

Guidelines for the Centrally Sponsored Scheme “National Mission on Agricultural Extension and Technology (NMAET)” to be implemented during the XII Plan.

1. GENESIS:

1.1 Agricultural Technology, including the adoption/ promotion of critical inputs, and improved agronomic practices were being disseminated under 17 different schemes of the Department of Agriculture & Cooperation during the 11th Plan. The Modified Extension Reforms Scheme was introduced in 2010 with the objective of strengthening the extension machinery and utilizing it for synergizing the interventions under these schemes under the umbrella of Agriculture Technology Management Agency (ATMA). NMAET has been envisaged as the next step towards this objective through the amalgamation of these schemes. National Mission on Agricultural Extension and Technology (NMAET) consists of 4 Sub Missions:

- (i) Sub Mission on Agricultural Extension (SMAE)
- (ii) Sub-Mission on Seed and Planting Material (SMSP)
- (iii) Sub Mission on Agricultural Mechanization (SMAM)
- (iv) Sub Mission on Plant Protection and Plant Quarantine (SMPP)

1.2 While four separate Sub-Missions are included in NMAET for administrative convenience, on the ground these are

inextricably linked to each other. **The common threads running across all 4 Sub-Missions are Extension & Technology.** Seeds, pesticides and machinery are three important agricultural inputs whose technological and economic significance needs to be disseminated to all the farmers through efficacious extension machinery. However, besides the core component of ensuring easy availability of these key inputs (i.e. Seeds, Pesticides and Machinery) at reasonable prices, there will be a **subject specific capacity building** element built in the latter three Sub-Missions as well. Agricultural extension and technology have to go hand in hand and that is the genesis of the National Mission on Agricultural Extension and Technology.

2. The aim of the Mission is to restructure & strengthen agricultural extension to enable delivery of appropriate technology and improved agronomic practices to the farmers. This is envisaged to be achieved by a judicious mix of extensive physical outreach & interactive methods of information dissemination, use of ICT, popularisation of modern and appropriate technologies, **capacity building and institution strengthening to promote mechanisation, availability of quality seeds, plant protection etc.** and encourage the aggregation of farmers into Interest Groups (FIGs) to form Farmer Producer Organizations (FPOs).

2.1 **SMAE:** Sub-Mission on Agricultural Extension will focus on awareness creation and enhanced use of appropriate technologies in agriculture & allied sectors. Gains made in the past will be consolidated and strengthened through increased penetration of extension functionaries. Personnel trained under Agri-Clinics and Agri-Business Centres Scheme (ACABC) and Diploma in Agriculture Extension Services for Input Dealers (DAESI) will also provide extension services to the farmers. Use of interactive and innovative methods of information dissemination like pico projectors, low cost films, handheld devices, mobile based services, Kisan Call Centres (KCCs) etc. will be used and convergence brought among extension efforts under different programmes and schemes at village level through the institution of ATMA (Agriculture Technology Management Agency) and Block Technology Teams (BTTs).

2.2 **SMSP:** Adoption of quality seeds is the most cost effective means for increasing agricultural production and productivity. The interventions included in the Sub-Mission will cover the entire gamut of seed chain from nucleus seed to supply to farmers for sowing and also to the major stakeholders in the seed chain and also provide for support for infrastructure to create an enabling environment for development of the Sector. SMSP also envisages strengthening of Protection of Plant

Varieties and Farmers' Rights Authority (PPV&FRA) in order to put in place an effective system for protection of plant varieties, rights of farmers and plant breeders and to encourage development of new varieties of plants.

- 2.3 **SMAM:** There is a strong co-relation between farm power availability and agricultural productivity. Therefore, Sub-Mission on Agricultural Mechanization will focus on farm mechanization. The Sub-Mission will mainly cater to the needs of the small and marginal farmers through institutional arrangements such as custom hiring, mechanization of selected villages, subsidy for procurement of machines & equipments, etc.
- 2.4 **SMPP:** Sub-Mission on Plant Protection included in NMAET envisages increase in agricultural production by keeping the crop disease free using scientific and environment friendly techniques through promotion of Integrated Pest Management. Strengthening and Modernization of Pest Management Approach aims at this vital aspect of Plant Protection and also covers regulatory requirements of pesticides. The component on Strengthening & Modernization of Plant Quarantine facilities in India is regulatory in nature with the aim of preventing introduction and spread of exotic pests that are harmful to crops by regulating/restricting import of plant/plant products.

Monitoring pesticide residues in food commodities and environmental samples is also included in this Sub-Mission. The component on National Institute of Plant Health Management (NIPHM) will promote environmentally sustainable Plant Health Management practices in diverse and changing agro-climatic conditions, pesticide management, and Bio-security through capacity building programmes. Farmers' skill trainings and field extension as contained in all 4 Sub Missions of NMAET (Viz. SMSP, SMAE, SMAM and SMPP) will be converged with similar farmer-related activities going on through ATMA. Five-tiered modes of extension carried out in broadcast or interactive electronic modes will also cut across extension activities in all the four Sub Missions. Mutually synergetic linkages will be established among various activities instead of unilaterally mandating that all such farmer-centric activities will be carried out through ATMA.

3. LINKAGES BETWEEN DIFFERENT SUB-MISSIONS:

- 3.1 Farmers' skill trainings and field extension as contained in all 4 Sub Missions of NMAET (Viz. SMSP, SMAE, SMAM and SMPP) will be converged with similar farmer-related activities going on through ATMA. Five-tiered modes of extension carried out in broadcast or interactive electronic modes will also cut across extension activities in all the four Sub Missions. Mutually

synergetic linkages will be established among various activities instead of unilaterally mandating that all such farmer-centric activities will be carried out through ATMA.

3.2 Process Flow for Action Plans encompassing capacity building programmes included in all the four Sub-Missions: Strategic Research and Extension Plan (SREP) is a comprehensive document prepared at the district level identifying research/ extension priorities for district, keeping in mind agro-ecological conditions and existing gaps in technology generation and dissemination in all agriculture and allied sector areas/ activities including in the **area of Seeds, Mechanization, Plant Protection. The gaps in all farmer centric trainings and field extension in respect of other Sub-Missions of NMAET would also be included in the SREP.** SREPs will be prepared in coordination with the line departments, Krishi Vigyan Kendras (KVKs), Panchayati Raj Institutions (PRIs), Private Sector, farmers and other stake-holders at the district level.

ILLUSTRATIVE LIST OF FARMER CENTRIC TRAININGS AND FIELD EXTENSION

SMSP	SMAE	SMAM	SMPP
Seed Village Programme	Farm Schools, Demo Plots, Trainings, Exposure Visits	Capacity Building by Institutions identified by the State Government	Pest Monitoring (including Pest Scouts), FFSs, IPM Training to Farmers

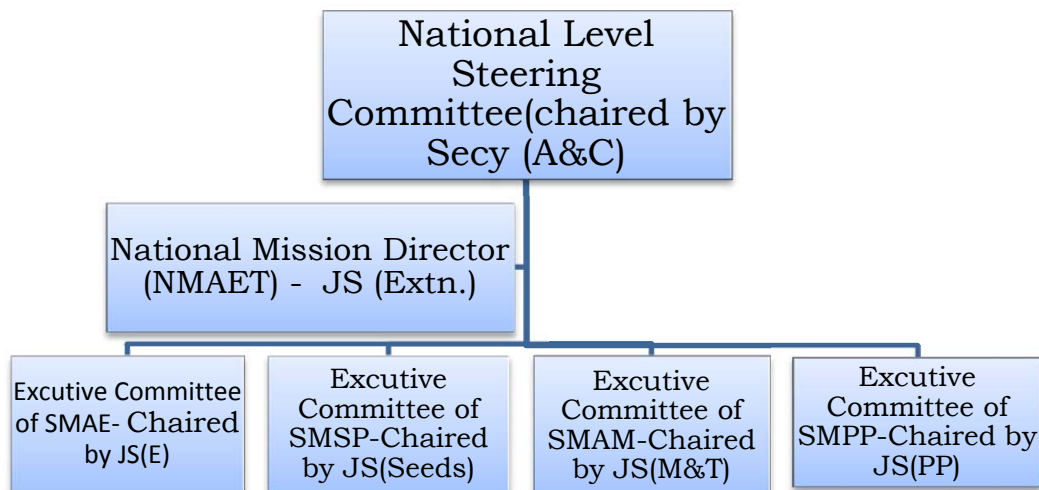
Similar training & field extension related components in other programmes of DAC and State Governments will also be implemented through ATMA.

Funds earmarked for such activities under different Sub-Missions of NMAET, Missions & Schemes / Programmes will be utilized through ATMA. Similarly, ATMA funds also will be suitably used to cover training & field extension objectives / activities of other Sub-Missions, Missions and Schemes / Programmes. Manpower under ATMA will be effectively utilized for extension related activities under various Sub-Missions. Some other field activities (e.g. Pest Scouts) can also be performed by extension under workers under ATMA. State Extension Work Plan (SEWP) will contain proposals on farmer centric activities cutting across all Sub-Missions. **Such convergence arrived at through SREP / SEWP will avoid duplication and ensure wider coverage in terms outreach to farmers and gamut of activities.** Such convergence at the grassroots level will also provide correct focus on nature of activities to be covered under different extension activities. **Five Tiered Modes of Awareness Campaign (TV, Newspapers, Booklets, KCC, Internet, SMS) will also be used for disseminating information or providing services under all schemes and programmes pertaining to agriculture and allied sectors (including various Sub-Missions of NMAET).**

Technical, legal, administrative & regulatory functions and other components (not related to farmer centric extension) will continue to be discharged independently under the respective Sub-Missions.

Detailed guidelines of each of the four Sub-Missions are included in subsequent chapters.

4. STRUCTURE OF THE MISSION:



The respective Sub-Missions may also higher level monitoring and supervisory bodies.

4.1 A National Level Steering Committee of the Mission chaired by Secretary (Agriculture).

4.1.1 For the effective implementation of the National Mission on Agricultural Extension & Technology (NMAET), a Steering Committee would be constituted and notified. The members of the Committee would be -

Secretary (A&C), DAC	- Chairperson
Addl. Secretary (Extn.), DAC	- Vice Chairperson
Additional Secretary (Seeds), DAC	- Member
Additional Secretary (M&T), DAC	- Member
Additional Secretary (PP), DAC	- Member
AS&FA, DAC	- Member
Advisor, Planning Commission	- Member
Joint Secretary (Extn.), DAC	- Member
Joint Secretary (Seeds), DAC	- Member

Joint Secretary (M&T), DAC	– Member
Joint Secretary (PP), DAC	– Member
DDG (Extn.), ICAR	– Member
DDG (Crops), ICAR	– Member
DDG (M&T), ICAR	– Member
DDG (PP), ICAR	– Member
Director (Extension)	– Member Secretary

4.1.2 Terms of Reference:

- The Committee will be policy making body giving overall directions and guidance to the Mission.
- The Committee will act as an Empowered Committee and will decide inter-component changes among Sub-Missions.
- Review the performance of NMAET at least once a year.
- Chairperson will have the power to co-opt, invite other official members.

4.2 The Joint Secretary (Extension) would be the **Mission Director for NMAET** to ensure that it is implemented effectively and expeditiously and convergence among all Sub-Missions is achieved. The Mission Director, NMAET will coordinate with all the Sub-Mission Heads (respective Joint Secretaries) to look after all inter Sub-Mission issues including compilation of reports, convergence at farmer level through SREP & SEWP etc., replies to integrated issues / matters / questions on NMAET.

- 4.3 **Overall in-charge of each of the Sub-Mission** will be the Joint Secretary concerned of the respective Sub-Mission. However, convergence of farmer centric extension related activities will be overseen by the Extension Division through the instrumentality of SEWP. Mission Director, NMAET also will help in bringing about synergies among various Sub Missions.
- 4.4 **Executive Committee** on different Sub-Missions will be headed by the respective Joint Secretaries to oversee the activities of the Sub-Mission and to approve the State Work Plans.
- 4.5 **An expanded IDWG headed by the APC or Principal secretary (Agriculture) at State level (after including all Sub-Missions related officers) and ATMA Governing Board** at District level will monitor and will be accountable for the effective implementation of the Mission. There will be an Implementation Committee under the chairmanship of the Commissioner / Director (Agriculture) and consist of officials and non-officials pertaining to various Sub Missions.
- 4.6 **Guidelines of** each of the Sub-Mission will also enumerate the Coordination Committees and other Committees for effective implementation of the programmes at State Level.

GUIDELINES FOR NIPHM SCHEME

National Institute of Plant Health Management (NIPHM) is an ongoing scheme from the XI Plan to develop human resources in various aspects of Plant Health Management and Biosecurity issues. NIPHM is engaged in creation of Master Trainers in the field of Plant Health Management, Pesticide Management and Biosecurity besides extending policy support to Central and State Governments. The Institute has been registered as an Autonomous Society under the Ministry of Agriculture, Govt. of India, in the Office of the Registrar of Societies, Rangareddy District, Hyderabad, Andhra Pradesh on 24th October, 2008 under the name, **National Institute of Plant Health Management** with Registration No. 1444 of 2008 under the Andhra Pradesh Societies Registration Act, 2001 (Act No.35 of 2001). This Scheme is being framed as a Sub-Mission component of on Plant Protection and Plant Quarantine so as to enhance its delivery & reach in a mission mode under the National Mission on Agricultural Extension and Technology (NMAET).

