

**Crop Pest Surveillance and Advisory Project
(CROPSAP)
in
Maharashtra (2011-12)**

**A Collaborative Programme
By**

State Agriculture Department, Maharashtra, Pune
National Centre for Integrated Pest Management (NCIPM), New Delhi
Panjabrao Deshmukh Krishi Vidyapeeth (PDKV), Akola
Marathwada Agricultural University (MAU), Parbhani
Mahatma Phule Krishi Vidyapeeth (MPKV), Rahuri
Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, (BSKKV), Dapoli
Central Institute for Cotton Research (CICR), Nagpur
Directorate of Soybean Research (DSR), Indore
Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad
Directorate of Rice Research (DRR), Hyderabad
Indian Institute Of Pulses Research (IIPR), Kanpur

Funded under

**Rashtriya Krishi Vikas Yojana (RKVY)
Government of Maharashtra**

Introduction:-

Agriculture in Maharashtra is a predominantly rainfed (83%). Cotton and soybean are the two major kharif crops of Maharashtra that covers 62 lakh hectares and collectively occupies 45% of the total area under kharif crops. During 2008-09, there was severe outbreak of *Spodoptera litura* coupled with *Helicoverpa armigera* and other leaf eating caterpillar pest on soybean crop in Marathwada and Vidarbha regions of Maharashtra State. Crop over an area of 14.64 lakh hectares (48% of area under soybean) was infested out of that 10.44 lakh hectares was having more than 50% infestation level. As such, the crop was almost devastated. Monetary losses due to pest outbreaks were estimated to the tune of Rs.1392 crores. The team of expert from Central Government visited area and the post epidemic analysis has brought forward following points for severity of the problem and difficulties faced in effective pest management.

- Lack of information to understand the pest appearance on soybean and paucity of manpower to tackle pest management.
- Negligence of different agencies involved in agricultural enterprises of the region.
- Lack of collective approach by the agencies towards pest management in response to the severe outbreak.
- Due to multitasking situation in State Department of Agriculture (SDA) personnel could not focus on a particular crop and specific pest problems.
- Inability in identifying the type of pests that is defoliating the crop.
- Inadequacy about adoption of IPM practices on the crop for better crop protection.
- Indiscriminate use of pesticides and their dosages.
- *Spodoptera litura* being a polyphagous pest having wider dispersal capability, the exact niches of its development were unknown.
- The area being isolated by jungles and vegetables are grown during off season the situation has aided for survival of *S. litura* population.
- In Gadchiroli and Chandrapur tracts drastic crop diversification from rice to soybean was conducive for development of Lepidopterous pests (e.g. *Spodoptera* on rice).
- The conducive climatic conditions in the pockets, profuse vegetative crop growth coupled with heavy attacks of *S. litura* the pest later spread to adjacent places.

Considering various factors responsible for onset and spread of the pest it became necessary to monitor the pests continuously in order to avoid recurrences of pest outbreak. Creating awareness among farmers across all cotton-soybean growing districts of Maharashtra was targeted vis a vis the pest surveillance based real time advisory through web based monitoring system using tools of information and communication technology.

The existing system of pest monitoring 'PDMIS', was found to be ineffective to deal with the situation. It was felt necessary to bridge the gap in Research and Extension machinery and develop a scientific approach to pest surveillance system.

The event warranted a strong pest monitoring and advisory mechanism in place. To cater to this requirement, a series of meetings were held at Commissionerate of Agriculture, Maharashtra State with the core team members to develop an appropriate programme. The modalities of the project, area of operation was finalised and a project document was prepared in consultation with NCIPM and submitted to the State Agriculture department. The responsibilities of different stakeholders were earmarked and the time-line for project implementation was also drafted. The project was financed under Rashtriya Krishi Vikas Yojana with a total outlay of Rs.25.00 crores for one year by the Commissionerate of Agriculture, Government of Maharashtra. Considering utility of the project, Govt. of Maharashtra have given extension to the project for years 2010-11 and 2011-12.

Achievements :

Scientific surveillance of Pest and Diseases as a regular activity on large scale involving of major stakeholders has redefined Lab to Land concept in interactive mode.

1. Regular survey helped in early identification and detection of pest problems and to combat the pest situation.
2. Location specific and timely advisories based on scientific observations were given through mass communication systems like SMS for effective communication. Timely advisories to farmers helped in judicious use of Biological and chemical pesticides.
3. By understanding the ETL concept farmers started adopting appropriate plant protection measures instead of calendar based spraying. This ultimately helped in judicious use of pesticides.
4. Increased awareness among farmers and field functionaries about pest surveillance, monitoring and pest management. It helped to keep the pest population below ETL level.
5. The areas where the pest outbreak is crossing ETL, field functionaries, district pest management units, SAUs, NCIPM visited such areas and given their suggestions for taking timely corrective measures.
6. Success of the project has also reflected through increased crop yields.
7. The project was aimed at pest surveillance and monitoring of four major crops. The increase in yield to the tune of 38% is the cumulative resultant of this activity. Net worth of increase in yield is Rs. 3992.30 crores from the said crops that is direct gain to the beneficiaries.

1. Area of Operation:-

Project covers Soybean, Cotton, Rice, Tur and Gram crops from all 33 districts of the state

Crop	Area in Lakh ha.
Soybean	26.00
Cotton	39.73
Pigeonpea	13.84
Paddy	15.47
Gram	14.15
Total Area	109.19
Districts covered	33 (90 Subdivisions)
Talukas covered	348

2. Pests considered for surveillance:-

1. **Soybean:** - Spodoptera, Semilooper, Helicoverpa and Girdle Beetle
2. **Cotton:** - Spodoptera, Jassid, Thrips, White fly & Reddening
3. **Paddy:-** Yellow Stem borer, Gall Midge, Plant hoppers, Leaf folder, Swarming / other caterpillars, , blast/Neck blast, Sheath blight & bacterial blight.
4. **Pigeon Pea:** - Tur pod borer, Pod fly, plume moth and webbed leaves
5. **Chick Pea:** - Helicoverpa and Wilt

3. Mode of Operation:

Programme consists of three parts i.e.

- A. Pest monitoring-cum-surveillance based advisory system.
- B. Awareness creation
- C. Supply of chemical and biological pesticides in critical situations on 50% subsidy as a plant protection measures.

A. Pest monitoring-cum-surveillance based advisory system.

Random survey of Soybean, Cotton and Tur in kharif and gram in Rabi is to be conducted in 78 Subdivisions of 29 districts in Maharashtra. One pest scout will survey 12000 ha area of Cotton and Soybean and for this purpose 550 pest scouts have been deployed. For monitoring ten pest scouts one Agril. Supervisor has been deputed. In all 64 Agril Supervisors have been deployed for the monitoring work. To upload the data and to send SMS advisories to farmers services of 64 data entry operators (one for each Agril. Supervisor) have been made available.

Advisories will be issued on every Monday and Thursday in a week through various publicity media. Last year 29.53 Lakh advisory SMS have been sent to the farmers.

B. Awareness creation among the farmer regarding pest and diseases

To create required awareness about the pests and their management practices field extension staff is being trained at SAU level. With the help of this field staff farmers will be trained in weekly village level meetings. In these meetings pest situation and management strategy will be discussed.

C. Supply of chemical and biological pesticides in critical situations on 50% subsidy as a plant protection measures.

To handle the critical situation and to combat pest attack critical inputs will be made available to farmers on 50 % subsidy base. Divisional Joint Director will supply and monitor timely supply of critical inputs.

4. Stakeholders and Steering committee :

As the programme is first of its kind in country specified set of guidelines were not available for implementation. The programme was co-ordinated by NCIPM and a Steering committee with stakeholders under the chairmanship of Commissioner Agriculture, Maharashtra State was formed to formulate guidelines and take periodic review of the programme. It includes representative from

State Agriculture Department, Maharashtra, Pune
National Centre for Integrated Pest Management (NCIPM), New Delhi
Panjabrao Deshmukh Krishi Vidyapeeth (PDKV), Akola
Marathwada Agricultural University (MAU), Parbhani
Mahatma Phule Krishi Vidyapeeth (MPKV), Rahuri
Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, (BSKKV), Dapoli
Central Institute for Cotton Research (CICR), Nagpur
Directorate of Soybean Research (DSR), Indore
Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad
Directorate of Rice Research (DRR), Hyderabad
Indian Institute Of Pulses Research (IIPR), Kanpur

The responsibilities of the steering committee are:

- Coordinating programme activities through monthly meetings.
- Assign duties to different stakeholders of the programme and supervise implementation

Steering Committee Constitution:

Chairman - Shri. Prabhakar Deshmukh,
Commissioner of Agriculture, Government of Maharashtra

Co-Chairman - Dr. O. M. Bambawale,
Director, National Centre for Integrated Pest Management, New Delhi

Members:

