are available

\* if possible, give in tons a.i. ; if known, also give value in US\$ or other currency.

### Post registration monitoring

Testing, quality control and effects in the field	Yes	No	Don't know
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	x		
Source for more information: <a href="http://ppqs.gov.in">http://ppqs.gov.in</a> , <a href="https://cropuser.cgg.gov.in">https://cropuser.cgg.gov.in</a>			

Health and environmental information	Yes	No	Don't know
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: <a href="http://ppqs.gov.in">http://ppqs.gov.in</a> , <a href="https://cropuser.cgg.gov.in">https://cropuser.cgg.gov.in</a>			

Pesticide disposal	Yes	No	Don't know
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? (eg. banned and no longer traded, but still in storage)	X		
Do you have illegal trade in pesticides? if yes: what is the estimated amount: Note: No estimates made, but it exists.			No estimates made
Source for more information: <a href="http://ppqs.gov.in">http://ppqs.gov.in</a> , <a href="https://cropuser.cgg.gov.in">https://cropuser.cgg.gov.in</a>			

## Key operation indicators

Registration/regulation/monitoring	Year: 2023-24	
	a.i.*	Trade names
Number of registered pesticide products	946	
Number of registered bio-pesticides (Avamectrin, Bt, Neem, etc.)	104	
Number of restricted-use pesticides/formulations	16	
Number of banned pesticides	49	
Number of licensed outlets	>2,85,865	
Number of licensed field applicators (professional and/or farmers)	N.A	
Number of licensing violations reported during year	>487	
Number of quality control analyses conducted during year	807047	
Number of food samples analyzed for pesticide residues during year	-	
Number of samples exceeding MRL	-	
Number of environmental samples analyzed for pesticide residues	2,751	

\* active ingredient; \*\*provisional registration

Pesticides which are banned, refused registration and restricted to use

[https://ppqs.gov.in/sites/default/files/list\\_of\\_pesticides\\_which\\_are\\_banned\\_refused\\_registration\\_and\\_restricted\\_in\\_use\\_0.pdf](https://ppqs.gov.in/sites/default/files/list_of_pesticides_which_are_banned_refused_registration_and_restricted_in_use_0.pdf)

As on 31.03.2024

Cooperation projects			
Purpose/target	Donor	Amount	Years (start-end)
Purpose/target of government follow-up programs		Amount	Years (start-end)

## Progress and constraints

Main progress in recent years (legislation, policies, infrastructure, investments, training, etc.)

Legislations and policies:

- (a) Pesticide Management Bill 2020 has been under consideration for replacing existing Insecticides Act, 1968.

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

Shortage of personnel.

## V. Additional issues of interest

Genetically Modified Crops

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