1. Basic features

1. The main focus of Plant Health Management Programmes is to promote agro-ecosystem analysis (AESA) based plant health management through Farmer Field Schools (FFS), which takes into account the intricate interdependence among various components of an ecosystem and the role of natural flow of ecosystem services.
2. Capacity building programmes are essential for creating dedicated professionals in Plant Biosecurity with special focus on Plant Quarantine, Pest Surveillance, Pest Risk Analysis, Pest Incursion Management, etc with exposure to Sanitary and Phytosanitary issues, strengthening enforcement of plant quarantine regulations and education on Biosecurity issues in India's neighbourhood (South Asian region) in view of the globalization of trade and emerging challenges in Biosecurity.
3. The Insecticide Act, 1968 regulates the import, manufacture, sale, transport, distribution and use of pesticides with a view to preventing risk to human beings and animals and ensuring the supply of quality pesticides. NIPHM is one of the national level institutions identified to impart mandatory training for Pesticide Analysts to enhance the trained manpower to ensure quality control of pesticides.
4. Specialized training programmes are also required to be organized in the areas of *Pesticide Management, Rodent Pest Management, Biocontrol agent production protocols and Integrated Weed Management* to meet the demands of intensive and competitive agriculture in the global context. In order to promote safe and judicious use of pesticides and residue free produce, exclusive programmes are also to be organized in the specialized field of *Pesticide Application Engineering Systems*.

Thus, NIPHM will assist Central and State Governments and other stakeholders in the above areas through its core role of Teaching, Training, Research, Certification & Accreditation and Policy Support.

Aims and objectives of NIPHM shall be:

- a) Human Resource development, both in public and private sector, covering areas inter alia, of plant protection technology, plant quarantine and bio-security, crop oriented Integrated Pest Management approaches, quality testing of pesticides and monitoring of pesticide residues for monitoring the quality status of pesticides.
- b) Develop systematic linkages between state, regional, national, and international institutions of outstanding accomplishments in the field of plant protection technology.
- c) Function as a nodal agency/ forum for exchange of latest information on plant protection technology.
- d) Collect and collate information on plant protection technology for dissemination among the state extension functionaries and farmers.
- e) Gain overall insight into plant protection systems and policies together with operational problems and constraints at each step and stage.
- f) Identify, appreciate and develop modern management tools, techniques in problem-solving approaches and utilizing the mechanism of personnel management, resource management, input management and finally conflict management at the organization level.
- g) Develop need-based field programmes for training and retraining of senior and middle level functionaries for executing plant protection programmes and using training of trainer approaches to ensure maximum reach of programmes.
- h) Provide feedback to training programmes, conduct programme-oriented research in the area of plant protection, Integrated Pest Management, pesticide management, plant quarantine and pesticide delivery systems and residues.
- i) Serve as repository of ideas and develop communication and documentation services at national, regional and international level, in regard to the subject of plant protection management.
- j) Forge linkages with national and international institutions and create networks of knowledge sharing through a programme of institutional collaboration and employment of consultants.
- k) Provide policy support to the central government in various sectors of plant protection including IPM, pesticide management, plant quarantine, bio-security, SPS and market access issues.

Areas of focus under the scheme

The scheme –National Institute of Plant Health Management, in order to promote environmentally sustainable Plant Health Management practices in diverse and changing agro climatic conditions, will adopt the following strategies during XII Plan

- I. Education:** Offer Post Graduate Diploma, Concurrent Post Graduate Diploma Courses. The participants will be exposed to Agro Eco System Analysis based Plant Health Management, latest advancements in Pest Management such as Ecological Engineering for Pest Management, Pesticide Formulation and Residue Analysis, Pesticide Application techniques etc..

Further, in order to build the capacity of the students in specific areas through short term & medium term programmes, NIPHM shall offer following Diploma & Certificate courses to fresh graduates of Life Sciences /Agriculture /Horticulture /Veterinary Science streams. These programmes will also be open for PG students.

Diploma Programmes:

1. Biocontrol Input Production Management
2. Biosecurity & Incursion Management
3. Pesticide Management
4. Vertebrate & Structural Pest Management
5. Plant Health Engineering

Certificate Courses:

1. AESA based Plant Health Management
 2. Safe & Judicious use of Pesticides
 3. Urban Integrated Rodent Pest Management
 4. Vertebrate Pest Management
 5. Structural Pest Management
 6. Pesticide Formulation Analysis
 7. Pesticide Residue Analysis
 8. Instrumentation & Laboratory Standards
 9. Phyto Sanitary Treatments

The above programmes shall be subject to periodic review by the Academic committee.

II. Capacity building programmes;

Short and Long-term Training Courses and also organize National and International Workshops / Seminars on Plant Health Management and Plant Quarantine to:

- a. Enhance the skills of Master-trainers (extension functionaries) of governmental and non-governmental agencies, Directorate officials, Kisan Vikas Kendras, Public Sector / Commodity Boards (who are in agricultural sector with non-commercial objectives), and accredited agencies in matters of Agro ecosystem analysis based Plant Health Management with emphasis on Ecological Engineering (with experiential learning methodology), Plant Biosecurity and Quarantine, Pesticide Management, etc.
- b. The Institute shall function as a national academy of training for the officials of the Directorate of PPQ&S and organize special programmes such as – *Season Long Training Programmes on PHM, Induction Training for Freshly Recruited officers of the Directorate, Induction Programmes for inter- scheme transferees, Refresher Programmes*, etc. Similar programmes may also be extended to State Government officers as may be requested by the State Governments.
- c. Create awareness on the emerging challenges of sustaining agricultural production in the context of Climate Change.
- d. Create a pool of trained manpower in management of Vertebrate pests with focus on Rodents to minimize crop loss and also build capacity of Rural and Urban local bodies in Integrated Pest Management to prevent zoonotic diseases.
- e. Ensure Quality Control by skill upgradation of Central and State Pesticide Testing Laboratories and other stakeholders in pesticide analysis including newly registered pesticide molecules, methodologies and operation of instruments and equipments.
- f. Build a pool of trained resource personnel in residue monitoring to reduce pesticide risk and enhance the competitiveness of Indian farmers in domestic & export market.
- g. Build a pool of trained professionals in Fumigation Industry for adoption of best fumigation practices, to comply with International Phyto-Sanitary requirements, to support export of Indian agricultural commodities.
- h. Ensure adoption of appropriate Pesticide Application Technology to enhance efficacy and minimize residue, and enable safe & judicious use of pesticides.

(i) The course fee for different categories of participants shall be levied as follows:

Training cost Rs. 1350/day/participant (Junior Level Officer)	Training cost Rs. 1500/day/participant (Middle Level Officer)	Training cost Rs. 1750/day/participant (Senior Level Officer)
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Cost breakup is at Annexure I.

*The above costing is made taking into account the availability of funding for salaries. As and when a decision is taken that the Grant in Aid – Salaries is to be withdrawn, the training costs shall be linked to the then prevailing rates. The stated cost norms furnished in the Annexure is based on prevailing costs during 2013-14. **The rate of the costs shall increase by 3% every 2 years to compensate for inflation.***

III. Create and collate knowledge and forge systematic linkages, through MOUs, bipartite and multi-lateral agreements, with National and International Institutes to act as repository of ideas and create knowledge network in Plant Health Management with emphasis on IPM, Pesticide Management besides SPS issues at national level as well as for the South Asian Region.

IV. Provide project advisory services and technical consultancy for:

- a. Evaluating the bio-efficacy of both existing and new Chemical, Botanical and Bio-pesticides including Herbicides in the context of Integrated Weed Management.
- b. Evaluating various Programmes being implemented in areas relating to Integrated Pest Management including Rodent Management, Biosecurity, Plant Quarantine, Surveillance, Pesticide Residue Monitoring at national level, etc.
- c. Development and dissemination of cost effective and appropriate Agricultural Input Application Technologies.

V. Develop standards & systems and function as a Nodal Agency:

- a. To facilitate Pest Diagnostics, Pest Risk Assessment, Pest Surveillance and Residue Monitoring.
- b. For Certification & Accreditation on matters relating to Pesticide Residue Monitoring, Pesticide Quality Control and SPS.
- c. To serve as database management centre relating to pests & diseases, pesticide residues, SPS and market access issues.
- d. To facilitate web-enabled information dissemination in the areas of Plant Health Management, Biosecurity and Pesticide Management.

VI Undertake Policy analysis, Program oriented **Research / Evaluation Studies** in Plant Health Management including sustainability of native agro-ecosystems from invasion of alien species, Plant Quarantine, Plant Health in the context of Climate

Change to provide Policy support to Central and State Governments. Following will be major areas of focus of adoptive research programmes :

- i) Development and Validation of Farm level PHM packages/technologies based on AESA and Ecological Engineering approaches for major crops.
- ii) Development of field level technologies to manage both rodent and other vertebrate pests in different situations.
- iii) R&D for improving the designs of pesticide appliances, since the design of equipment impacts the health of the pesticide operator and can also play a significant role in environmental safety.
- iv) Evaluation studies of various agricultural programmes.
- v) Undertake Policy oriented research.
- vi) Participation in developing /reviewing national and international standards on phytosanitary measures, quarantine regulations and agreements.
- vii) Undertake commodity oriented studies to facilitate Market Access.
- viii) Undertake studies for establishing Pest Free Areas and Areas of Low Pest Prevalence.

VII Creation of new systems /facilities for plant health management

- i) Establish a nationwide network of Pest Surveillance System for early warning and pest alert system and a centralized National Repository on pests.
- ii) Creation of State of the art facilities which includes Video Conferencing facility established through NICNET, to facilitate close monitoring of integrated pest management and pest surveillance programmes.
- iii) Establishment of National level Pest Diagnostic Facility and network with regional level pest Diagnostic centres to supplement the pest surveillance programme . Facility will be helpful in training, data collation on pest and for advisory purposes.
- iv) Active role in the Centrally Sponsored scheme of All India Network Project on Pesticide Residue Monitoring.
- v) In order to promote Biological Control of pests establish a state of the art Biocontrol Laboratory and Biopesticides Testing Laboratory.
- vi) To promote appropriate pesticides application technology establish a Spray Technology Centre.
- vii) To validate the RPM technologies and develop new practices, a Rattery Centre to be established.

- viii) Upgrade the teaching aids, provide wi fi facilities in the campus and launch e-governance initiatives, and modernize the library.

VIII Provide consultancy services to public sector and private agencies

IX. International Collaboration:

Collaborate with International organizations in the areas of PHM, Biosecurity, Pesticides Management for synergizing Institute's knowledge base with advancements in the field and organize International Training Programmes (in collaboration with USDA/ CABI/Australia Biosecurity, etc). Capacity building programmes of SAARC countries shall also be undertaken as per directions of DAC.

5. Target beneficiaries---

NIPHM is mandated to organize programmes to enhance capacity and skill sets of Officers from the Government and employees of Public & Private Sector, Civil Societies, etc in the specialized fields of Plant Health Management, Pesticide Management, Plant Biosecurity & Quarantine, Vertebrate Pest Management, and Pesticide Application Technology. NIPHM will also undertake induction training programmes for the officers of the Directorate of PPQ&S as well as for the State Governments for their fresh recruited officers and transferees. Training will be provided to TOTs (Training of Trainers) at three levels (Senior, Middle and Junior levels), who in turn, will train the officers below them for proper implementation and trainer farmers for horizontal expansion of appropriate technologies. The target beneficiaries are:

Central & State Governments

- i) Pesticide Analysts of State Pesticide Testing Laboratories
- ii) Analysts of State Pesticide Residue Testing Laboratories
- iii) Quality Control Inspectors of State Depts. of Agriculture for pesticide sampling & monitoring
- iv) Agricultural & Horticultural extension functionaries of State Governments
- v) Plant Quarantine officials
- vi) New recruits of the Directorate of PPQ&S
- vii) Officers of the Directorate of PPQ&S transferred from one division to another
- viii) Agricultural Scientists / Faculties of SAUs / ICAR / KVKs for pesticide residue monitoring

Public / Private Sector, Industry, Civil Society

- i) IPM practitioners
- ii) Officers of Public Sector Companies such as Tobacco Board, Spices Board, etc
- iii) Pest Control Operators (service sector)
- iv) Exporters / Importers (mandatory for fumigation operation / forced hot air treatments)
- v) Pesticide Analysts (quality control & residue analysis) of Pesticide Industry
- vi) Fresh Graduates through Regular & Concurrent PGDPHM Programme
- vii) Progressive Farmers, farming community

6. Operationalization of the scheme

The Joint Secretary (Plant Protection) in the DAC will be the Nodal Officer for implementation of component of Plant Health Management- NIPHM under the submission on Plant Protection & Plant Quarantine. The Director General of the Institute will assist the JS(PP) in administering and steering the Institute's activities.

It was decided, when the scheme was approved during 11th plan, that plan funding for the institute will be provided for a period of 10 years from October 2008. The institute is expected to become substantially self-sustaining by middle of XIII Plan. Action has to be taken for full cost recovery of training, project or advisory activities undertaken for the Government, public and private sector to build the resources of the organization. It is expected that the government funding will come down in a phased manner over a period of time.