1	Shri R .B. Ramteke Dy. Secretary, (Agri. & Horticulture), Govt. of Maharashtra, Mantralaya, Mumbai	2	Shri V.K. Yadava Plant Protection Adviser to GOI, Directorate of Plant Protection Quarantine & Storage, Haryana
3	Dr. Anupam Barik Director, Directorate of Cotton Development, Mumbai	4	Dr. K.R. Kranti Director, Central Institute for Cotton Research, Nagpur
5	Shri J.V.Deshmukh Director, Extension & Training, Commissionerate of Agriculture, Maharashtra State, Pune	6	Dr. D.G. Bakwad Director, Horticulture, Commissionerate of Agriculture, Maharashtra State, Pune
7	Dr. S.S. Adsul Director, Input & Quality Control, Commissionerate of Agriculture,	8	Dr. V. U. M. Rao Project Coordinator (Agromet), Central Research Institute for Dry land

	Maharashtra State, Pune		Agriculture, Santoshnagar, Hyderabad
9	Dr. U.P. Barkhade HOD, Entomology, Dr. Punjabrao Deshmukh Krishi Vidyapeeth, Akola	10	Dr. D. W. Wadnerkar HOD, Entomology, Marathwada Agricultural University, Parbhani
11	Dr. J. R. Kadam HOD, Entomology, Mahatma Phule Krishi Vidyapeeth, Rahuri	12	Dr. P. D. Patil HOD, Entomology, Dr. B. Sawant Konkan Krishi Vidyapeeth, Dapoli
13	Dr. Amar Nath Sharma Principal Scientist, Directorate of Soybean Research, Indore	14	Dr. S. K. Singh Principal Scientist, Indian Institute of Pulses Research, Kanpur
15	Dr. Gururaj Katti Principal Scientist, Entomology, Directorate of Rice Research, Rajendranagar, Hyderabad	16	Shri. Ashok Lokhande Joint Director of Agriculture, E.&T.-3, Commissionerate of Agriculture, Maharashtra State, Pune
17	Dr. J. C. Bhutada Divisional Joint Director of Agriculture, Nagpur Division	18	Shri. K.V. Deshmukh Divisional Joint Director of Agriculture, Pune Division
19	Shri. S. L. Jadhav Divisional Joint Director of Agriculture, Latur Division	20	Dr. M.S. Ghag Divisional Joint Director of Agriculture, Kolhapur Division
21	Shri. S.N. Ambulgekar Divisional Joint Director of Agriculture, Amravati Division	22	Shri. S. R. Sardar Divisional Joint Director of Agriculture, Aurangabad Division
23	Shri. P. B. Adgale Divisional Joint Director of Agriculture, Nasik Division	24	Shri. K. N. Deshmukh Divisional Joint Director of Agriculture, Thane Division
25	Technical Coordinator – Dr. S. Vennila Principal Scientist, National Centre For Integrated Pest Management, New Delhi	26	Member Secretary – Dr. Ram Lokare Dy. Director of Agriculture (Plant Protection), Maharashtra State, Pune.

Stakeholders and Their Responsibilities:

Sr. No.	Institution	Responsibility
1	NCIPM, New Delhi	<ul style="list-style-type: none"> • To upgrade and maintenance of existing on-line monitoring system with change in key pests • To upgrade and maintenance of existing automated map generation system for generation of GIS based maps • To print and make available surveillance profarmae for online data feeding • To maintain online pest based advisory system • To make available the pest monitoring kits • To assist in training of pest monitoring team for effective pest surveillance • To coordinate the overall programme of pest monitoring • To analyse and interpret monthly technical reports submitted by stake holders • Field visits particularly to hotspot areas to suggest remedies for pest management or monthly visit for verification of field situation and data entry.

		<ul style="list-style-type: none"> • Constant watch on online data entry and advisory issued and if any discrepancy found report to concern SAU and state level monitoring unit for action • Timely submission of utilization certificate and monthly progress report in respect of physical and financial target
2	State Agriculture Department	<ol style="list-style-type: none"> 1. To identify Agril. Supervisors for surveillance and make available required manpower from placement agencies through outsourcing 2. To train the field staff by the master trainers 3. To identify, select and train the farmers about integrated pest management by the field staff 4. To communicate & popularize the IPM module through SMS, posters / leaflets, etc. 5. To monitor the pest population in different villages at Sub divisional level and make it available online. 6. To alert the farmers based on pest monitoring in case of alarming situations & keep the pest situation below ETL. 7. To create awareness among the farmers about pest – disease and their management 8. Printing of technical material 9. Stocking and supply of critical inputs on 50 % subsidy be supplied to the farmers for emergency use 10. Overall monitoring & co-ordination of project
3	CRIDA, Hyderabad	<ol style="list-style-type: none"> 1. Collection of weather data past & present 2. To document weather information in pest surveillance area and make it available to other stake holders 3. To work out and submit monthly report to NCIPM and State Agril. Dept about crop pest weather relationship in surveillance area. 4. To formulate weather based pest-disease fore alarming modules 5. Field visits particularly to hotspot areas to suggest remedies for pest management or monthly visit for verification of field situation and data entry. 6. To submit monthly technical report to NCIPM for analysis and interpretation and copy to Commissionerate of Agriculture and also the final report at the end of project year 7. Timely submission of utilization certificate and monthly progress report in respect of physical and financial target
4	DOSR, Indore	<ol style="list-style-type: none"> 1. To help in formulation of IPM strategies in soybean programmes 2. To get feedback for future research for developing IPM components 3. To guide and assist monitoring for surveillance and advisory work 4. Field visits particularly to hotspot areas to suggest remedies for pest management or monthly visit for verification of field

		<p>situation and data entry.</p> <ol style="list-style-type: none"> 5. To submit report on surveillance, management measures and research components of soybean pest diseases in the project 6. Constant watch on online data entry and advisory issued and if any discrepancy found report to concern SAU and state level monitoring unit for action 7. To submit monthly technical report to NCIPM for analysis and interpretation and copy to Commissionerate of Agriculture and also the final report at the end of project year & give suggestion for forewarning which will be helpful for next season 8. Timely submission of utilization certificate and monthly progress report in respect of physical and financial target
5	CICR, Nagpur	<ol style="list-style-type: none"> 1. To help in formulation of IPM strategies in cotton programmes 2. To get feedback for future research for developing IPM components 3. To guide and assist monitoring for surveillance and advisory work 4. Field visits particularly to hotspot areas to suggest remedies for pest management or monthly visit for verification of field situation and data entry. 5. To submit report on surveillance, management measures and research components of cotton pest diseases in the project 6. Constant watch on online data entry and advisory issued and if any discrepancy found report to concern SAU and state level monitoring unit for action 7. To submit monthly technical report to NCIPM for analysis and interpretation and copy to Commissionerate of Agriculture and also the final report at the end of project year 8. Timely submission of utilization certificate and monthly progress report in respect of physical and financial target
6	IIPR, Kanpur	<ol style="list-style-type: none"> 1. To help in formulation of IPM strategies in pigeonpea and chickpea programmes 2. To get feedback for future research for developing IPM components 3. To guide and assist monitoring for surveillance and advisory work 4. Field visits particularly to hotspot areas to suggest remedies for pest management or monthly visit for verification of field situation and data entry. 5. To submit report on surveillance, management measures and research components of pigeonpea and chickpea pest diseases in the project 6. Constant watch on online data entry and advisory issued

		<p>and if any discrepancy found report to concern SAU and state level monitoring unit for action</p> <p>7. To submit monthly technical report to NCIPM for analysis and interpretation and copy to Commissionerate of Agriculture and also the final report at the end of project year</p> <p>8. Timely submission of utilization certificate and monthly progress report in respect of physical and financial target</p>
7	DRR, Hyderabad	<p>1. To help in formulation of IPM strategies in paddy programmes.</p> <p>2. To get feedback for future research for developing IPM components.</p> <p>3. To guide and assist monitoring for surveillance and advisory work.</p> <p>4. Field visits particularly to hotspot areas to suggest remedies for pest management or monthly visit for verification of field situation and data entry.</p> <p>5. To submit report on surveillance, management measures and research components of paddy pest diseases in the project.</p> <p>6. Constant watch on online data entry and advisory issued and if any discrepancy found report to concern SAU and state level monitoring unit for action.</p> <p>7. To submit monthly technical report to NCIPM for analysis and interpretation and copy to Commissionerate of Agriculture and also the final report at the end of project year & give suggestion for forewarning which will be helpful for next season.</p> <p>8. Timely submission of utilization certificate and monthly progress report in respect of physical and financial target.</p> <p>9.</p>
8	<p>SAUs</p> <p>1. MAU, Parbhani 2. Dr.PDKV, Akola 3. MPKV, Rahuri 4. BSKKV, Dapoli</p>	<p>1. To train the Master Trainers of State Agriculture Department and pest surveillance staff in respective districts.</p> <p>2. To take technical reviews of the project through field visits and submit monthly report by District coordinator of SAU to respective SAU and State Agril Dept.</p> <p>3. To take monthly technical review of surveillance programme in their jurisdiction keeping in touch with district coordinator of SAU. District coordinator frequent visit in affected areas & report to SAU & State Monitoring Unit.</p> <p>4. To assist in pest monitoring and development of IPM module</p> <p>5. To interpret and issue pest advisory at twice a week (Friday & Monday before 10.00 am)</p> <p>6. Constant watch on online data entry and advisory issued</p>

		<p>7. To monitor the pest situation on the basis of online data, field visits where pest situation is critical and above ETL and submit report to State Agril. Dept.</p> <p>8. Field visits particularly to hotspot areas to suggest remedies for pest management or monthly visit for verification of field situation and data entry.</p> <p>9. To submit monthly technical report of taluka wise pest situation, advisory and the intensity of pest incidence of your jurisdiction to NCIPM for analysis and interpretation and copy to Commissionerate of Agriculture and also the final report at the end of project year</p> <p>10. To get services of Krishi Vidnyan Kendras (KVKs) with their active participation for guiding the farmers regarding integrated pest management</p> <p>11. Timely submission of utilization certificate and monthly progress report in respect of physical and financial target</p>
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5. Hierarchical structure of Pest Monitoring and Awareness Programmes

A. Pest Monitoring

Coordinator

(Sub Divisional Agricultural Officer from ST. AGRIL. DEPT.)