7. Management Councils

Scheme implementation and day- to- day monitoring will be done by DG. However, periodic review will be carried out by the Executive Council & General Council of NIPHM under the overall supervision of DAC. The annual accounts of the Institute will be audited by the office of Accountant General, Hyderabad as approved by CAG and DAC.

8. Release of funds under the scheme Funds flow on annual basis in the form of budgetary support as Grants-in-Aid (Plan) will be from DAC to NIPHM . The estimated outlay of funds requirement for the XII plan period totaling Rs 9000.34 lakhs is furnished in **Annexure-II.**

9. Training Activities to be undertaken by NIPHM during the XII Plan:

- i) Organize 120 programmes to train 1800 agricultural officers in AESA based PHM with specific reference to crops such as rice, cotton, pulses & vegetables, etc, where the use of chemical pesticides is quite significant with an intention to promote pest management

through increased reliance on biological control and minimize the use of the chemical pesticide.

- ii) NIPHM will play a major role in capacity building in plant quarantine, pest surveillance, pest diagnosis, pest incursion management, pest risk analysis, Phytosanitary treatments.. It is planned to organize 40 programmes and train 600 officers during the XII Plan.
- iii) Organize 38 capacity building programmes in Rodent/ Vertebrate Pest Management to train 570 officials in Vertebrate Pest Management to minimize the crop losses, both on field and in storage, and also play an active role in containing the spread of dreaded zoonotic diseases, both in rural and urban areas.
- iv) HRD in the area of 'Pesticide Application Technology' for Officers of various Central and State Govt. organizations as well as NGOs, KVKs, and Private sector on need basis(37 programmes).
- v) Initiate international training programmes on harmonized plant quarantine procedures, pest risk analysis, pest surveillance and emergency preparedness for plant pest incursion (as per requirement).
- vi) Capacity building of Insecticide Inspectors for sampling, enforcement of Insecticide Act 1968, Rules 1971 etc and interpretations of the analytical results,of pesticide analysts in initiation and maintenance of laboratory quality management standards, quality analysis with exposure to handling of highly sophisticated equipments for pesticide formulation and residue analysis(60 programmes and train 900 officers).
- vii) Organize 28 Induction Training Programmes and Refresher Training Programmes exclusively for the staff of the Directorate of PPQ&S and train 420 officials to provide the required grounding and equip them with specialized practical skills required for effective discharge of duties in the Directorate.
- viii) Capacity Building Programmes for the Private Sector / NGOs / Public sector Undertakings on payment basis(52 programmes).
Details of the training programs are at **Annexure III**

11. Brief of the activities to be undertaken during XII plan is at Annexure IV

12 Revenue generated (accrued) during XI Plan -

The Year wise Gross revenue generated (accrued) through various programmes of the Institute from 2009 to 2012 is furnished below:

1. 2009-10... Rs. 8.29 lakhs
2. 2010-11... Rs. 15.95 lakhs
3. 2011-12... Rs 100 lakhs (approximately)

Total **Gross Revenue accrued** during the XI Plan (from 2009 – 2012) is **Rs 124 lakhs approx.**

Plan of Action for XII Plan

In order to achieve the substantially self sustaining status by the middle of XIII Plan, it is proposed to organize sustainable revenue generating programmes. During the XII Plan, NIPHM is planning to undertake consultancy services, analytical testing services, increase the payment programmes and broad base the PG Diploma programmes to enroll students on concurrent mode. Research projects will also be undertaken by seeking funds from different agencies. In addition, through collaboration with USDA/ CABI/Australia Biosecurity, International Training Programmes (on payment basis) will be offered. Through these efforts, NIPHM intends to generate revenue as noted below:

Rs. in lakhs

Year	2012-13	2013-14	2014-15	2015-16	2016-17
Gross Revenue Generation	200	200	250	300	300

It is expected that the revenue generation will be stepped up during XIII plan. From the year 2019-20, to enable NIPHM substantially self finance its revenue expenditure (salaries & other revenues) the tariff for Government training programmes will be refixed (which are currently low) to ensure substantial cost recovery of training costs (cost of trainers +other costs) commensurate with market rates prevailing at that time. The quantum of assistance to be extended to NIPHM from 2019-20 will be taken up during the XIII Plan, taking into account the revenue generation potential from the year 2019-20.

Year wise phasing of recurring & non- recurring expenditure in XII plan*(Rs. in lakhs)*

Year of the Plan	Grant-in-aid Salaries	Grants-in-aid Revenue	Grants for Creation of Capital Assets	Total
2012-13	577.88	377.50	1030.85	1986.23
2013-14	570.57	526.00	1095.20	2191.77
2014-15	689.60	562.00	519.95	1771.55
2015-16	834.20	588.00	17.00	1439.20
2016-17	955.59	644.00	12.00	1611.59
Total	3627.84	2697.50	2675.00	9000.34

i) DETAILS OF PROPOSED TRAINING PROGRAMMES FOR XII FIVE YEAR PLAN

Year wise targets for XII Plan Period							
	COURSES	2012-13	2013-14	2014-15	2015-16	2016-17	TOTAL
I.	<u>On-Campus Courses</u>						
1.1	No. of courses for Extension functionaries	35	35	35	35	35	175
1.2	No. of persons to be trained	525	525	525	525	525	2625
II	<u>Off-Campus Courses</u>						
2.1	No. of courses for extension functionaries	10	10	10	10	10	50
2.2	No. of persons to be trained	150	150	150	150	150	750
III	<u>New Activities proposed under XII Plan</u>						
3.1	Induction & Refresher Training programmes for staff of Dte of PPQ&S	4	6	6	6	6	28
	Target days cost-recoverable activities	60	90	90	90	90	420
3.2	New Training activities						
	Programmes for Private Sector, NGO, PCOs, Quarantine agencies etc.	7	9	10	12	14	52
	No. of participants to be trained	105	135	150	180	210	780
3.3	Workshops on Rodents (impact and control options)	5	5	8	8	10	36
	No. of participants to be trained	75	75	120	120	150	540
3.4	Training for progressive farmers	4	5	6	9	10	34
	No. of participants to be trained	60	75	90	135	150	510

i) SUMMARY TARGETS FOR XII FIVE YEAR PLAN

	2012-13	2013-14	2014-15	2015-16	2016-17	Total
No. of Courses*	65	70	75	80	85	375
No. of persons to be trained	975	1050	1125	1200	1275	5625

ACTIVITIES PROPOSED FOR THE XII PLAN

1. **Training:** NIPHM will organize a total of 375 programmes for training 5625 officers / officials in the emerging areas of Plant Health and Biosecurity management, Biocontrol Agent Production, Pesticide Management, Phytosanitary & Forced Hot Air Treatment, etc as follows:
 - a) Organize 120 programmes to train 1800 agricultural officers in AESA based PHM with specific reference to crops such as rice, cotton, pulses & vegetables, etc, where the use of chemical pesticides is quite significant with an intention to promote pest management through increased reliance on biological control and minimize the use of the chemical pesticide.
 - b) NIPHM will play a major role in capacity building in plant quarantine, pest surveillance, pest diagnosis, pest incursion management, pest risk analysis, Phytosanitary treatments. It is planned to organize 40 programmes and train 600 officers during the XII Plan.
 - c) Organize 38 capacity building programmes in Rodent/ Vertebrate Pest Management to train 570 officials in Vertebrate Pest Management to minimize the crop losses, both on field and in storage, and also play an active role in containing the spread of dreaded zoonotic diseases, both in rural and urban areas.
 - d) HRD in the area of 'Pesticide Application Technology' for Officers of various Central and State Govt. organizations as well as NGOs, KVKs, and Private sector on need basis(37 programmes).
 - e) Initiate international training programmes on harmonized plant quarantine procedures, pest risk analysis, pest surveillance and emergency preparedness for plant pest incursion (as per requirement).
 - f) Organize 28 Induction Training Programmes and Refresher Training Programmes exclusively for the staff of the Directorate of PPQ&S and train 420 officials to provide the required grounding and equip them with specialized practical skills required for effective discharge of duties in the Directorate.
 - g) Capacity building of Insecticide Inspectors for sampling, enforcement of Insecticide Act 1968, Rules 1971 etc and interpretation of the analytical results of pesticide analysts in initiation and maintenance of laboratory quality management standards, quality analysis with exposure to handling of highly sophisticated equipments for pesticide formulation and residue analysis(60 programmes and train 900 officers).
2. Initiate international training programmes on harmonized plant quarantine procedures, pest risk analysis, pest surveillance and emergency preparedness for plant pest incursion.
3. Assist in developing / reviewing national and international standards on phytosanitary measures, plant quarantine regulations and agreements besides functioning as a policy support centre for Govt. of India -a new activity
4. Establish a nationwide network of Pest Surveillance System for early warning and pest alert system and a centralized National Repository on pests.

5. Creation of State of the art facilities which includes Video Conferencing facility established through NICNET, to facilitate close monitoring of integrated pest management and pest surveillance programmes.
6. Establishment of National level Pest Diagnostic Facility and network with regional level pest Diagnostic centers to supplement the pest surveillance programme, which will be helpful in training, data collation on pest and for advisory purposes.
7. Active role in the Centrally Sponsored scheme of All India Net-work Project on monitoring of Pesticide Residues.
8. Offer consultancy services to the State Pesticide Testing Laboratories (SPTLs) for getting NABL accreditation as per ISO 17025:2005.
9. Capacity Building Programmes for the Private Sector / NGOs / Public sector Undertakings on payment basis (52 programmes).
10. To promote appropriate pesticides application technology, establish a Spray Technology Centre.
12. R&D for improving the designs of pesticide appliances, since the design of equipment impacts the health of the pesticide operator and can also play a significant role in environmental safety.
13. Upgrade the teaching aids, provide *wi-fi* facilities in the campus and launch e-governance initiatives, and modernize the library.

Cost Norms[@] for NIPHM training Programmes**(Domestic Participants)**

.No	Particulars	Training cost- Rs.1350/day/participant (Junior Level officers)	Training cost- Rs.1500/day/participant (Middle Level officers)	Training cost- Rs.1750/day/participant (Senior Level Officers)
1	Room rent	250	375	500
2	Type of Accommodation	Non-A.C (Twin sharing)	A.C (Twin sharing)	A.C (Single occupancy)
3	Food	300	300	350
4	Training material	250	250	250
5	POL	100	100	100
6	Honorarium to Resource persons (Rs.500/session)	100	100	100
7	Institutional fee	350	375	450
Total		1350	1500	1750

[@] The cost norms is based on prevailing cost s during 2011-12. The reate of the costs shall increase by 3% every 2 years to compensate for increase in costs.

The breakup of training cost for Junior level ,Middle Level and Senior officers Level

Guidelines for the Central Sector Scheme Monitoring of Pesticide residue at National Level

The Department of Agriculture and Cooperation, Ministry of Agriculture is regularly monitoring the presence and levels of pesticide residues in food commodities and environmental samples under the central sector scheme, “Monitoring of Pesticide Residues at National Level”. The scheme was initiated during 2005-06 and is being implemented through Indian Agricultural Research Institute, New Delhi and has **23 participating laboratories (Annexure-I)** from the Ministry of Agriculture, Indian Council of Agriculture Research, Ministry of Health and Family Welfare, Ministry of Environment and Forest, Council of Scientific and Industrial Research, Ministry of Chemical and Fertilizers, Ministry of Commerce and State Agricultural Universities.

1. Objectives and Targets

- (i) To test residues of pesticides, their metabolites and other related contaminants in food commodities and environmental samples like soil and water across the country.
- (ii) To identify crops and regions in the country having preponderance of pesticide residue contamination in order to focus extension efforts for Integrated Pest Management (IPM) and Good Agriculture Practices (GAP) aimed at judicious use of pesticides.
- (iii) To strengthen infrastructure at Plant Quarantine Stations to assess the contamination of pesticide residues in imported food commodities.
- (iv) To check and certify presence of pesticide residues in food for export.

The projected targets for the scheme for XII Plan (2012-2017) are at **Annexure-II**

Pesticides residue data generated under the scheme are shared with State Governments and concerned Ministries/Organizations to initiate corrective actions and awareness building among farmers.

The Scheme is monitored by two Committees viz. Steering Committee and Technical Committee. The policy decisions related to the scheme are under the purview of the Steering Committee headed by the Joint Secretary (Plant Protection), Department of Agriculture & Cooperation (DAC) while the Technical Committee headed by the Assistant Director General (Plant Protection), Indian Council of Agriculture Research (ICAR) takes care of the technical issues related to the scheme including purchase of equipments, assessment/identification of laboratories and technical work plan. The Project Coordinating Cell of All India Network Project (AINP) on pesticide residues is the nodal centre for implementation of the scheme. The Network Coordinator, AINP, IARI, New Delhi is the Member -Secretary of the Committee and is the nodal person for the day to day implementation of the scheme related to financial and technical matters and submission of periodical reports, annual report and need based information to the DAC.

Participating laboratories are provided with highly sophisticated analytical equipments like, Gas Chromatograph(GC), High Performance Liquid Chromatograph (HPLC), Gas Chromatograph-Mass Spectrometer(GC-MS) and Liquid Chromatograph-Mass Spectrometer(LC-MS).

Participating laboratories collect samples of various food commodities such as vegetables, fruits, cereals, spices, pulses, milk, butter, irrigated water, fish, meat, tea etc. from across the supply chain such as Agriculture Produce

Marketing Committee (APMC) markets, retail points and Public Distribution System outlets (PDS). Irrigated water and soil samples are also collected from agricultural fields across the country. The samples are then analyzed for the presence of pesticides residues.

During the period (October, 2006 to March, 2013) out of the 84,486 samples of various food commodities such as vegetables, fruits, cereals, spices, pulses, milk, butter, fish, meat, tea, honey etc. and environmental samples like soil and water that were collected and analyzed, 1487 (1.76%) samples were found to contain pesticide residues above MRL.

During 2012-13, a total of 16,494 samples of food commodities including water have been analyzed, of which 436 (2.6%) samples were found to contain residues above MRL. Status of Pesticide Residues in Various Food Commodities and environmental samples is at **Annexure-III**.

The laboratories involved in the scheme have been chosen from the existing network of laboratories under various ministries, departments and institutes on the basis of their technical expertise in the area of pesticide residues analysis and their geographical location in order to represent different agricultural zones in the country. The commodities to be monitored by each laboratory are location specific with special emphasis on those widely consumed there. It is proposed to associate private laboratories accredited by the National Accreditation Board for Testing and Calibration Laboratories (NABL) and certain other laboratories functioning under Government Departments in the scheme to increase the coverage of monitoring of pesticides residues crop-wise, region wise and pesticide-wise.

Total financial outlay required to meet the expenditure for this scheme during XII Plan period (2012-2017) is Rs. 5009.37 lakhs and year-wise budget allocation is as under.
(Rs. in lakhs)

	2012-13	2013-14	2014-15	2015-16	2016-17	Total
Non-recurring	100.00	300.00	300.00	400.00	400.00	1500.00
Recurring	676.474	694.474	699.474	734.474	704.474	3509.37
Total	776.474	994.474	999.474	1134.474	1104.474	5009.37

It is pertinent to mention that no land is needed. No construction of building is envisaged in this scheme.

The cost estimate provided include 10-15% escalation in cost owing to variable factors viz. purchase of equipments , travelling costs , wage bills, cost of consumable like chemicals, glassware, training component, miscellaneous and incidental expenses of intermittent nature. However, new equipments like Gas chromatography-mass spectrometry (GC-MS)/ Liquid chromatography-mass spectrometry (LC-MS)/ Gas chromatography (GC)/ High performance liquid chromatography (HPLC), Uninterruptible power supply (UPS)/ Generator, homogenizer, rotary evaporator, air compressor is proposed to be procured at a cost of Rs. 1500 lakhs. A sum of Rs 2032.62 lakh is proposed for engagement of contractual manpower in the scheme. The year-wise outlay is given in **Annexures –IV, IV (a) & IV(b)**

There is no proposal to create new posts. However, contractual manpower for residue analysis will be hired on the ICAR pattern after the approval of Steering Committee.

A sum total of Rs 2032.62 lakhs is proposed for engagement of contractual manpower in the scheme. Rs. 337.62 lakhs is proposed as cost towards salary for contractual services engaged in NPQS, Rangpuri and RPQs, Mumbai & Chennai and Rs. 1695.0 is proposed under Grants-in-aid towards salary for contractual services .

Annexure-I

List of the participating laboratories under the central sector scheme, “monitoring of pesticide residues at national level”

1. Project Coordinating Cell, All India Network Project on Pesticide Residues, LBS Building, Indian Agricultural Research Institute, New Delhi
2. Dept. of Entomology, Punjab Agricultural University, Ludhiana, Punjab
3. ICAR Unit No.-9, BTRS Building, Anand Agricultural University, Anand
4. Dept. of Entomology, Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra
5. Dept. of Entomology, College of Agriculture, Kerala Agricultural University, Vellayani, Kerala
6. Division of Soil Sci. & Agril. Chemistry, Indian Institute of Horticulture Research, Hesaraghatta Lake Post, Bangalore, Karnataka
7. Dept. of Entomology, Rajasthan Agricultural University, Research Station, Durgapura, Jaipur
8. Acharya N.G. Ranga Agricultural University, E.E.I. Premises, Rajendranagar, Hyderabad, Andhra Pradesh
9. Dept. of Agricultural Entomology, Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu
10. Institute of Pesticide Formulation Technology, Sector-20, UdyogVihar, Gurgaon, Haryana
11. National Institute of Occupational Health, P. B. No. 2031, Meghani Nagar, Ahmedabad, Gujarat
12. Western Region Referral Laboratory, Department of Veterinary Public Health, Bombay Veterinary College, Parel, Mumbai, Maharashtra
13. MPEDA, MPEDA House, Panampilly Avenue, Kochi, Kerala

14. Pesticide Toxicology Laboratory, Indian Institute of Toxicology Research, Mahatma Gandhi Marg, Lucknow, Uttar Pradesh
15. Trace Organic Laboratory, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi
16. National Environmental Engineering Research Institute, Nehru Marg, Nagpur, Maharashtra
17. Regional Plant Quarantine Station, Haji Bunder Road, Sewri, Mumbai, Maharashtra
18. Regional Plant Quarantine Station, G.S.T. Road, Meenambakkam, Chennai, Tamil Nadu

19. AINP on Pesticide Residues, Directorate of Research, Research Complex Building, Kalyani, Nadia, West Bengal
20. Dept. of Entomology, Dr. Y.S.P. Univ. of Horticulture & Forestry, Nauni, Solan, Himachal Pradesh
21. National Plant Quarantine Station, New Delhi
22. National Institute of Plant Health Management (NIPHM), Pesticide Management Division, Rajendranagar, Hyderabad
23. Central Agriculture Research Institute (CARI), Port Blair, Andaman and Nicobar

Annexure-II

TECHNICAL PROGRAMME (2012-2017)

Projected samples to be analyzed

S.No.	Commodity	2012-13	2013-14	2014-15	2015-16	2016-17	Total
1.	Vegetables	6000	7200	7800	8100	8100	37200
2.	Fruits	2000	2800	3000	3100	3100	14000
3.	Rice	1000	1100	1200	1400	1400	6100
4.	Water	4000	4200	4400	4500	4500	21600
5.	Fish/crustacean/ meat/eggs	1600	1725	1725	1800	1800	8650
6.	Wheat	800	825	800	900	1000	4325
7.	Milk	650	650	650	700	700	3350
8.	Butter	650	650	650	650	650	3250
9.	Spices	550	550	550	550	550	2750
10.	Tea	300	300	300	300	300	1500
Total		17550	20,000	21075	22000	22100	102725
Private NABL accredited laboratory							
Pesticides/aflatoxin/heavy metal/antibiotics in food commodities & environmental samples		1900	2000	2100	2200	2200	10400
						Total	113125

Annexure-III

Status of Pesticide Residues in Various Food Commodities and environmental samples:

During the period April 2010 to March 2013, commodities which have frequently showed the presence of pesticides residues above MRL are given below:

Commodity	Samples analyzed	Samples above MRL	Pesticides which are found Above MRL	Commonly detected Non approved Pesticides
Vegetables	18,704	540 (2.9%)	Chlorpyriphos, Cypermethrin, Phorate and Ethion	Acephate, Profenophos, Quinalphos, Imidacloprid and Triazophos
Fruits	6,263	54 (0.86%)	Chlorpyriphos	Quinalphos, Profenophos and Cypermethrin
Spices	1,433	158 (11%)	Quinalphos and Cypermethrin	Dithiocarbamates, Profenophos, Chlorpyriphos and acetamiprid
Tea	566	7 (1.2%)	Ethion, Dicofol	Cypermethrin
Rice	2,422	61 (2.5%)	Chlorpyriphos and Quinalphos	Acephate and Cypermethrin
Wheat	2,107	42 (2%)	Cypermethrin	Parathion methyl and Quinalphos
Pulses	2,171	3 (0.14%)	Cypermethrin	Chlorpyriphos and Malathion

**XII Plan Year-wise Budget Outlay for the Scheme
“Monitoring of Pesticide Residues at National Level”
Consolidated (2012-2017) (Rs. in lakh)**

Code & sub-code	2012-13	2013-14	2014-15	2015-16	2016-17	Total
Computer Code-2401- Crop Husbandry						
107-Plant Protection 12-MONITORING OF PESTICIDE RESIDUES AT NATIONAL LEVEL						
01.12.12 – Foreign Travel Expenses	3.5	3.5	3.5	3.5	3.5	17.50
13 – Office Expenses	17.00	20.00	25.00	25.00	25.00	112.00
16 - Publication	0.20	0.20	0.20	0.20	0.20	1.00
20 – Other Administrative Expenses	1.25	1.25	1.25	1.25	1.25	6.25
21 – Supply & Material	20.00	20.00	20.00	25.00	25.00	110.00
28 – Professional Services	0	0	0	30.00	0	30.00
30 – Contractual Services	67.524	67.524	67.524	67.524	67.524	337.62
31 – Grants-in-Aid	649.00	864.00	864.00	964.00	964.00	4305.00
52 – Machinery & Equipment	15.00	15.00	15.00	15.00	15.00	75.00
Travel Expenses (T.E.)	3.00	3.00	3.00	3.00	3.00	15.00
Total	776.474	994.474	999.474	1134.474	1104.474	5009.37

Guidelines for the Strengthening and Modernization of Plant Quarantine Facilities in India

The World Trade Organization – Agreement on application of Sanitary and Phytosanitary Measures (WTO-SPS Agreement) facilitates movement of plants, planting materials globally. Increased volume of trade poses greater risks of introduction of exotic pests/diseases in the country.

Plant Quarantine regulatory measures derive legal sanctity from the Destructive Insects and Pests Act, 1914 (Act 2 of 1914). The purpose and intent of this Act is to prevent the introduction of any insect, fungus or pest which is or could be destructive to crops. Import of agricultural commodities into India is regulated by Plant Quarantine (Regulation of Imports into India) Order 2003 notified under Section 3 (1) of Destructive Insects and Pests Act, 1914. This Order is a significant step in harmonizing India's regulatory framework with the International Plant Protection Convention and internationally accepted standards and the tenets of the SPS Agreement of the World Trade Organization. Steps are also being taken to improve the entire gamut of quarantine activities and Phytosanitary border controls, related to import and export inspections, on-field surveillance for pests and vectors, treatment standards and processes, and certification methodologies. India has made imports of plants and plant materials subject to pest risk analysis to help protect its crops from the risks of introduction of alien pests. Efforts are also under way to improve the export certification processes and standards to ensure that the Phytosanitary certification provides adequate assurance of safety from quarantine and regulated pests and vectors, to our trading partners.

Plant quarantine operations in India are carried out by the Directorate of Plant Protection, Quarantine and Storage, which functions under the aegis of the Ministry of Agriculture

Objectives of the Scheme

- To prevent the introduction and spread of exotic pests that are destructive to the country by regulating the import of plants and plant products through adequate policy and statutory measures.
- To support India's agricultural exports through credible export certification.
- To facilitate safe global trade in agriculture by assisting producers, exporters and importers and by providing technically comprehensive and credible Phytosanitary certification.

Import

- Import of agricultural commodities into India is regulated by Plant Quarantine (Regulation of Imports into India) Order 2003 notified under Section 3 (1) of Destructive Insects and Pests Act, 1914. The amendments made from time to time are incorporated in this Order. This Order is available on web site “<http://plantquarantineindia.org/>”. All regulated pests have been mentioned in this Order.
- National Plant Protection Organization (NPPO) of India is the competent authority to certify freedom of the consignments from pests of quarantine concern for importing countries.
- Only those agricultural commodities which are listed in either of the Schedules V, VI, VII of PQ Order, 2003 are permitted to be imported into India.
- Agricultural imports are classified as:
 - (a) Prohibited plant species;
 - (b) Restricted species where import is permitted only by authorized institutions;
 - (c) Restricted species permitted only with additional declarations of freedom from quarantine pests and subject to specified treatment certifications; and (d) Plant material imported for consumption or industrial processing permitted with normal phytosanitary certification.
- A permit requirement is enforced on imports of seeds, including flower seeds; propagating material and mushroom spawn cultures..

Import permits

Regulatory features of imports include the following:

- Separate formats have been devised for applications for the issue of import permits and also for the permit letters issued for consumption purposes as opposed to those for propagative plant materials.
- Commercial imports of seeds of coarse cereals, pulses, oil seed, fodder crops and planting materials of fruit plant species require prior clearance.
- Applications for seeds and planting materials must be accompanied by (1) a registration certificate issued by the National Seeds Corporation or the Director of Agriculture or Director of Horticulture of the state government and (2) a certificate of approval of post-entry quarantine facilities issued by the designated inspection authority.
- Permits are to be issued within a maximum period of three working days of submission of an application.
- Pest risk analysis has been made a precondition for import of new agricultural commodities.