- To facilitate between the surveillance team and the steering committee
- To monitor the duties of pest monitor and ensure the online feeding of the data in time
- One representative from State Agricultural University in each district will give technical assistance to SDAO while executing this duty



Pest Monitor

(One Agricultural Supervisor from State Dep. @ one per 10 scouts)

- To assist the scout on data collection
- To monitor the scouts for proper data collection
- To gather the data from scouts and enter it online during the crop season
- To conduct roving survey



Data Entry Operator

(1 Per Pest Monitor hires from Service provider on contract)

- To feed the data online on Wednesday & Thursday (before 12 noon) and Saturday & Sunday (before 12 noon)
- To pass on pest advisory to SDAO and other Agricultural Officers for dissemination



Scout

(One per 12000 ha of Soybean + Cotton + Rice area to be engaged on contract for five months starting from first week of June)

- To scout cotton / soybean fields @ four fields per village and two villages per day for four days i.e. Monday, Tuesday and Thursday, Friday
- To report the data to Pest Monitor at a fixed place on Wednesday and Saturday

B. Awareness and Pest based Advisory System

Coordinator

(One Sr. Officer at district level from ST. AGRIC. DEPT.)

- To facilitate between the ST. AGRIC. DEPT. officers and Steering Committee
- To nominate the Master Trainer's (10 / district + All SDAOs) for training at SAU
- To coordinate the field staff (400 / district) training by Master Trainers with technical assistance from SAU representative at district level
- To organize elite farmers training at Taluka level with assistance from Master Trainers and SAU representative at district level

Master Trainer

(Ten per district and all SDAOs from ST. AGRIC. DEPT.)

- To obtain training from SAU
- To train the field staff of ST. AGRIC. DEPT
- To assist in organizing Taluka level elite farmers training



Field Staff

(400 per district from ST. AGRIC. DEPT.)

- To obtain training from Master Trainers
- To disseminate the knowledge to all progressive soybean/cotton farmers
- To disseminate the weekly pest advisory system to farmers



Elite Farmers

(Five per village)

- To pass on the pest based advisory information to fellow farmers through village boards
- To organize group meetings at fortnightly intervals to pass on the information to fellow farmers.

6. Execution:

a. Monitoring Staff



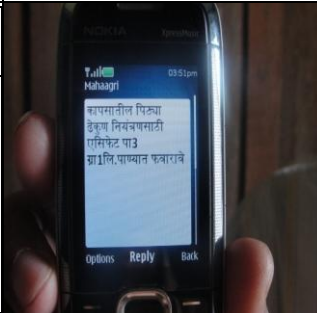
Monitoring Staff	Soybean, Cotton, Paddy & Tur	Gram
Pest Scouts at village level Having Jurisdiction of 12000 ha for Soybean, Cotton, Paddy, Tur & 3000 ha. for Gram	835	464
Pest Monitors at SDAO jurisdiction For Supervision of 10 Pest Scout	80	51
Data Entry Operator at SDAO jurisdiction For online data entries & Tracking Advisories	80	51
Research Associate at Institute level For data analysis & project work	20	20

b. Procedure

Pest Scouts : Pest scouts are collect pest/disease wise data from selected fixed and random plots in field. Every week one Pest scout collects the data from 8 villages allotted. Every week observations are recorded on Monday, Tuesday and Thursday, Friday from 16 fixed and 16 random plots. These observations recorded on data sheets are submitted to pest monitor on every Wednesday and Saturday.

Pest monitor : Pest monitor collects the data of scouts on every Wednesday and Saturday. Apart from that they also monitor the activities of pest scouts through surprise checks and conducts a roving survey @ 5-8 villages /day.

Data Entry Operators : Data entry operators feed the data and upload it on website (www.ncipm.org.in).

Survey	Online data feeding	Data analysis and Advisories by SAUs	Dissemination of advisory by SDAO								
Monday &	Wednesday	Thursday	Thursday								
Thursday & Friday	Saturday	Monday	Monday								
		<table border="1"> <thead> <tr> <th>Taluka</th> <th>Crop Name</th> <th>Brief Remarks</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>Akola</td> <td>Cotton</td> <td>For Cotton Spodoptera-egg masses 0.02- 0.05 No/plant Spodoptera soli.larva 0.04-0.09 and Spodoptera</td> <td>For Spodoptera – Low incidence noticed, keep the crop in close watch. Remove and destroy egg masses/gregarious and solitary larvae. Spray SI NPV @ 250 LE/ha or NSKE 5% or Beauveria bassiana @ 20 g/10 lit of water if RH is more than 75%.</td> </tr> </tbody> </table>	Taluka	Crop Name	Brief Remarks	Remarks	Akola	Cotton	For Cotton Spodoptera-egg masses 0.02- 0.05 No/plant Spodoptera soli.larva 0.04-0.09 and Spodoptera	For Spodoptera – Low incidence noticed, keep the crop in close watch. Remove and destroy egg masses/gregarious and solitary larvae. Spray SI NPV @ 250 LE/ha or NSKE 5% or Beauveria bassiana @ 20 g/10 lit of water if RH is more than 75%.	
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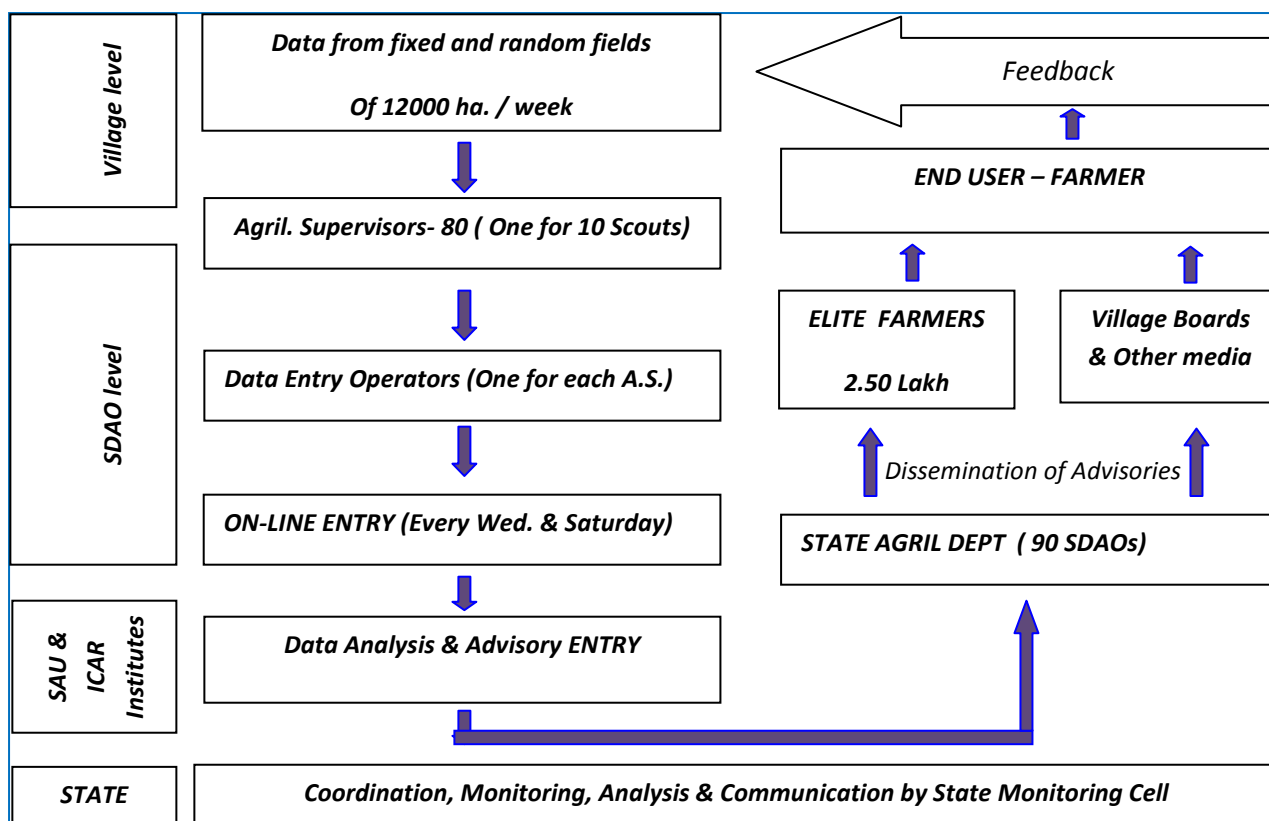
Data Processing : The data uploaded online is processed through software and reports are generated at NCIPM. The reports so generated are interpreted by the Research Associates at SAUs under the guidance of Head, Department of Entomology and the advisories are issued. CRIDA, Hyderabad correlates the weather parameters with pest situation and the data weather parameters is made available to SAUs that helps in giving advisories. Data generated is utilized for developing GIS maps and correlating effect of weather parameters with pest population dynamics. The long term data will be helpful for developing pest forecasting models of major crop pests