- Permits for import of soil or peat and for import of live insects, microbial cultures or biocontrol agents are to be issued only by the Plant Protection Adviser, the technical head of the plant quarantine service.
- Permits for import of germplasm, genetically modified organisms and transgenic material are to be issued by the Director of the National Bureau of Plant Genetic Resources, New Delhi.
- Issued permits are valid for six months. This may be extended a further six months.
- Permits are not transferable and no permits are to issued for landed consignments.
- Relaxations from the conditions of the new Order, necessitated by emergency or unforeseen circumstances, are to rest with the Ministry of Agriculture.
- A major feature of the plan is the establishment of a national pest risk analysis unit.
- PRA is a primary requirement of Plant Quarantine (Regulation of Import into India) Order, 2003 under Destructive Insects Pests Act, 1914 for allowing any import of plant and plant products into the country and this requirement is in line with International Plant Protection Convention (IPPC) which enjoins upon importing countries to conduct PRAs to prevent the entry of exotic pest and disease.
- India is carrying out PRAs as per the procedures and guidelines issued by the IPPC. Therefore, the overall process adopted by India is similar to the procedures followed internationally by most of the countries. India's import conditions are transparent and the process to get market access is well defined in the Plant Quarantine (Regulation of Import into India) Order, 2003, which is available on website www.plantquarantineindia.org. India always welcomes comments of the stakeholders before finalization of import regulations.

PSC Procedures (EXPORT)

- Phytosanitary certificate (PSC) can be obtained from any of the Plant Quarantine stations or the State PSC issuing authorities notified for this purpose.
- The details of phytosanitary procedures and all PSC issuing authorities list is available in the 'export' section at the home page of the website: <http://plantquarantineindia.nic.in>
- Exporters are advised to register themselves on-line on the above website as an exporter and thereafter apply on-line for obtaining phytosanitary certificate from a Plant Quarantine station.
- Uniform pre-printed stationery for issuance of phytosanitary certificate with security features is used for issuance of PSC by all Plant Quarantine offices in India.

- Issue of Phytosanitary Certificates (PSCs) for export of agricultural commodities is carried out as per International Plant Protection Convention (IPPC) of FAO.
- [List of Phytosanitary Certificate Issuing Public Officers notified by National Plant Protection Organisation](#) may be seen at the website www.plantquarantineindia.org.

The ongoing activities assigned under the scheme include:

- To issue import permits with additional declarations and special conditions to facilitate safe imports of agricultural products.
- To undertake quarantine inspection and laboratory testing of plants and plant material to ensure freedom from exotic pests.
- To undertake phytosanitary certification (for issuance of Phytosanitary Certificates (PSCs)); 150 Nos. of Officers from Central/ State/ UT Governments have been authorized for this purpose.
- To undertake fumigation/disinfestations/disinfections of commodities to control infestation/infection.
- To undertake certification of post-entry quarantine facilities and inspection of imported growing plants and plant material; 41 Nos. of Inspection Authorities have been designated.
- To support Export market access for India's Agriculture products from the phytosanitary point of view.
- To facilitate safe global trade in agriculture by assisting the producers and exporters by providing a technically competent and reliable phytosanitary certificate system to meet the requirements of trading partners.
- To provide Grants-in-aid to State PSC issuing authorities for equipping them with minimal equipments required for export inspection/certification and for establishing computer linkages with the Directorate of PPQ&S as per norms (Annexure-I).
- To provide Grants-in-aid to Designated Inspection Authorities for equipping them with minimal equipments required for Post Entry Quarantine inspection in respect of seeds and plants imported for propagation purpose as per norms (Annexure-I).
- Granting approval/accreditation of Treatment providers in line with the requirement of ISPM-15.
- To undertake PRAs of different agricultural commodities with respect to their import or export in relation to the countries concerned.

Present Setup:

- **36 Plant Quarantine Stations** (PQSs) and 21 extension/camp offices (**Annexure-II**) at sea ports, air ports and land frontiers under DPPQ&S enforce quarantine regulations so as to keep the exotic pests and diseases at bay. Out of them five stations are major, viz., National Plant Quarantine Station, New Delhi and Regional Plant Quarantine Stations at Mumbai, Chennai, Amritsar and Kolkata.
- All five major stations were **ISO certified** during 2008-09 for improving delivery of services. Tuticorin PQS has been ISO certified during 2010-11.
- **Online computerized plant quarantine system** has been launched in January, 2011 to provide online services to importers and exporters of agricultural commodities.
- **Round the clock (24x7) plant quarantine services** have been introduced at Chennai, Mumbai, New Delhi, Kolkata, Amritsar and Thiruvananthapuram. These services will be introduced at other PQSs in a phased manner
- **The Agricultural Biosecurity Bill** has been prepared for strengthening country's plant and animal quarantine system. The Bill has been approved by the Cabinet and has been introduced in Parliament on 11th March, 2013.
- Development of an integrated information management system
- An integrated pest risk analysis system and a national pest risk analysis unit for conducting integrated pest surveillance.
- An integrated phytosanitary border control system
- A national phytosanitary database.
- A national management centre for phytosanitary certification to continuously review the national standards for export phytosanitary certification.
- Establishment of advanced molecular diagnostic facilities at major plant quarantine stations for rapid pathogen detection
- Standardization of the export certification process so that uniform and credible certificates with a common format and seal are issued by all phytosanitary certification authorities, both in central and state governments, across the country
- Human resource development and skill upgrading or training programmes for scientists, researchers and others
- Production of guidelines for training of plant quarantine inspectors
- Production of guidelines for the development of new disinfestations techniques and vapour heat treatment of fruit fly host commodities

- Development of fumigants as an alternative to the ozone-depleting methyl bromide
- Development of international standards for phytosanitary measures
- Planned production of guidelines for accreditation of post-entry quarantine facilities and inspection.

Activities to be taken up during the XII Plan as under-

a) Development & Strengthening of facilities at existing 36 PQ Stations:

Development & Strengthening of existing 36 PQ stations include construction of buildings or upgrading the existing premises and hiring suitable accommodation, upgrading the equipment to carry out inspections and laboratory diagnosis to render quality phytosanitary services and to ensure that the staff manning all the stations is adequate and appropriately trained to perform phytosanitary activities to internationally acceptable standards.

b) Establishment of PQ Stations at the Notified Points of Entry:

To facilitate international trade, Ministry of Commerce has notified various points of entry either by air or sea or land frontiers. The Plant Quarantine (Regulation of import into India) Order, 2003 envisages that agricultural commodities imported into India are only allowed into India through the Points of Entry notified under this Order. Hence Ministry of Agriculture has also notified the entry points amongst them for allowing entry of agricultural commodities. In XII plan 16 new PQ stations will be established (Annexure-III) at the points of entry notified under the Plant Quarantine (Regulation of Import into India) Order, 2003 and amendments issued there under, so as to render the plant quarantine services effectively at all the points of entry.

The budget support for establishing 16 new PQ stations and strengthening existing 36 PQ stations is at **Annexure IV**.

c) Development of an Integrated Export Certification System:

Development of an integrated Export Phytosanitary Certification system to harmonize the on-going phytosanitary certification among Central/State Government authorities and other agencies to ensure that a valid and credible phytosanitary certificates are issued to meet the international agreements.

The activities involve development of a phytosanitary Export database to provide on-line information on importing country's phytosanitary requirements for a specific commodity; a national standard for accreditation of certifying officers based on a minimum level of technical skills or competencies required to undertake phytosanitary

certification, equipments and facilities specified in the standard; auditing requirements; training of staff on export inspection and phytosanitary certification; review meetings with phytosanitary certificate issuing authorities; developing programme links with State/Central phytosanitary certificate issuing authorities; operational manuals and work instructions preferable to ISO standards; and establishing National Phytosanitary Certification Management Centre.

d) Development of an Integrated Phytosanitary Border Control System:

Development of an effective phytosanitary-border control programme to ensure that all phytosanitary activities at all entry/exit points are harmonized and well coordinated with other departments and agencies involved viz., Customs/Posts/Port Authorities/Airlines and Shipping agencies, ICD, CFS etc.

The budget support for development of an integrated phytosanitary border control system shall include the cost of developing national standard on phytosanitary border control (including post-entry quarantine procedures and accreditation of nurseries and tissue culture facilities and auditing procedures) to ISO Standards, expert consultation for developing the standard, training programmes and public awareness programmes and establishment cost of National Phytosanitary Border Control Unit within plant quarantine system.

e) Development of an Integrated Information Management System:

Improvement of the information management system used by the plant quarantine service to meet organizational and client needs by way of free exchange of information. In fact an integrated information management is vital to quarantine policies and to meet information exchange requirements on quarantine regulations/procedures/guidelines/protocols and shall improve responding quickly to clients and other stakeholder enquiries and increasing the transparency of operations.

The budgetary support include the costs of computer hardware support to database centre, networking of PQ stations, cost of hiring services, maintenance costs, software costs, cost of development programme links and salaries of Data Manager and supportive staff thereafter.

f) Establishment of Molecular Diagnostic facilities:

Establishment of molecular diagnostic facilities at the five regional plant quarantine stations viz., Amritsar, Chennai, Kolkata, Mumbai & New Delhi for rapid and accurate diagnosis of plant pathogens using DNA probes and DNA finger printing.

The activities include developing protocols for molecular diagnosis of plant pathogens, procuring molecular diagnostic equipments such as PCR Unit, Gel documentation Unit, horizontal gel electrophoresis unit, micro centrifuge (table top), other supportive equipments & accessories and chemicals; training programmes for staff in molecular techniques for detection of plant pathogens and establishing a molecular diagnostic laboratory at the four regional centres.

g) Strengthening of Integrated Pest Risk Analysis System:

Implementation of science based pest risk analysis for the application of phytosanitary measures consistent with the WTO-SPS Agreement and the IPPC and international standards on pest risk analysis has been established during the XI Plan. These include fully documented systems and stakeholders consultations. This needs further strengthening to meet the future challenges in view of increased PQ activities in the country.

The activities mainly include a national PRA Unit (exclusively dedicated staff to work on PRA) within the Plant Quarantine System to continue the development of the PRA database, pest categorization activities, consultation with expert scientists of ICAR/SAUs/Commodity Research Organisation for undertaking detailed PRA, training of staff of PRA Unit and selected specialists to undertake PRA as per international standards. The training would involve an advanced level two-week course on pest risk analysis for a group of 15 scientists from PRA Unit and eight fellowships for PRA scientists from PRA Unit to undertake intensive two-month PRA course at post-graduate level at an appropriate university or regulatory agency in one or more developed countries.

h) Strengthening of Integrated Pest Surveillance System:

A national integrated plant pest surveillance system in India to ensure early detection of introduced pests, to provide reliable data for Pest Risk Analysis, monitor pest status, and develop pest free areas to support market access has already been established in the XI Plan. Now, the demand of importing country for the agricultural commodities

grown in particular pest free area has increased . Respective stake holders engaged in production of such commodities need to be supported by providing technical information.

The activities include establishing a Coordinated Unit within the Plant Quarantine System (as a regulatory agency, development of a national standard on pest surveillance in close collaboration and cooperation with relevant agencies (ICAR/SAUs/State Governments/Commodity Boards), workshop on pest-free areas and other related phytosanitary standards for surveillance coordinators, developing a fully documented system for data gathering from surveillance operations,. developing software package for information storage, retrieval, analysis and mapping, linking of all surveillance information gathering systems to the National Phytosanitary Database and training of staff involved in field operations, survey planning, methods, documentation systems etc. of surveys to international standards.

i) Strengthening of Human Resource Development (HRD) Cell:

Capacity development in Plant Quarantine is of paramount importance in fast changing scenario of global trade in competitive international market under **WTO- SPS**. It is imperative to upgrade the skill and knowledge of all involved in this area for effective implementation of phytosanitary regulations and compliance under SPS agreement as well. The phytosanitary measures are being stream lined and harmonized as per international standards/guidelines developed by IPPC. Hence, a mechanism for periodical trainings/refresher trainings on phytosanitary issues including pest diagnostics, samplings, international standards/guidelines etc. are required. Accordingly, a Human Resource Development Cell for organizing trainings, seminars, workshops etc. on the phytosanitary issues at domestic and international level has been established in the XI Plan. It has been observed that the HRD programme has been successful tool for updating the skill and knowledge of the PQ manpower. It is, therefore, desired to strengthen the HRD Cell to keep momentum of activities

j) Strengthening of X-Ray Baggage Scanners (organic) at the International Terminals of Major Airports:

X-Ray baggage scanners (organic type) at the international terminals of five major airports viz., Delhi, Chennai, Kolkata, Mumbai, Bangalore has already been established for detection of plants and plant products clandestinely imported through passenger baggage's.

The activities include procurement of X-Ray baggage colour scanners (organic type) and positioning the same at the arrival hall of international terminals of major airports and imparting training to plant quarantine staff in baggage screening, developing of procedural manual for baggage screening, annual maintenance of scanners, calibration and validation. This facility will be established at four other stations viz., Ahmadabad, Bangalore, Cochin, Hyderabad.

k) Strengthening of Taxonomy Unit:

The global trade in agriculture has increased under WTO-SPS regime due to liberalization. Therefore, it is imperative to undertake faster plant quarantine inspection and clearance. At times, it is observed that various pests and diseases are intercepted in the imported plants and plant material which requires its identification to conclude the level of risk associated with it for making a decision for its release/ treatment or otherwise. Hence, a centralized system/unit as Taxonomy Unit is proposed to be established at Hqrs., Faridabad for identification of pests at faster pace to enhance the decision making by the operational staff at port of entries. The Unit will constitute experts in a field of Entomology, Plant Pathology and Weed Science alongwith supporting staff for identification of the pests/diseases. Various laboratories in the discipline of Entomology, Pathology, Weed Science have been established with modern equipments and other infrastructures.