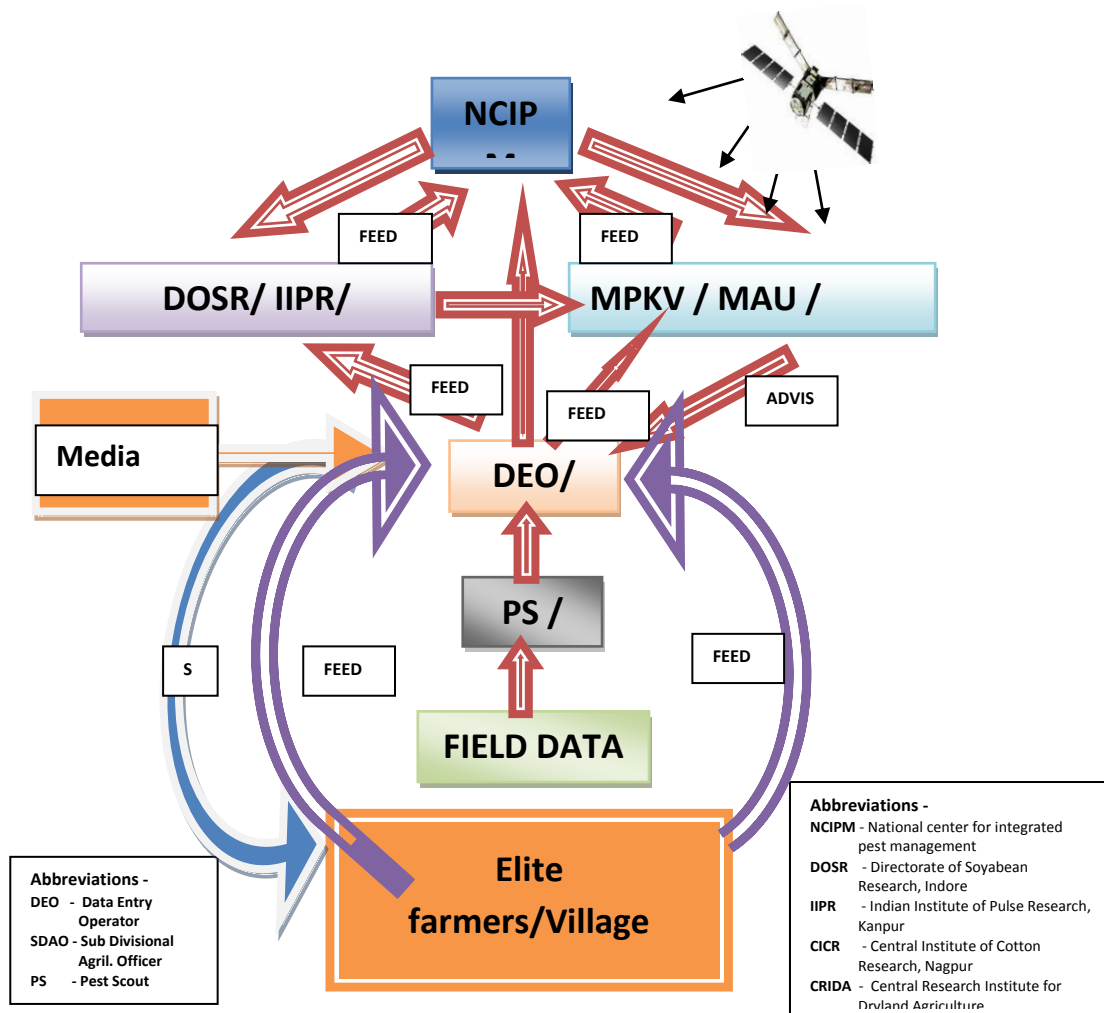
Advisory System: SAUs based on surveillance data issue the advisories on every Thursday and Monday. The advisories are of two types, i) Detail Advisories - to be disseminated in villages through field staff and for mass communication through radio bulletins, television, press reports, weekly bazaars, agriculture exhibitions, farmers rallies, Jingles on bus stands, display on village notice board etc. ii) Short Advisories - in the form of short messages to be disseminated through SMS to elite farmers. The advisories sent through SMS to elite farmers are discussed in the village level meetings and these farmers further pass on the advisories to local farmers.

The pest monitors and pest scout also create awareness among the farmers during their field visits.

Integrated Pest Management (Critical input supply): Regular pest surveillance and monitoring aided in identification of the hotspots and the adoption of appropriate management strategies. Field staff is trained to manage crisis situation by creating awareness among farmers. In order to deal with the critical situation and combat pest problem critical inputs like pheromone traps and lures, bio-pesticides, chemical pesticides etc. are supplied to farmers on 50% subsidy. Necessary provision is made under the project through RKVY. Based on the advisories issued by SAUs availability and supply of critical inputs is monitored by concerned Divisional Joint Director of Agriculture. Apart from this, pesticide supply on subsidy through various Govt. programmes is made available on priority basis to these hot-spots.

c. Schematic diagrams:





7. Important Time line schedule

S No	Time line up to	Work to be done	Action by
1	5/4/2011	Finalization of terms and conditions of tender process for outsourcing surveillance team	Commissionerate (Agri)
2	07/4/2011	Submission of project proposal to GoM	Commissionerate (Agri)
3	13/4/2011	Arranging of meeting for updating online monitoring system	Commissionerate (Agri), NCIPM
4	15/4/2011	Get sanction for project proposal and guidelines from the GoM	Commissionerate (Agri)
5	18/04/2011	Issue of guidelines at field level and inform respective stakeholders for micro planning and their role in the project	Commissionerate (Agri)
6	19/04/2011	Release of grants to respective stakeholders	Commissionerate (Agri)
7	21/04/2011	Publication of tenders for outsourcing surveillance team by DJDAs	DJDAs
8	25/04/2011	Detail pesticides wise indent of critical input by DJDAs to MAIDC	DJDAs
9	25/04/2011	Organization of one day state level workshop	DJDA- Amravati & DSAO Akola
10	28/04/2011	Technical meeting for finalization of advisory capsules for soybean, cotton, paddy, Tur and gram	Commissionerate (Agri) & All Stakeholders

11	13/05/2011	Testing of updated online monitoring system	NCIPM
12	25/05/2011	Supply of Monitoring kit and surveillance proforma	NCIPM
13	30/05/2011	Completion of tender Process by DJDAs	DJDAs
14	1/6/2011 to 10/06/2011	Organizing training for Masters trainers, including all SDAOs and SAU district representatives in respective SAU	SAUs & DJDAs
15	15/06/2011	Selection of Pest Scouts, Data Entry Operators and Software Supporters and allotment of headquarters to them	DJDAs
16	16/06/2011	Finalization of recruitment process of Research Associates and Computer Operators by all Stakeholders	All Stakeholders
17	23/06/2011	Selection and Allotment of headquarters of Agril. Supervisors by DJDAs	DJDAs
18	24/6/2011 to 30/6/2011	Organizing training for Surveillance team in respective SAU	SAUs & DJDAs
19	1/7/2011	Reporting of Research Associates, Computer Operators, Pest Scouts, Agril Supervisors Data Entry Operators and Software Supporters to DJDAs and all Stakeholders	All Stakeholders
20	1/7/2011	Commencement of Online Surveillance	All Stakeholders
21	2/7/2011	First Online Data entry	All Stakeholders
22	4/7/2011	Release of first online plant protection advisory	All Stakeholders
23	1/7/2011 to 30/9/2011	Surveillance of Soybean	All Stakeholders
24	1/7/2011 to 19/11/2011	Surveillance of Paddy and Cotton	All Stakeholders
25	3/10/2011 to 31/12/2011	Surveillance of Tur	All Stakeholders
26	21/11/2011 to 12/2/2012	Surveillance of Gram	All Stakeholders

8. Budgetary Provision

a. Detail budget with Justification:

Sr.N	Details	Justification	Budget (Rs. in lakhs)	Respective Institution
A) Pest Monitoring and Surveillance				
1	A) Honorarium for outsourcing of Pest Scouts For Soybean-Cotton, Rice & Tur: @ Rs.9500/-pm (including travelling and service charges of manpower supply agency) for 6 months for 814 Pest scouts	To conduct the pest surveillance of fixed and random plots,	467.78	St. Agril Dept.
	B) Honorarium for Pest Scouts For Gram: @ Rs.9500/-pm (including travelling and service charges of manpower supply agency) for 1.5 months for 464 Pest scouts		66.12	
2	A) Honorarium for outsourcing of Data Entry Operators For Soybean-Cotton, Rice & Tur: @ Rs.7000/pm (fixed) for 6 months for 80 Data Entry Operators	To feed the data online regularly, To collect the advisories from SAUs and forward the same to the concern farmers, officers,	32.90	St. Agril Dept.