It requires further strengthening with the establishment of specialized laboratories particularly within the plant pathology viz., plant virology, plant bacteriology including mycoplasma and mycorrhiza with the support of manpower and laboratory equipments. A laboratory of Nematology cell is also required to strengthen the activities of Taxonomy Unit.

1) Law and RTI cell, administrative cell will be established.

Financial implication

The financial implication activity wise is at **Annexure V**. Recurring/non-recurring revenue expenditure and capital outlay of XII Plan is to the tune of **Rs.14964.00 lakh** and the year wise details are available in **Annexure- VI**.

Norms for release of Grant in aid to state PSC issuing authorities and Designated Post Entry Quarantine Inspection Authorities

- i. The funds under Grants-in-aid shall be kept at the disposal of the Directorate of Plant Protection, Quarantine & Storage.
- ii. The Grant in aid to Designated Inspection Authorities for post entry quarantine shall be released to the concerned institute of ICAR/SAUs for post entry quarantine on case-to-case basis through the head of the institution.
- iii. The identified DIA for the concerned activity i.e. PEQ shall submit a self-contained proposal along with the expenditure involved to carry out the specific activity.
- iv. 50% of the proposed expenditure will be released at the time of approval of the proposal and the remaining immediately after the completion of assigned task and submission of the report.
- v. The Grants-in-aid to the State PSC issuing authorities for strengthening the export inspection/ phytosanitary certification and for establishing computer linkages with the Directorate of PPQ&S shall be provided through the State Government (the concerned Director of Agriculture/Horticulture) for utilization by the respective notified Phytosanitary Certificate Issuing Authority based on the past performance of the Phytosanitary work carried.

ANNEXURE-II

List of Existing Plant Quarantine Stations/extension offices (57) and their categorization based on the current PQ activities

Category I Stations

1. Agartala
2. Guwahati
3. Lucknow*
4. Okha*
5. Mundra#
6. Raxaul
7. Sanauli
8. ICD Sanand, Ahmadabad#
9. Banbasa
10. Rupaidiha
11. Verawal*
12. Pondicherry (Karaikal)#
13. Machalipattnam*
14. Cuddalore#
15. Jogbani
16. Krishna Pattinam#
17. Karwar#
18. Thiruvananthapuram (Vizhinjam)*
19. Attari-Wagah Border – Rly. Stn. (Working unit under RPQS, Amritsar)
20. Amritsar Rly. Stn. (working unit under RPQS, Amritsar)
21. Air Cargo, Delhi Airport (working unit under NPQS, Delhi)
22. Calicut Airport
23. Paradeep*
24. Haldia#
25. Pipavav#
26. Coimbatore#
27. Baghdogra Airport#
28. Cochin Airport#
29. Slamabad#
30. Chakandabagh#

Category II stations

31. Panitanki
32. Kalimpong
33. Trivendrum
34. Triuchirapalli
35. Jamnagar#
36. Moreh#
37. Gopalganj*
38. Bhavnagar
39. Air Cargo, Mumbai (working unit under RPQS, Mumbai)
40. Air Cargo, Kolkata (working unit under RPQS, Kolkata)

41. Mangalore
42. Kakinada
43. ICD Tuglakabad (working unit under NPQS, Delhi)

Category III Stations

44. Vishakhapatnam
45. Tuticorin
46. Cochin
47. Bongaon
48. Hyderabad
49. Attari-Wagha Border – LCS (working unit under RPQS, Amritsar)
50. Nava Sheva

Category IV Stations

51. New Delhi
52. Amritsar
53. Chennai
54. Kolkata
55. Mumbai
56. Kandla (only for consumption purpose)
57. Bangalore

Station made functional by deputing staff from other stations.

*** Stations under process of establishment**

ANNEXURE-III

List of New Plant Quarantine Stations (16) proposed to be established during XII Plan Period at the notified points of entry and their categorization based on the quarantine activities likely to be handled.

Region	Seaport/Air port	Category I	Category - II	Category - III	Category - IV
North Region New Delhi	Airport terminal	Jaipur	--	--	--
North Western Region Amritsar	Land Frontiers	Munabao-khokhrapar (Railway)	--	--	--
Western Region Mumbai	Seaport	1. Mandavi 2. Navlakhi		--	--
Southern Region Chennai	Seaport	1. Alleppy 2. Beypore	--	--	
Eastern Region Kolkata	Seaport			--	--
	Land Frontiers	1. Gojhadanga-Basirhat, North 24 Parganas, West Bengal 2. Mehdipur, Malda, West Bengal 3. Indian Hilli, NorthDinajpur, West Bengal, 4. Changrabandha-Coach Bihar, West Bengal 5. Fulbari (Siliguri), Jalpaiguri, West Bengal 6. Jaigaon-Phuentosholing Border Jalpaiguri, West Bengal 7. Pashupati Fatak-Sukhiapokhari, Darjeeling, West Bengal 8. Galgalia-Border Kishaganj, Bihar 9. Nathu-la Border (Changu Lake) 10. Gede Road (Rly. Stn)		--	--

ANNEXURE IV**Requirement of funds under the Capital Head during XII Plan (2012-17)****A. Land & Building Cost for the existing PQS's :**

Category	No. Stations to be covered during the Plan period	Unit cost of land & building (Rs. In lakh)	Total cost of land & building (Rs. in lakh)
Category I (Amongst PQS, Agartala, Guwahati, Raxaul, Sanauli, Banbasa, Rupadiah and Jogbani)	06	60	360
Category II (Amongst Panitanki, Jamnagar, Kalimpong, Trivendrum, Triuchirapalli, Nava sheva (JNPT), Hyderabad, Haldia, Pipava)	06	150	900
Category III (Amongst Kandla, Visakhapatnam, Tuticorin, Banglore, Cochin)	04	Kandla – 300 Vishakhapatnam – 100 Tuticorin – 200 Cochin – 100 Bangalore - 500	1200
TOTAL	16		2460

B. Land & Building Coast for the new proposed PQS's :

Category	No. Stations to be covered during the Plan period	Unit cost of land & building (Rs. In lakh)	Total cost of land & building (Rs. in lakh)
Category I (Amongst Okha, Beypore, Pondicherry, Karwar, Paradeep, Alleppy, Machlipatinam, Moreh, Vizhinjam and Haldia)	03	40	120
Category II (PQS, Mundra, Ahmedabad)	02	70	140
TOTAL	05		260

Summary of requirement of funds under Capital (Major Works)**during XI Plan**

Particulars	Total Requirement (Rs. in lakh)
Cost of land and building for the existing PQ Stations	2460
Cost of land and building for the new proposed PQ Station	260
Total:	2720

Details of Equipment requirements for strengthening and modernizing Plant Quarantine facilities (existing and new stations) proposed under 12th Plan

Summary of Statements of Equipments Proposed

Estimate of equipments for the existing PQS's:

Category (List of equipments attached)	Unit cost per station in Rs.	No. of Stations in each category	Total cost in Rs.
Category I (Agartala, Guwahati, Raxaul, Sanauli, Banbasa, Rupadiah, Jogbani & Calicut)	625,220	07	43,76,540
Category I – Strengthening of PQS, Attari Rly. Stn., ICD Tuglakabad, Air Cargo (Delhi Airport)-Being attached uit only few equipments are to be procured.	232,470	05	11,62,350
Category II – Strengthening of PQS, Panitanki, Kalimpong, Trivendrum, Tiruchirapalli, Bhavnagar, Hyderabad, Attari Wagah Border (LCS), Air Cargo (Mumbai) & Air Cargo (Kolkata)	700,000	09	63,00,000
Category III – Strengthening of PQS, Kandla, Vizag, Tuticorin, Bongoan & Cochine.	1,200,000	05	60,00,000
Category III (PQS, Bangalore)	6,507,725	01	65,07,725
Category IV- Strengthening of RPQS, Chennai, Mumbai, Kolkata & Amritsar	1,400,000	04	56,00,000
TOTAL:		31	2,99,46,615

Estimate of equipments for the new proposed PQS's (31):

Category (List of equipments attached)	Unit cost per station in Rs.	No. of Stations in each category	Total cost in Rs.
Category I (Agra, Lucknow, Mandvi, Okha, Nevlakhi, Verawal, Mundra, Ahmadabad, Alleppy, Beypore, Pondicherry, Machilipatnam, Cuddalore, Krishnapattinam, Karwar, Thiruvanathapuram, Paradeep, Haldia, Gopalpur, Gojhadanga, Mehdipur, Indian Hilly (west Dinajpur), Changrabandha, Fulbari, Phuentoshling, Pashupati Fatak, Galgalia Border, Nathula By Pass	625220	28	1,75,06,160
Category II (Jamnagar, Moreh, Gopalganj)	1,7,62,775	03	52,88,325
TOTAL:		31	2,27,94,485

Total Estimates of equipments proposed for XII Plan :

Particulars	Total cost in Rs.
Existing PQ Stations	2,99,46,615
New Proposed PQ Stations (31 Nos.)	2,27,94,485
Four X-ray baggage scanner (Organic type) @ Rs. 35 lakhs per unit	14,000,000
Total	6,67,41,100

Proposed activities along with Budget during 12th Five Year Plan (2012-2017)

S. No.	Particulars of Programmes/Activities	12 th Plan Proposal (Rupees in Lakh)
	Budget outlay for Scheme 2- Strengthening & Modernization of PQ Facilities	
A.	Continuance of regular activities/Ongoing activities	
1.	Action Plan - Activities – Recurring expenditure	
1.1	Strengthening of existing PQ stations and Headquarters a) Development & Strengthening of facilities at existing PQ Stations b) Development of an Integrated Export Certification System c) Development of an Integrated Phytosanitary Border Control System d) Development of an Integrated Information Management System e) Establishment of Molecular Diagnostic facilities f) Strengthening of Integrated Pest Risk Analysis System g) Strengthening of Integrated Pest Surveillance System h) Strengthening of Human Resource Development (HRD) Cell i) Strengthening of X-Ray Baggage Scanners (organic) at the International Terminals of Major Airports j) Strengthening of Taxonomy Unit	7498
1.2	Non Recurring Expenditure Minor works – Motor Vehicles – Machinery & Equipment - Grants in aid (C.3601) – Capital (D.4401)-	235 215 550 137 1375
1.3	Additional Heads Training head – Library head –	600 59
	Total Expenditure on ongoing activities	10669
B.	New Component of Activities	
2.	Action Plan - Activities – Recurring expenditure	
2.1	New Components a) Establishment of PQ Stations at the Notified Points of Entry b) Law & RTI Cell c) Administrative Cell d) Strengthening of Integrated Pest Risk Analysis System e) Strengthening of Integrated Pest Surveillance System f) Strengthening of Human Resource Development (HRD) Cell g) Strengthening of X-Ray Baggage Scanners (organic) at the International Terminals of Major Airports h) Strengthening of Taxonomy Unit	2896

2.2	Non Recurring Expenditure	
	Minor works –	120
	Motor Vehicles –	95
	Machinery & Equipment -	235
	Grants in aid (C.3601) –	60
	Capital (D.4401) -	590
2.3	Additional Heads	
	Training head –	280
	Library head –	19
	Total Expenditure on new activities	4295
	Grand Total (A+B)	14964

ANNEXURE-VI

TOTAL BUDGET OUTLAY FOR ONGOING AND NEW ACTIVITIES OF THE SCHEME " STRENGTHENING & MODERNIZATION OF PLANT QUARANTINE FACILITIES" FOR THE 12TH PLAN PERIOD (2012-17)							
Code	Sub-Head	Year wise Phasing of Outlay					Total (Rs. In Lacs)
		2012-13	2013-14	2014-15	2015-16	2016-17	
A - Budget Outlay for Ongoing Activities							
	A. Recurring						
10501	Salaries	830	840	950	1670	1928	6218
10502	Wages	5	5	7	7	8	32
10503	Overtime Allowance	5	5	7	7	8	32
10505	MT	17	21	24	29	33	124
10511	Domestic Travel Expenses	102	110	115	122	127	576
10512	Foreign Travel	24	35	47	55	63	224
10513	Office expenses	165	225	255	272	295	1212
10514	Rent/ Rate/Taxes	115	150	175	187	190	817
10521	Material & Supplies	20	22	25	26	29	122
10516	Publication	3	3	4	5	5	20
10520	Other Administrative Expenses	17	20	28	30	35	130
10526	Advertisement & Publicity	2	3	4	6	6	21
10528	Professional Services	30	34	34	34	39	171
10530	Contractual Services	90	95	130	140	160	615
10531	Grants- in aid	15	15	15	15	20	80
Total of A :		1440	1583	1820	2605	2946	10394
	B. Non recurring						
10527	Minor works	60	65	75	75	80	355
10551	Motor Vehicles	50	60	60	65	75	310
10552	Machinery & Equipment	140	140	155	170	180	785
Total of B:		250	265	290	310	335	1450
50031	<i>C. 3601 - Grants - in - aid</i>	32	35	40	45	45	197
10553	<i>D. 4401-Capital</i>	325	360	395	405	480	1965
Grand Total (A+B+C+D):		2047	2243	2545	3365	3806	14006
	Training Head	160	170	175	185	190	880
	Library Head	11	14	16	18	19	78
Grand Total		2218	2427	2736	3568	4015	149,64

Total recurring expenditure – Rs. **103, 94.00** lakhs

Total non-recurring expenditure – Rs. **1450.00** lakhs

Norms/Guidelines for, “Strengthening and Modernization of Pest Management Approach in India”

“Strengthening and Modernization of Pest Management Approach in India” is a central sector scheme having following main components:

(a) Integrated Pest Management: Integrated Pest Management is an environment friendly approach to pest managements. It encompasses pest control techniques such as cultural, mechanical and biological with minimum dependence on chemical pesticides. IPM related activities are being implemented through 31 Central Integrated Pest Management Centres (CIPMCs) established in 28 States and one Union Territory. Activities under IPM are:

(i) **Human resource development** (HRD) through Farmers’ Field Schools (FFSs), **Season Long Training Programmes (SLTPs), Short Duration Training Programmes** including refresher courses: CIPMCs organize FFSs in fields to create awareness among farmers. Under the HRD programme, CIPMCs organize short duration courses of two days and five days for pesticides dealers/ NGOs/ Graduates/Post-graduates/Pvt. Entrepreneurs and progressive farmers. They also organise Season Long Training (SLT) programmes on major agricultural/ Horticultural crops for extension workers of the States Govts. Cost norms for organizing FFSs , 5and 2 days training program and season long training program are provided in **Annexure I(a) to 1(d)**. Experience shows that there is no significant locust activity from January to May. During this period LWO staff can be utilized for conducting crop pest surveys and Farmers Field Schools for crops like Spices, vegetables, Pulses and fodder crops etc. to popularize IPM activities.

(ii) **Production and release of bio-control agents** by Central Integrated Pest Management Centres (CIPMCs). Funds will also be provided to state bio – control labs (SBCLs) for production of bio- control agents. Funding pattern & list of equipments is at **Annexure II**.

(iii) **Conservation and augmentation** of natural enemies of pests.

(iv) **Survey and monitoring** of insect-pests and diseases in important pest prone crops. Emphasis will be given on e-pest surveillance which enable early detection & quick transmission of survey data / information from field to the base stations, equipped with necessary hardware and software for rapid processing and decision making.

(v) Creation of Emergency Mitigation and preparedness Cell for Emerging Pest Problems:

An emergency preparedness plan with detail contingent plans will be prepared at least at regional CIPMCs to combat the threat of emerging pests effectively. The contingent plan will be prepared every year in advance and will include activities like surveillance for early detection of pests, creation of pest alert mechanism, training of stake holders, pest risk analysis, deployment of resources required for this purpose and managerial operational work.

(vi) Establishment of Pest Diagnostic Units at five regional CIPMCs:

New invasive pests, new strains of existing pests require early detection and identification of steps to be taken to eradicate them before the pest gets established and poses threat to our bio security. Hence, pest diagnostic units at least at five regional CIPMCs will be set up. A provision of Rs 3.44 crore is proposed for this purpose .

(vii) Data Management cum Pest Forecasting Unit

A pest surveillance data management system is required to be established for pest forecasting and release of pest advisory both at CIPMC level and at Head Quarters level during 12th five year plan.

(viii) Rodent Pest Management :

States sometimes demand funds for rodent management when they face rodent attacks. Funds can be provided for capacity building , awareness creation and rodent control campaigns. Cost break up of each component under Rodent Pest Management will be same as for other pest management programme as at Annexure – I(a) to (d).

(ix) A **coordination cell** for IPM will be setup for coordination with Research & Extension Agencies and Other stakeholders.

(x) **CIPMC buildings**

Office-cum-bio-control laboratory buildings will be constructed at CIPMCs, Guwahati (Rs.1.75 crores.), Indore (Rs.1.75 Cr.), Sriganaganagar (Rs.1.77 Cr.), where buildings are already available. Four new CIPMCs are proposed at Jaipur (Rajasthan), Agra (Uttar Pradesh), Nasik(Maharashtra) and Vijayawada (Andhra Pradesh) to increase the reach and coverage of IPM in these states.

(xi) **Outsourcing of Services**

Services like cleaning of laboratory cum office building, premises/ campus, horticulture work, lab equipment/ glass wares, lab wastes etc and watch & ward duty of all 35 CIPMCs (31 existing & 4 proposed new CIPMCs) are proposed to be outsourced through service providers during 12th Five year plan.

(b) **Locust Warning Organization (LWO)** is responsible for monitoring and controlling desert locust over 2.00 lakh sq km in Scheduled Desert Area (SDA) in Rajasthan, Gujarat and Haryana.

(c) **Implementation of Insecticides Act(IIA):** Pesticides are regulated under the Insecticides Act, 1968 (the Act) and Insecticides Rules, 1971 (the Rules). Implementation of Insecticides Act is through following setups:

(i) **Central Insecticides Laboratory** was set up under Section 16 of the Act with major objectives of pre and post registration verification of properties, performance and hazards associated with pesticides.

1. **Online Central Pesticides Analysis Information System(CPAIS)** is proposed to be launched in the XII Five Year Plan.
2. **Codex Unit** will be created to coordinate with different organizations/institutions/ministries and to prepare national views/ response on various codex matters arising out of WTO – SPS agreement on Agriculture.

3. Existing **animal house** will be modernised in conformity with CPCSEA and GLP norms to obtain GLP certification.
4. A provision has been made for **safe disposal of hazardous chemical** waste through incinerator during the XII Plan period (2012-17).

(ii) **Central Insecticides Board & Registration Committed (CIB& RC) :**

Central Insecticides Board was constituted under Section 4 of the Act advises Central and State Governments on technical matters arising out of administration of this Act and issue of safety to human beings or animals from manufacture, transport, sale, storage usage of pesticides. **Registration Committee (RC)** constituted under Section 5 of Insecticides Act, 1968, scrutinizes formulae of pesticides, verify claims regarding efficacy and safety to human beings and animals, specify doses, and precautions .Registration Committee registers pesticides under Section 9 of Act after verifying their efficacy and safety to human beings and environment.

1.Creation of new cells in CIB&RC Sectt : - Export registration cell, Biopesticides registration cell, legal cell, Environment Impact study cell, Compliance Monitoring Cell , Archive Management Cell for safe keeping and easy retrieval of records, e-Management Cell to maintain e-system and implement e-governance will be created during XII plan.

2. Housekeeping Services and security services will be outsourced. Management of Existing Record will be outsourced to digitize and classify them for easy retrieval, efficiency and space consummation. Provision has been made for renovation of Sectt Building for efficient utilization of space to meet the growing needs of existing and the proposed staff and for updating working and communication facilities, necessary to keep pace with development outside and enhance efficiency.

(iii) **Regional Pesticides testing Laboratories (RPTLs) and State Pesticide Testing Laboratories (SPTLs) :** - Efforts will be made to set up new

SPTLs in States/ UTs which do not have SPTL and to strengthen quality control testing facilities in States already having SPTLs. Grant in aid to the tune of Rs 95 lakh will be provided for setting up of SPTL, viz: Rs 50 lakh for equipments and Rs 45 lakh for building. List of equipments for setting up an SPTL is at **Annexe –III**.

(iv)Techno-legal Cell- Techno-legal Cell co-ordinates the work of two Regional Pesticides Testing Laboratories (**RPTLs**), established by the Central Government to supplement the resources of States/UT in monitoring quality of pesticides, where either State Pesticides Testing Laboratories (**SPTLs**) do not exist or where facilities for testing of all types of pesticides do not exist. It also facilitates in strengthening and setting up of new SPTLs as also the notification of the Central Insecticide Inspectors, co-ordinating their work, guide and help them in initiation of proceedings against the offenders.

A **Task Force** will be created to conduct raids on suspected offenders to check illegal/ spurious imports as well as manufacturing /selling of spurious pesticides/ Biopesticides/ bio-products in the market.

The cell will facilitate **creation of facilities for Bio-pesticides testing** in RPTLs, 5 regional CIPMCs and SBCLs / SPTLs.

List of equipments for bio-pesticide testing for SPTLs/SBCLs/ RPTLs/ CIPMCs is at **Annexe-IV(i) and (ii)**.

(v) Setting up of a National Pesticide Reference Repository (NPRR) to provide pesticide reference standards to pesticide testing laboratories to improve quality of testing. This laboratory will initially obtain technical grade pesticides, purify, standardize and supply them to pesticides testing laboratories in the country. Subsequently, it will synthesize all the technical grade pesticides. It will standardize primary and secondary standards and supply reference standards/Certified Reference Material (CRM) to State

Pesticides Testing Laboratories or Private Laboratories as and when required.

(vi) **Setting up of a National Pesticide Investigational Laboratory (NPIL)** in context of growing concern about spurious pesticides, including bio-pesticides, adulterated with unauthorized chemicals. NPIL would not only check such products but would also audit functioning of pesticide testing laboratories. Functions of NPIL would be detection of lacing of biopesticides (microbial pesticides) with chemical pesticides, detection of pesticides imported in the garb of other chemicals/intermediates by analyzing the samples, sent by Customs, verification of veracity of analysis of samples of pesticides by the Insecticide Analysts in all pesticides testing laboratories, development/validation of methods of analysis of newly introduced molecules and to provide them to all pesticides testing laboratories in the country & support to Environment Impact Study Cell of the RC.

(vii) Funding pattern for XII Plan for the Scheme is as under:

(Rs. in crore)

	Component	Outlay (crore)
A	Promotion of Integrated Pest Management (IPM)	82.04
B	Locust Control and Research	6.01
C	Implementation of Insecticides Act	94.95
	Total	183.00

Components	Recurring	Non-recurring	Total (Rs. in Cr)
A. IPM	75.06	6.98	82.04
B. LCR	3.41	2.15	6.01
C. IIA	59.62	35.33	94.95
Grand Total	138.09	44.47	183.00

Detailed cost break up of each of the three components is at **Annexure-V**.

(viii) Activity Map under SMPMA for effective devolution of funds, functions & functionaries to Panchayati Raj Institutions is at **Annexure VI**. This will bring in more effective delivery of public goods and services.

Annexure I (a)

Norms for expenditure on One Farmers Field School IPM demonstration-cum-training for 30 farmers and 5 Apprentice Officers (AEOs/NGOs/Lead farmers etc. for one FFS of duration of 14 days) **

	Item	Amount (Rs.)
1.	Refreshment @ Rs. 20/- per trainee for 14 number of programmes (30x20x14)	Rs. 8,400
2.	Expenditure on POL/hiring of vehicles	2,500/5,000*
3.	Contingent expenditure, Banners and refreshment for inaugural function of FFS	Rs.1,800/-
4.	Distribution of (i) Cost of training material including IPM kit @ Rs. 150/- per kit = Rs. 4,500 (ii) Cost of pheromones/biopesticides, emergency spray, other relevant training materials including planting of at least 100 neem trees. = Rs. 2000	Rs. 6,500
5.	Distribution of IPM literature and agricultural implements for cultural/mechanical practices for 30 trainees @ Rs. 100 per trainee	Rs.3,000/-
6.	Farmers' Field Day (one day) Miscellaneous contingent expenditure including refreshment	Rs.1,500/-
7.	Honorarium for two facilitators/trainers @ Rs. 1500/- each for complete season	Rs. 3,000/-
	Total expenditure for conducting one FFS by State Govts./SAUs/KVKs	Rs. 26,700
	Total expenditure for one FFS by NGOs/Private bodies	Rs. 29,200

N.B. * Contingent expenditure on POL/hiring of vehicles will be Rs. 2,500/- per FFS for Government and Public Sector Organization viz., State Government/KVKs/SAUs/ICAR Institutes and Rs. 5,000/- for NGOs and private bodies.

****Same cost norms will be followed for farmer training/awareness for rodent management.**

Annexure I (b)**IPM ORIENTATION TRAINING (One Week - 5 days)****BUDGET DETAILS FOR ACCOMODATION, CATERING, P.O.L. ETC.****UNDER IPM COMPONENT**

1. Accommodation	Rate	Maximum Amount (Rs.)
(i) Trainees	@ Rs.250 per day for 40 trainees for 5 days (250 x 40 x 5)	Rs.50,000
(ii) Resource persons	@ Rs.500 per day for 4 Resource Persons for 5 days(500 x 4 x 5)	Rs.10,000
2. Catering Expenses		
(i) Trainees & trainers etc.	@ Rs.300 per day for 53 trainees for 5 days(300 x 53 x 5)	Rs.79,500
3. Training accessories		
(i) Training equipment including IPM Kit	@ Rs.150 per IPM Kit for 40 persons (150 x 40)	Rs.6,000
4. POL & Minor repairs/hiring charges of vehicles	@ Rs.400 per day for 5 days (400 x 5)	Rs.2,000
5. Other expenses		
(i) Stationery	Rs.200/- per day	Rs.1,000
(ii) Inaugural Function Banners Seating arrangement Tea for 100 persons @ Rs.10/- per head		Rs. 500 Rs. 500 Rs.1,000
(iii) Valedictory function Seating arrangement Tea for 60 persons @ Rs.10/- per head		Rs.500 Rs.600
(iv) Contingency		Rs.500
Total		Rs.1,52,100/-

Annexure I (c)

IPM ORIENTATION TRAINING (2 days)*

1.Catering Expenses	Rate	Maximum Amount Rs.
(i) Trainees & trainers etc.	@ Rs.300 per day for 53 trainees for 2 days (300 x 53 x 2)	Rs.31,800
2. Training accessories		
(i) Training and awareness literature	@ Rs.50 for 40 persons (50 x 40)	Rs.2,000
3. POL & Minor repairs/ hiring charges of vehicles	@ Rs.400 per day for 2 days (400 x 2)	Rs.800
4. Other expenses		
(i) Stationery	Rs.200/- per day	Rs.400
(ii) Inaugural Function		
(a) Banners		Rs. 500
(b) Seating arrangement		Rs. 500
(c) Tea for 100 persons @ Rs.10/- per head		Rs.1,000
(iii) Valedictory function		
(a) Seating arrangement		Rs.500
(b) Tea for 60 persons @ Rs.10/- per head		Rs.600
(iv) Contingency		Rs.500
Total		Rs.38,600/-

* Same cost norms will be applicable for capacity building in rodent management.