	B) Honorarium for outsourcing of Data Entry Operators For Gram: @ Rs.7000/pm (fixed) for 2 months for 51 Data Entry Operators	Staff under the supervision of Agril. Supervisors	7.14	
3	A) Mobility for Agril. Supervisors For Soybean-Cotton, Rice & Tur: 80 Agril. Supervisors @ Rs,20000/ pm /Agril. Supervisors for 6 months for hiring vehicles on monthly basis)	To monitor the scouts for roving survey of villages not covered by scouts and preparing Pest history report	96.00	St. Agril Dept.
	B) Mobility for Agril. Supervisors For Gram: 51 Agril. Supervisors @ Rs,20000/ pm /Agril. Supervisors for 1.5 months for hiring vehicles on monthly basis)		15.30	
4	Upgradation, modification and maintenance of on-line monitoring system including necessary hardwares (computers/ scanners/ printers)	For development of software with the change in key pests, maintenance of website and, to ensure regular online reporting of online data and to release talukawise advisory	8.00	NCIPM
5	Development of data analysis softwares	To analyse the last two year data of CROPSAP project	2.00	
6	Training of data analysis softwares	To train the divisional and NCIPM level concerns about data analysis softwares	0.50	
7	Upgradation, modification and maintenance of automated map generation system(GIS)	For tracking the epidemic areas based on data linked with maps	1.20	NCIPM
8	Renovation/minor infrastructure tools/fixtures necessary for monitoring activities	For effective monitoring of surveillance activities of the project	8.50	
9	Monitoring kit- A) For Soybean-Cotton, Rice & Tur: Per Pest Scout 64 pheromone traps and 224 lures Rs/- 3400 For 814 Scouts (Cotton:- 2 traps for Spodoptera, Soybean:-2 traps each Spodoptera and Helicoverpa total 4 traps (16 fix plots 48 pheromone traps & 128 Spodo lures and 64 Heli lures with 50 gm castor seed each). For Tur 8 fix plots, 16 pheromone traps & 32 Heli Lures with 50 gm castor seed)	For installing pheromone traps (monitoring) and sowing castor as an indicator crop	27.68	NCIPM

	B) For Gram: For one scout 16 fix plots 32 pheromone traps & 64 Heli Lures with 50 gm castor seed each Rs 1260 per Scout for 464 Scouts		5.85	
10	Surveillance Kit:- For Paddy 86 Pest Scouts, 10 Pest Monitors and additional 14 kits Rs 1030/- per Kit for total 110 kits	Bag, Cap, Lense, Raincoat, Gum boot, 5-Storage vials etc for Pest Scouts and Pest Monitors for recording observations	1.13	St. Agril Dept.
11	A) For Soybean-Cotton, Rice & Tur: Printing and distribution of common surveillance proforma for scout and pest monitor	For 814 scouts & 80 Pest Monitors 84 proformae per week and for 24 weeks. Total 1802304 proformae. Printing and distribution of proformae. Rs 1.60/Proforma	28.84	NCIPM
	B) For Gram: Printing and distribution of common surveillance proforma for scout and Agril. Supervisor	For 464 scouts & 51 Pest monitors, 62 proformae per 6 week. Total 191580 proformae. Printing and distribution of proformae. Rs 1.60/Proforma	3.07	
12	A)Contingency for Monitoring unit For Soybean-Cotton, Rice & Tur: @ Rs. Twenty five thousand for each unit for 80 units	For purchasing stationeries, CDs, internet connection / cyber cafe, etc.	20.00	St. Agril.Dept.
	B) For Gram: Contingency @ Rs. five thousand for each team for 51 teams		2.55	
13	Training A)For Soybean-Cotton, Rice & Tur: Training of pest monitoring and surveillance team by SAUs (At the beginning of the season for two days) @ Rs.700 per staff for 814 scouts + 80 DEO + 80 Agril Supervisors (Total : 974)	For training on surveillance and online data feeding	6.97	St. Agril Dept.
	Training B)For Gram: Training of pest monitoring and surveillance team by SAUs (At the beginning of the season for two days) @ Rs.350 per staff for 464 scouts + 51 DEO + 51 Agril Supervisors (Total : 566)	For training on surveillance and online data feeding	1.98	St. Agril Dept.

14	<p>Honorarium for outsourcing of Research Associates: A) For Soybean-Cotton, Rice & Tur: Two RA (Entomology & Pathology) each for MPKV, MAU, KKV and Four RA (2 Entomology & 2 Path) for Dr. PDKV (Akola and Nagpur) and One each for, CICR, DOSR, DRR Total 13 RAs @Rs.23000/pm + HRA for 6 months (Rs. 24000/pm+ HRA for P.hd. candidates)</p>	For assisting in subject related works such as IPM module, popular material preparation training programs, and issuing weekly pest advisory etc.	21.88	All respective centres
	<p>Honorarium for outsourcing of Research Associates: B) For Gram: Two RA (Entomology & Pathology) each for MPKV, MAU and Four RA (2 Entomology & 2 Path) for Dr. PDKV (Akola and Nagpur) for 3 months and One for IIPR Kanpur for 6 months Total 9 RAs @Rs.23000/pm + HRA (Rs. 24000/pm+ HRA for P.hd. candidates)</p>	For assisting in subject related works such as IPM module, popular material preparation training programs, and issuing weekly pest advisory etc.	8.35	All respective centres
	<p>C) Honorarium for outsourcing of Research Associates (SMS) : Two RAs for State Agri. Dept and NCIPM for 12 months & 2 RAs for CRIDA for 09 months, Total 6 @ Rs.23000/pm + HRA (Rs. 24000/pm+ HRA for P.hd. candidates)</p>	For assisting in preparation IPM modules and popular material and issuing advisories	19.49	All respective centres
15	<p>Honorarium for outsourcing of Computer Operator: one each for CRIDA, MPKV, MAU and two for Dr. P.D.K.V Total 05 Comp. Op. for 09 months, one for State Agril. Dept and NCIPM Total 2 Comp. Op. for 12 months & one each for KKV, CICR, DOSR, IIPR and DRR Total 5 Comp. Op. for 06 months @ Rs.8000/ pm (fixed)</p>	For compiling and analyzing the pest and weather data	7.92	All respective centres
16	<p>Honorarium for outsourcing of Software supporter : Four (one each at Pune for Pune, Nasik & Kolhapur Div., Latur for Latur & Aurangabad Div., Amravati and Nagpur DJDA office)for 9 months. One at Thane for Konkan Div. for 6 months Total 5 SS @12000/ pm</p>	To solve the software and computer related difficulties in respective DJDAs jurisdiction	4.44	St. Agril Dept.
17	<p>Honorarium for outsourcing of server Supporter: @ Rs 15000/pm for 12 months at NCIPM</p>	Maintenance of Internet server relating to the program	1.80	NCIPM

18	Honorarium for outsourcing One Accountant for State Monitoring Unit @ 10000/pm for 10 months	To distribute grants, to update and maintain account register	1.20	St. Agril Dept.
19	Purchase of computer/Laptop, Internet Modem, Video camera and accsesories for IIPR, DRR and KKV @ 1.25 per unit	For making video clips on biology and damage of pests, IPM strategies and compiling them.	3.75	DRR, KKV
20	Traveling allowance A) Rs. 1.00 Lakh for SAUs, and CICR, Nagpur	Hire the Vehicle For monitoring the fixed and roving plots, field visits in case of emergencies, to attend meetings, etc.	5.00	All respective centres
	B) Rs. 1.10 Lakh for CRIDA , DOSR, IIPR and DRR		4.40	
	C) Rs. 2.30 Lakh for State. Agri. Dept		2.30	
	D) Rs. 5.00 Lakh for NCIPM New Delhi		5.00	
	E) Rs. 0.30 lakh per KVK for 33 KVK for fuel for Travelling and contingency	To monitor the work of PS and PM and , to assists the field staff for technically proper surveillance, to attain meetings etc.	9.90	KVKs
21	Contingency A) Rs. 0.50 Lakh/ for DOSR, CICR, CRIDA, IIPR and DRR	To meet out experimental materials, stationeries, miscellaneous expenses, postage charges, fax, monthly charges of internet modem, delopment of popular materials, video films, hiring cosultants services in case of manpower availability if require under this Programme etc.	2.50	All respective centres
	B) Rs. 0.75 Lakh/ for PDKV (Nagpur and Akola), MPKV, MAU and KKV (Including Office Assistant)		3.00	
	C) Rs.2.40 Lakh for State. Agri. Dept		2.40	
	D) Rs.2.00 Lakh for NCIPM, New Delhi including infrastructure necessary for monitoring activity		2.00	
	E) Contingency @Rs.15000/- for each district unit (SAU / KVK) for 33 districts	For assisting in field staff training and surveillance	4.95	SAUs

	F) Contingency: for 08 DJDAs @ Rs.55000/DJDA	To meet out experimental materials, stationeries and miscellaneous expenses, postage charges, fax, etc. related to programme and development of popular materials, video films, outsourcing tender process, hiring consultants services in case of manpower availability if require etc.	4.40	St. Agril Dept.
	G) Contingency for: TAOs to publish the advisories of 352 talukas (for 30 Weeks)	Printing and disseminating advisories at village notice board	17.60	
22	On-line SMS (Recurring expenses for SMS service)	For maintaining the SMS facility	40.00	St. Agril Dept.
	Total		975.79	
B) Awareness and Pest Advisory Based Action				
23	For Cotton, Soybean, Rice & Tur: Training of Master Trainers (All 90 SDAOs and 10 additional staff members per each district) in total 420 staff + 33 district representatives from SAU to be trained (Total 453) @ Rs.1000/ staff for 2 days training programme	For creating Master Trainers on Cotton-Soybean & Tur IPM module	4.53	St. Agril Dept.
24	Exposure Visits to DRR, Hyderabad for 3days during the season for all DSAOs and per District 10 Master Trainers from 33 Districts. Total 420 staff @ Rs.2500/ staff	For providing boarding and lodging (TA to be claimed from St. Agri. Dept.) to all trainees and the literatures	7.40	DRR-Hyderabad
25	Training of field staff in each district by Master Trainers @ Rs.1,00,000/ per Dist.(@ Rs.350/person)	For enhancing the knowledge base of the staff for further spread to farmers	33.00	St. Agril Dept.
26	Organization of Divisional workshop of TAOs, SDAOs & DSAOs @ 0.50 Lakh per Division for 7 Divisions	To review pest situation of last two years, Discussion on Talukawise hot spots, analysis of DSR,CICR,IIPR and NCIPM and anticipatory actions to overcome the pest situation	2.27	St. Agril Dept.
27	Printing of publicity materialb MSRTC Bus Stands posters / folders, etc. through electronic and print media @Rs. 1.5 lakh / district for 33 districts	For creating mass awareness	49.50	St. Agril Dept.

28	Coordinating the overall programme, purchase of laptops, cameras, Lense,GPS instruments etc. for new areas of rice as per requirement	To organize meetings of all stake holders at regular intervals and evaluation	9.70	St. Agril Dept.
	Total		106.40	
C) Critical Inputs / Pesticide Supply in case of pest outbreaks				
29	Critical Inputs: Supply of Pesticides on 50 per cent subsidy or Rs.750/Ha for 28384 Ha in critical pest situation	To manage the epidemic situation if arises	212.88	St. Agril Dept.
	Grant Total		1295.07	

b. Summary:

S N	Details	Amount (Rs. in Lakhs)
1	Pest Monitoring and Surveillance	972.66
2	Awareness and Pest Advisory Based Action	109.53
3	Critical Inputs / Pesticide Supply in case of pest outbreaks	212.88
	Total	1295.07

c. Institute wise Financial Outlay

S. N.	Component	ST. Agri. Dept.	NCIPM	MAU	MPKV	PDKV	KKV	DSR	CICR	IIPR	DRR	CRIDA	KVKs	Total
1	Honorarium for Pest Scouts @ Rs,9500/ pm	533.90												533.90
2	Honorarium for Data Entry Operators @ Rs,7000/ pm	40.04												40.04
3	Honorarium for Research Associates @23000/ pm for MSc & 24000 for Ph.D + HRA	6.60	7.49	5.08	5.08	9.94	3.31	1.66	1.73	1.66	1.79	5.38		49.72
4	Honorarium for Computer Operators for all stakeholders @8000/ pm	0.96	0.96	0.72	0.72	1.44	0.48	0.48	0.48	0.48	0.48	0.72		7.92
5	Honorarium for Software supporter at DJDA @12000/ pm	4.44												4.44
6	Honorarium for Server supporter at NCIPM @15000/ pm		1.80											1.80
7	Honorarium for Accountant at State level Monitoring unit @10000/ pm	1.20												1.20
8	Training of pest monitoring and surveillance team by SAUs	8.95												8.95
9	Training of Master Trainers, All SDAOs and District representatives of SAU	4.53												4.53
10	Training of field staff by Master Trainers	33.00												33.00
11	Exposure Visits to DRR, Hyderabad										7.40			7.40
12	Organization of State level workshop	2.27												2.27
13	Training of data analysis softwares		0.50											0.50
14	Mobility for 82 Agril. Supervisors @ Rs,20000/ pm	111.30												111.30
15	Traveling allowance for different Stake Holders and KVKs	2.30	5.00	1.00	1.00	1.00	1.00	1.10	1.00	1.10	1.10	1.10	9.90	26.60
16	Monitoring kit for pest scouts		33.53											33.53
17	Surveillance and Monitoring kit for pest scouts and Pest Monitors for Paddy crop		1.13											1.13
18	Printing and distribution of surveillance proforma		31.91											31.91
19	Purchase of computer, Video camera and accesories for IIPR, DRR and KKV						1.25			1.25	1.25			3.75
20	Upgradation and maintenance of on-line monitoring server		8.00											8.00
21	Upgradation and maintenance of automated map generation system(GIS)		1.20											1.20
22	Development of data analysis softwares		2.00											2.00
23	Renovation/minor infrastructure tools/fixtures necessary for monitoring activities		8.50											8.50
24	Printing of publicity material (Electronic and Press)	49.50												49.50
25	On-line SMS service (Recurring expenses for SMS service)	40.00												40.00
26	Critical Inputs / Pesticide Supply in case of pest outbreaks	212.88												212.88
27	Contingency for pest monitoring unit	22.55												22.55
28	Contingency for different stakeholders, DJDAs, TAOs and each SAU & SAU district representative unit/ KVK	24.40	2.00	1.95	2.25	2.40	1.35	0.50	0.50	0.50	0.50	0.50	0	36.85
29	Overall coordination of the programme	9.70												9.70
	TOTAL	1108.52	104.02	8.75	9.05	14.78	7.39	3.74	3.71	4.99	12.52	7.70	9.90	1295.07

9. Procedure for Engagement of contractual Staff

Agricultural Supervisors from state Dept. are deputed as Pest Monitors. Research Associates are engaged on by Associates on contract by following ICAR guidelines by the concerned stakeholders. The other Man power is outsourced from man power suppliers for which tenders are called at division level on the basis of service charge on payment of the surveillance staff. The General Terms and Conditions for Supply of Manpower are as below-

1. Sealed Tenders are invited from registered/licensed manpower supplier (Labour Contractor).
2. The manpower supplier firm whose tender will approve should have to produce license for respective district under Contract Labour (Regulation and Abolition) Act, 1970 (if no. of labours required for concerned district is more than 20) within fifteen days of approval of tender.
3. The Divisional Joint Director of Agriculture requires manpower on monthly wages basis **(details enclosed in Annexure-I)** for the July 2011 to March 2012 from manpower supplier (Labour Contractor).
4. Interested manpower supplier may quote their service charges in percentage for engaging manpower on monthly basic wages and HRA, Conveyance allowance, leave encashment and bonus of Pest Scout-Rs. 4200/-, Data Entry Operator- Rs. 4200/- , Software Supporter- Rs. 7200/-, Computer Operator- Rs. 4800/- and Accountant- Rs. 6000/-. Other statutory expenses like HRA, EPF, ESI, service tax, leave encashment, bonus etc. are fixed as per the labour laws, which are mentioned in information form to be submitted with tender. All the liabilities of supplied manpower directly or indirectly will be sole responsibility of the manpower supplier.
5. **The Services Charges will be primary criteria for evaluation of financial bid.**
6. Tender without earnest money **(Rs. 25,000 (Rupees Twenty-five thousand only))** will not be accepted.
7. Cost of tender form is Rs. 500/- (Rupees five hundred only) non refundable.
8. The contract period for Pest Scout, Data Entry Operator and Software Supporter for Soybean- Cotton- Paddy-Pigeonpea surveillance will be six months and that of one and half month for Chickpea surveillance (two months for Data Entry Operator). The contract period for Accountant and Computer Operator will be twelve months only (July 2011 to June 2012). However, Divisional Joint Director may decide the actual numbers as per requirements.
9. The manpower supplier must fulfill all conditions required under Contract Labour Act for which the manpower supplier have to submit details of manpower supplied in the last year.
10. The manpower supplier shall be governed by the laws of India and interpretations in accordance with such laws.
11. Manpower supplier should have EPF account number, ESI (wherever is applicable) account number/ policy number under Workmen's Compensation Act,, professional tax, service tax registration code number and should have to submit true copies of the same with tender.
12. Turn over for the last two years of the contractor should be duly certified by the Chartered Accountant.