Annexure I (d)

Pattern of Expenditure for Season Long Training Programme

(Training of Facilitators/Master Trainers)

S. No.	Description of items/activities	Amount	Total cost for 30 days	Total cost for 60 days	Total cost for 90 days
1.	Accommodation:				
	- Participants (40 trainees) on twin sharing basis	Rs. 500 per day	Rs.3,00,000	Rs.6,00,000	Rs.9,00,000
	- Support staff (5 persons) on twin sharing basis	Rs. 500 per day	Rs.37,500	Rs 75,000	Rs.1,12,500
	-Resource persons (8) on single accommodation	Rs. 500 per day	Rs,120,000	Rs 2,40,000	Rs.3,62,000
	Total cost (accommodation):		Rs.4,57,500	Rs.9,15,000	Rs.13,74,500
2.	Catering expenses for 53 persons	Rs.300 per day	Rs.4,77,000	Rs.9,54,000	Rs.14,31,000
3.	Training Expenses:				
	(a) IPM Training Kit & fields materials (40 trainees)	Rs.1000 per trainee	Rs.40,000	Rs. 40,000	Rs.40,000
	(b) Book/Stationery/Dissertation (40 trainees)	Rs.500/trainee	Rs.20,000	Rs. 20,000	Rs.20,000
	Total cost (Training expenses):		Rs.60,000	Rs. 60,000	Rs.60,000
4.	POL & Minor repair/Vehicle Hiring charges:	Rs.800 per day	Rs.24,000	Rs. 48,000	Rs.72,000
5.	Other expenses :				
	(a) Stationery		Rs.20,000	Rs.30,000	Rs.35,000
	(b) Training materials		Rs. 10,000	Rs.10,000	Rs.10,000
	Total cost (Other expenses):		Rs.30,000	Rs.40,000	Rs.45,000
6.	Inaugural function :				
	- Banners		Rs.1,000	Rs.1,000	Rs.1,000
	- Seating arrangement		Rs.1,000	Rs.1,000	Rs.1,000
	- Tea & snacks (for 100 persons)	Rs.10 per person	Rs.1,000	Rs.1,000	Rs.1,000
	- Working lunch (for 50 persons)	Rs.100 per person	Rs.5,000	Rs.5,000	Rs.5,000
	Total Cost (Inaugural function)		Rs.8,000	Rs.8,000	Rs.8,000

7.	Valedictory function : <ul style="list-style-type: none"> - Banners - Seating arrangement - Tea & snacks (for 100 persons) - Working lunch (for 50 persons) 		Rs.1,000	Rs.1,000	Rs.1,000
		Rs.10 per person	Rs.1,000	Rs.1,000	Rs.1,000
		Rs.100 per person	Rs.5,000	Rs.5,000	Rs.5,000
	Total cost (Valedictory function) :		Rs.8,000	Rs.8,000	Rs.8,000
8.	Honorarium <ul style="list-style-type: none"> - Resource person (8) - Guest Resource person (5 for 10 days in 30 days course) (5 for 20 days for 60 days course) (5 for 20 days for 90 days course) 	Rs.500 per day Rs.800 per day	Rs.1,20,000 Rs.40,000	Rs.2,40,000 Rs.80,000	Rs.3,60,000 Rs.1,20,000
	Total cost (Honorarium)		Rs.1,60,000	Rs.3,20,000	Rs.4,80,000
9.	Contingency:		Rs. 10,000	Rs. 15,000	Rs. 20,000
10.	Traveling Allowance (For trainees of North Eastern Region)		Rs. 10,000	Rs. 10,000	Rs. 10,000
	Total cost (Traveling Allowance)		Rs. 10,000	Rs. 10,000	Rs. 10,000
	GRAND TOTAL :		Rs.12,44,500	Rs.23,78,000	Rs.35,08,500

Funding pattern:**(i) For setting up new State Bio Control Lab (SBCL):**

- a) Rs. 45.00 lakh for building
 b) Rs. 20 lakh for equipments as listed below
 c) **For strengthening of SBCL** funds up to Rs. 20.00 lakh can be provided for equipments only excluding vehicle.

(ii) Same cost norms as for SBCL will be applicable for bio control Lab at CIPMCs.**List of Equipments for CIPMCs and SBCLs**

S. No.	Item	No.	Approx Cost (in Rs./Unit)	Total amount (in lakh.)
1	Heat convector	20	2,000	40,000
2	Steel racks (7x3x18) (with 6 compartments)	20	1,000	20,000
3	Chrysopa cages	20	1,000	20,000
4	Laboratory tables	5	7,000	35,000
5	Laboratory stools	20	250	5,000
6	Hygrometer (Dail type)	10	400	4,000
7	Thermometer (Dail type)	10	400	4,000
8	Mixture-cum-grinder	2	2,000	4,000
9	Corcyra egg laying cages	50	200	10,000
10	UV Chamber with UV tubelight	2	1,500	3,000
11	Exhaust Fan	10	1,000	10,000
12	Vacuum cleaner	2	4,000	8,000
13	Water Distillation Unit	1	2,000	2,000
14	Glasswares (Petri dishes, Jars, Flask etc.)	-	-	60,000
15	Air Conditioner with cooling and heating arrangement with 4 KVA Stabilizer	8	50,000	4,00,000
16	Refrigerator 300 Lit capacity with 1 KVA Stabilizer	2	20,000	40,000
17	Hot Air Oven	2	40,000	80,000
18	BOD Incubator with temp. humidity and photo period provision with 1 KVA stabilizer	2	80,000	1,60,000
19	Centrifuge	2	8,000	16,000
20	Laminar Flow	1	24,000	24,000
21	Autoclave vertical	1	20,000	20,000
22	Semi automatic Corcyra rearing system	50	10,000	5,00,000
23	Microscope (Research with accessories)	1	1,00,000	1,00,000
24	Stereo Binocular Microscopic	1	50,000	50,000
25	Top loading electronic balance	1	35,000	35,000
26	Vehicle Diesel Jeep with trailer	1	5,00,000	5,00,000
27	Miscellaneous lab. Items	-	-	3,50,000
	Total			25,00,000

Annexure III

Equipments for State Pesticides Testing Laboratories

S. No.	Name of Equipment	Cost (Rs. in lakh)
1	HPLC with UPS	16.00
2	GLC with UPS	10.00
3	FTIR with UPS	17.00
4	UV Visible Spectrophotometer	5.50
5	Electronic Balance	1.50
	Total	50.00

Equipments for bio-pesticide testing at SPTL/SBCL.

S. No.	Equipment	No.	Cost (Rs. In Lakh)
1.	ELISA (Enzyme-linked immune sorbent assay) complete unit	1	10.00
2.	Fluorescent Microscope with phase contrast attachment	1	08.00
3.	Miscellaneous items	--	02.00
	TOTAL	--	20.00

Equipments for bio-pesticide testing at RPTL and CIPMC.

S. No.	Equipment	No.	Cost (Rs. In Lakh)
1.	Laminar flow	1	01.00
2.	BOD Incubator	1	01.00
3.	Hot Air Oven	1	00.20
4.	Autoclave	1	00.40
5.	Moisture Analyzer	1	00.40
6.	Haemocytometer	1	00.40
7.	Aerosol Disinfectant	1	00.20
8.	ELISA (Enzyme-linked immune sorbent assay) complete unit	1	10.00
9.	PCR (Polymerase Chain Reaction) Complete Unit	1	10.00
10.	Compound Microscope (Research)	1	02.00
11.	Fluorescent Microscope with phase contrast attachment	1	08.00
12.	Centrifuge (20,000 rpm)	1	01.00
13.	Micropipette (different range) 0.01 μ ml-1ml	--	01.00
14.	Miscellaneous items	--	01.00
	TOTAL	--	36.60

Annexure V

Component-wise Budget Outlay for “Strengthening & Modernization of Pest Management approach in India” for the 12th Five Year Plan (2012-2017)

S. No.		Rs` in lakh			
		IPM	Locust	IIA	Total
A	Recurring		Total		
1.	Salaries + salaries for Addl posts	4140.61	120.77	2946.21	7207.59
2.	Wages	25.93	0.60	7.10	33.63
3.	OTA	4.71	0.00	46.10	50.81
4.	Medical Treatment	93.50	1.50	257.30	352.3
5.	DTE	293.22	1.60	225.94	520.76
6.	Foreign Travel Expenses	9.14	0.00	144.45	153.59
7.	Office Expenses	832.97	67.50	741.56	1642.03
8.	RRT	521.89	1.00	0.00	522.89
9.	Publication	60.00	1.05	2.50	63.55
10.	Other Administrative services	1167.32	26.00	159.74	1353.06
11.	Supply & material	27.47	26.00	420.50	473.97
12.	Advertisement & publicity	146.66	0.00	8.50	155.16
13.	Minor Work	116.03	94.00	890.00	1100.03
14.	Professional services	6.10	00.00	111.80	117.90
15.	GIA	61.05	0.00		61.05
	Total A	7506.60	340.92	5961.70	13809.22
B	Non-Recurring				
1.	Motor vehicles	30.00	38.00	50.00	118
3.	Machinery & Equipment	40.03	7.50	1458.80	1506.33
4.	Contractual services/ Outsourcing	15.39	00.00	320.00	335.39
5.	Capital	527.00	215.00	980.50	1722.5
6	NE Region	60.77	0.00	0.00	60.77
7	3601-Grants in Aid	25.02	0.00	724.00	749.02
	Total B	698.21	215.00	3533.30	4446.51
	Grant Total (A +B)	8204.81	601.42	9495.00	18301.23

Annexure VI

SMPMA ACTIVITY MAPPING

S. No	Activity Category	Role of Central Government	Role of Village Panchayat
1	Setting Standards	Issue guidelines for implementation of SMPMA	Implementation of advisories on pest management issued by CIPMCs.
2		National level norms for conducting FFS.	Support of village panchayat in logistics.
3		Norms for grant to State for setting State Pesticides Testing Laboratories (SPTL).	State government to execute the project.
4		Norms for grants to State for setting State Bio-control Laboratories (SBCL).	-Do-
5		Norms for seed treatment.	Facilitate setting up of seed treatment drums at village panchayat office.
6	Planning	1. Setting targets for the five year plan and annual plans.	Provide inputs in the planning process.
7		2. Identification of activities to be accomplished during the year under the scheme. 3. Identification of Land for construction of CIPMCs.	
8	Asset Creation	Approval for the construction of various facilities such as SPTL, SBCL.	State government to execute the project.

9		Purchase of Machinery and equipment for State labs as well as central labs. .	-Do-
10	Operation and Maintenance	Approval of State Agriculture Plan for the purpose of identifying and supporting activities under SMPMA.	Village panchayats to provide inputs in the plan keeping in view their requirement.
11		Pest Surveillance & Monitoring.	To provide first hand information about occurrence of pest and diseases in it's jurisdiction on different crops and to guide the survey team to prepare the survey route.
12		Augmentation & Conservation of Natural Enemies.	-To avoid the indiscriminate use of pesticides to conserve the natural enemies of crop pests. - Field to field augmentation of existing bio-control agents.
13		Production & release of Bio-control agents.	Formation of Self help groups for production and release of bio-control agents in their areas.
14		Human Resource Development Programme	-
15		A. Conducting IPM Farmers Field Schools (FFSs)	-To motivate the fellow farmers to attend these schools.
16		B. Short Duration Training Programme (2days)	-To motivate the fellow farmers and sensitization of pesticides dealers for judicious use of pesticides and encourage the bio-pesticides.
17		C. Short Duration Training Programme (5days)	-To follow the advice of State Extension Officers who are directly in touch with village Panchayat.
18		D. Season Long Training Programme (30 days)	-To provide demonstration Field for experiments and farmers Field schools.

19	Monitoring and Evaluation	Periodical Technical Reports	-
20		Financial Audits	-
21		Meetings	-
22		Obtaining Utilization Certificates (UCs) from State Govt & NGOs w.r.t Grant-in- Aid.	-
23		Evaluation through independent agencies	-