13. The manpower supplier should have experience of at least two years to supply the manpower to the Government/Semi government Institutions or reputed organizations for the various jobs.
14. The manpower supplier shall have to furnish a performance bank guarantee of Rs. 2,00,000/- (Rupees two lakh only) for Amravati and Nagpur divisions and Rs. 1,00,000/- (Rupees one lakh only) for rest of the divisions before awarding of contract refundable after successful execution/completion of the contract and verification of necessary documents under terms and condition no, 16 of the tender. The earnest money deposited by successful bidder shall only be refunded after he has furnished performance bank guarantee. The said bank guarantee should be in favour of Account Officer, Divisional Joint Director of Agriculture.
15. The payment (s) to be made to the contractor are subject to deduction of tax(s) Cess leviable by any Government as per rules from time to time and will be made after the completion of every month on doing the assigned work.
16. The contractor shall abide by all the Labour Laws (PF, Income Tax, Service Tax, Professional Tax or any other extra taxes levied by the Government) Companies Act, Tax deduction liabilities, welfare measures of its employees and all other obligations that enjoin in such cases and are not essentially enumerated and defied herein, though any such onus shall be the exclusive responsibility of the contractor and it shall not involve the Govt. in any way whatsoever. Compliance of these provisions shall be ensured at the time of making monthly payments.
17. The manpower supplier should have to kept separate records of payments given to their employees. He should have to keep Muster roll cum wage register as per the Bombay shop and Establishment Act 1948. He should have to deposit statutory amount payable to employee through challen in the respective month as per Labour Acts. e.g. HRA, EPF, ESI/ policy amount under Workmen's Compensation Act, service tax, leave compensation, bonus, Professional tax etc. and true copies of the same, muster roll cum wage register as per the Bombay shop and Establishment Act 1948 and other information should be made available to the respective District Superintendent Agriculture Officer and Divisional Joint Director of Agriculture. Also, the same should be made available to Commissionerate of Agriculture as and when demanded.
18. The manpower supplier shall submit two separate bills to the respective District Superintendent Agriculture Officer, one of wages of employees and other of their service charges along with employee attendance sheet, true copy of muster roll cum wage register as per the Bombay shop and Establishment Act 1948 up to first day of the every month. Beside these bills he shall submit true copies of challen (previous month) by which amount mentioned in the item No. 17 and 18 deposited in the Govt. treasury. District Superintendent Agriculture Officer after verifying the employee attendance sheet, muster roll cum wage register as per the Bombay shop and Establishment Act 1948 and report submitted by Sub Divisional Agriculture Officer shall made payment to the manpower supplier up to 10th day of every month. **The manpower supplier should have to deposit statutory amount payable to employee as per Labour Acts i.e. HRA, EPF, ESI/ policy amount under Workmen's Compensation Act, service tax, leave compensation, bonus, Professional tax etc. through separate challen for this particular project.**
19. The manpower supplier shall make the payment to the supplied manpower by depositing payment in their bank account.
20. In case of disputes for nonpayment of wages to the supplied manpower or any other disputes the payment due to the manpower supplier can be withheld till settlement of

the disputes by the Divisional Joint Director of Agriculture or on the orders of competent authority.

21. The manpower supplier will sole responsible for any dispute of manpower supplied and the manpower so provided shall be employee of the manpower supplier only. They will not be related to Government service in any way and they will not have any rights to claim for regularizing their services from the Government. The manpower supplier should have to intimate the same in written to the manpower.
22. The manpower supplier shall be responsible for all injuries and accidents to persons employed by him. The workmen shall be insured against personal accidents arising out of and during the course of their duties.
23. In the event of injury, illness or mis-happening to any worker, the manpower supplier will be liable to pay any compensation. The insurance cover shall include the liability under the ESI/workmen's Compensation Act.
24. **If required**, the supplied manpower will wear proper uniform as approved by the Divisional Joint Director of Agriculture with name plate to be provided by the manpower supplier, failing which wages of that day will be deducted.
25. The manpower supplier shall maintain all necessary registers (prescribed under different Labour Acts), a daily attendance register including the number and names of the workers engaged for works as per scope of the contract.
26. The manpower supplier should make suitable arrangement for supervision of the manpower supplied and other related works.
27. Man power supplied by manpower supplier firm will be selected by judging their competence by a committee under the chairmanship of Divisional Joint Director of Agriculture. The manpower supplier should have to keep ready the manpower as per the ratio of 1:3 (three labours for a single post). The manpower supplier will have to replace particular employee in case of complaints from the controlling/supervising authority of Agril. Dept. in same the remuneration of the concern worker.
28. The manpower supplier shall maintain a complaint book, which should be made available in his Camp Office.
29. The manpower supplier shall have to engage the required number of manpower and in case required number is not available on any day, Divisional Joint Director of Agriculture can impose penalty of rupees equal to make alternate arrangement for the same on manpower supplier.
30. The contractor will not be allowed to rescind the contract voluntarily or otherwise, he is required to give a notice of at least 60 days failing which the amount of security deposit including any other dues will be recovered from him for making alternate arrangement until the new contract is assigned to the other party.
31. If the contractor repeatedly violates the terms and conditions of the contract or fails to supply required number of manpower despite Divisional Joint Director of Agriculture having served him proper notices, the contract shall be liable to be terminated and security so deposited shall be forfeited.
32. If case of any damage or loss caused to the Divisional Joint Director of Agriculture property by the manpower supplied, the value shall be fixed by appointing arbitrator which includes Divisional Joint Director of Agriculture, Superintendent Agriculture Officer from the office of Divisional Joint Director of Agriculture, two District Superintendent Agriculture Officer from the division, Account Officer from the Divisional Joint Director of Agriculture and concerned Subject Specialist. It must be ensured by the manpower supplier firm before competent authority of Agril. Dept. by submitting an affidavit on non-judicial paper of Rs.100/- (Rs. Hundred only) that same

shall be compensated within two months from the manpower supplier, failing which the necessary action will be undertaken as per the obtainable laws.

33. The loss caused to the Govt. on account of negligence/derelection of duties by the employees of the manpower supplier firm, shall be established after a joint inquiry comprising the representatives of the Divisional Joint Director of Agriculture then manpower supplier, and the Divisional Joint Director of Agriculture shall be within its right to make it good from the manpower supplier.
34. The required strength of manpower under various categories is indicative only. However the deployment shall be as per actual requirement to be decided in consultation with the manpower supplier firm.
35. Manpower supplied by the company should be physically fit to perform the duties.
36. As per Govt. Resolution, Employment And Self Employment Department No. Roswaro-2002/Pra.Kra.267/ Roswaro-1, dated 17th Aug. 2002 and Agriculture, Animal Husbandry, Dairy Development and Fisheries Department Circular No. Rojgar-1004/ Pra.Kra. 79/ 13- A, dated 18th Aug. 2005, exemption in earnest money and experience may be given to unemployed Agricultural service cooperative societies/ Lokseva Kendra. Where as, other terms and conditions will compulsorily binding to them. (Registration certificate under Maharashtra state cooperative societies Act,1960 and Rules 1961 required to be submitted with tender)
37. Notwithstanding the above, the Divisional Joint Director of Agriculture reserves the right to accept or reject any tender or annul the tender process and reject all tenders at any time prior to award of the contract, without assigning any reason, whatsoever and without incurring any liability or obligation, whatsoever to the affected quoter or quoters.
38. Manpower Supplier will have to make service agreement with District Superintendent Agriculture officer and Director, Extension & Training (in respect of labours supplied at Commissionerate level) regarding acceptance of terms and conditions on non-judicial paper of Rs.100/- (Rs. Hundred only).

Eligibility Conditions & Details of manpower required

S. N.	Category	Minimum Qualification	Minimum Experience	Remarks
1	Pest Scout	Diploma in Agriculture	1 Year	Candidate should have fluency in Marathi and English, should be computer literate
2	Data Entry Operator (DEO)*	10th Pass with One year certificate / diploma course in Computer.	2 Years	Candidate Should be proficient in Microsoft office use and good Marathi and English typing speed.
3	Software Supporter*	Post Graduate in Computer Science/ Computer applications /MCS or any equivalent qualification	2 Years	Should have knowledge of Microsoft networking
4	Computer Operator*	Any Graduate with One-year certificate /diploma course in Computers.	2 Years	Candidate Should be proficient in Microsoft office use, should have minimum knowledge of computer and data handling with good Marathi and English typing speed.
5	Accountant*	Any Graduate with MS-CIT certificate. Commerce candidate will be preferred.	1 Year	Candidate should have minimum knowledge of computer with good Marathi and English typing speed.

Note:

1. *Period of Data Entry Operator- Jan.2012 to 29th Feb. 2012, Accountant and Computer Operator- July 2011 to June 2012, Software Supporter for Thane Division- July 2011 to Dec 2011.
2. Minimum qualification and experience can be relaxed for suitable candidate.
3. Age of candidate should be 21 years to 45 years.
4. Candidate should be physically fit to perform the duties.

Duties and Responsibilities of manpower**1. Pest Scout (PS):-****A. Duties & responsibilities:-**

1. Pest Scout will make pest surveillance of soybean, cotton, pigeonpea & chickpea crops of the pre-defined area according to the guideline issued by state steering committee.
2. Pest Scout will facilitate work under pest monitor.
3. Pest Scout will take observation of pest & diseases in the area of 12000 ha. as fixed fields (2) and random (2) fields in each village /area specified or the more fields in one village (depending up on the area) & the report of pest surveillance of total four fields (as per guide lines issued in training programme) in a village and two villages per day on Monday, Tuesday, Thursday and Friday
4. He will submit report of pest surveillance to pest monitor twice in a week i.e. Wednesday & Saturday.
5. The work of pest surveillance should follow as per the technical specifications given in the training by SAU & State Agril. Dept.
6. Pest scout shall live in the rural area for the observations of pest & disease on crop.
7. Pest Scout should capture knowledge of pest surveillance in the different trainings offered to him.
8. Pest Scout will be responsible for fixing pheromones trap in the field under the guidelines from the pest monitor & timely changing of the lure in the pheromones trap.
9. Pest Scout should have good mobility's awareness / interest to have timely observations in the field.
10. Pest Scout should keep close liaison with farmers, Agril. Dept. & other officials.
11. They have to conduct roving survey in his jurisdiction as per the guidelines.

B. Travelling:-

1. Pest Scout has to travel minimum 04 fields in each village /area specified or the more fields in one village depending up on sown area of the crop (two villages per day) on every Monday, Tuesday, Thursday and Friday in their jurisdiction (Approximately 50 - 60 Km. on every Monday, Tuesday, Thursday and Friday).
2. Fix travelling allowance of Rs. 1500/- per month will be given to Pest Scout.

C. Place & Posting:-

One Pest Scout will be appointed for 12000 ha. area in case of soybean, cotton & pigeonpea or two Scouts in case of soybean, cotton, Paddy & pigeonpea while in

case of chickpea there will be One Pest Scout for 3000 ha. area of chickpea. The jurisdiction of Pest Scout may be Taluka/ Subdivision/ District according to sown area crop/ crops.

D. Period of Services:-

1. For soybean, cotton, Paddy & pigeonpea:- 1st July 2011 to 31st Dec. 2011
2. For chickpea: - 1st Jan. 2012 to 15th Feb. 2012.

2. Data Entry Operator (DEO):-

A. Duties & responsibilities:-

1. To feed the data online regularly will be the prime duty of DEO
2. DEO will work under overall control & guidance of SDAO & Pest Monitor
3. DEO will be responsible for proper classification & proper maintenance of office records timely feeding of information collected from Pest Scout for pest surveillance & related information in the website provided by NCIPM (ICAR) New Delhi under guidance of Pest Monitor & SDAO.
4. DEO will responsible for sending SMS & web messages, e-mail under guidance of Pest Monitor to resource personnel's i.e. SAU & after collecting the advisory from them forwarding the same to the concerned farmers, officers, staff & related personnel's under guidance of Pest Monitor through various computer based communication tools.
5. DEO will type the replies to all correspondence of subject/work allotted to him.
6. DEO will be responsible for proper upkeep of computer/ Laptop & their accessories.
7. The DEO shall inform & follow up to Pest Monitor & SDAO about repair & maintenance as per guidance of Pest Monitor & SDAO.

B. Travelling:-

Not Applicable

C. Place & Posting:-

Data Entry Operator will be posted in the office of Sub Divisional Agricultural Officer /District Superintendent Agriculture officer or at specified place.

D. Period of Services:-

1. For soybean, cotton, Paddy & pigeonpea:- 1st July 2011 to 31st Dec. 2011
2. For chickpea: - 1st Jan. 2012 to 29th Feb. 2012.

3. Software Supporter: -

Five Software Supporters one at Pune for Pune, Kolhapur & Nasik Divisions, one at Latur for Latur & Aurangabad Divisions and one each at Thane, Amravati & Nagpur for respective Divisions.

A. Duties & responsibilities:-

1. The software supporter has to report to Joint Director of Agriculture of the respective Division where attached. His area of operation will normally be the Divisional Office and the additional divisions (depending on the number of pest monitoring centers in each division), which are to be allocated by Director of Agriculture (Extension & Training).
2. The support for the client software loaded in the pest monitoring centre's laptops and to ensure the smooth functioning of the software and regular uploading of data.
3. In case of any problem in uploading of data the Data Entry Operator will contact Software Supporter, who in turn attempts to solve the problem over phone or connecting the laptop through net.
4. If these attempts do not yield the desired results, Software Supporter should call the Data Entry Operator along with the laptop to Divisional Office, where he should check whether the problem is due to hardware or software.
5. If the hardware problem is diagnosed Software Supporter has to contact the nearby HCL dealer for getting it rectified. (HCL dealer's phone number should be obtained from DDA (Plant Protection). While handing over the laptop to HCL dealer, Software Supporter has to obtain the acknowledgement for handing over to Data Entry Operator.
6. After successful repair of the hardware Software Supporter has to test the laptop and then load the required softwares for successful operation and uploading of data.
7. In case of software problems he has to troubleshoot on his own or reload the software (based on training by NCIPM). If the problem could not be solved by him, the staff from NCIPM shall have to be contacted for further assistance.
8. In case of OS corruption / web server problems, repair has to be done by Software Supporter with the original CDs available with laptop.

B. Travelling:-

Not Applicable/ If he travelled as per the directions Divisional Joint Director of Agriculture, the actual travelling allowance will be given by respective Divisional Joint Director of Agriculture from their contingency amount.

C. Place & Posting:-

Software Supporter will be posted in the office of Divisional Joint Director of Agriculture (one at Pune for Pune, Kolhapur & Nasik Divisions, one at Latur for Latur & Aurangabad Divisions and one each at Amravati & Nagpur for respective divisions or at specified place).

D. Period of Services:-

For soybean, cotton, Paddy, pigeonpea & chickpea: - 1st July 2011 to 15th Feb. 2012.

4. Computer Operator (CO):-

A. Duties & responsibilities:-

1. Computer Operator will work under overall control & guidance of Dy. Director of Agriculture (Plant Protection), Commissionerate of Agriculture, Pune-5.

2. Prime duty to extract online data entry regularly and bring into notice of Dy. Director of Agriculture (Plant Protection), Commissionerate of Agriculture where data entry will be below 80%.
3. Computer Operator will be responsible for proper classification & proper maintenance of office records timely feeding of information collected from pest scout, pest monitor for pest surveillance & related information in the website provided by NCIPM (ICAR) New Delhi under guidance of Research Associate & Dy. Director of Agriculture (Plant Protection), Commissionerate of Agriculture, Pune-5.
4. Computer Operator will be responsible for sending SMS & web messages, e-mail under guidance of Research Associate to resource personnel's i.e. SAU, NCIPM, New Delhi, CRIDA, Hyderabad, CICR, Nagpur, DOSR, Indore & after collecting the advisory from them forwarding the same to the concerned officers, staff & related personnel's under guidance of Research Associate & Dy. Director of Agriculture (Plant Protection), Commissionerate of Agriculture, Pune-5 through various computer based communication tools.
5. Computer Operator will type the replies to all correspondence of subject/work allotted to him.
6. Computer Operator will be responsible for proper upkeep of computer & their accessories. The Computer Operator shall inform & follow up to Research Associate & Dy. Director of Agriculture (Plant Protection), Commissionerate of Agriculture, Pune-5 about repair & maintenance as per guidance of Research Associate.
7. Computer Operator will prepare meeting notes/power point presentations.

B. Travelling:-

Not Applicable

C. Place & Posting:-

Computer Operator will be posted in the office of Dy. Director of Agriculture (Plant Protection), Commissionerate of Agriculture, Pune-5.

D. Period of Services:-

For soybean, cotton, Paddy, pigeonpea & chickpea: - 1st July 2011 to 30th June, 2012.

5. Accountant: -

A. Duties & responsibilities:-

1. Accountant will work under overall control & guidance of Dy. Director of Agriculture (Plant Protection), Commissionerate of Agriculture, Pune-5.
2. He will be responsible for distributing the funds to all stakeholders, maintaining its records in necessary formats and maintaining updated physical and financial Monthly Progress Reports (MPR).
3. He will take follow up with Account branch for funds/ account related matter.
4. He will make all necessary correspondence with stakeholders in respect of funds/ account related matter.
5. To prepare utilization certificate (UC) of the project.

6. He will prepare meeting notes respect of funds.
7. He will be responsible for proper classification & proper maintenance of account related records and documents at commissionerate level.
8. Any other account related work assigned by Dy. Director of Agriculture (Plant Protection).

B. Travelling:-

Not Applicable

C. Place & Posting:-

Accountant will be posted in the office of Dy. Director of Agriculture (Plant Protection), Commissionerate of Agriculture, Pune-5.

E. Period of Services:-

For soybean, cotton, Paddy, pigeonpea & chickpea: - 1st July 2011 to 30th June. 2012.

Statement showing Districtwise number of Pest Scouts, Agril Sup. & Data Entry Operators required under Soybean, Cotton, Paddy Crop Pest Surveillance and Advisory Project (CROPSAP) 2011-12

Division	District	No. of Sub divisions	No. of Talukas	Soybean	Cotton	Paddy	Tur	Total area ha.	Pest Scout	Pest Monitor	Data Entry Operator
Thane	Thane	3	14	0	0	138600	0	138600	28	3	3
	Raigad	4	15	0	0	124600	0	124600	26	3	3
	Ratnagiri	3	9	0	0	77700	0	77700	16	2	2
	Sindhudurg	2	8	0	0	74800	0	74800	16	2	2
Thane Div.	4	12	46	0	0	415700	0	415700	86	10	10
Nashik	Nashik	4	15	52300	50600	60100	11400	174400	21	2	2
	Dhule	1	4	18500	136800	7800	9300	172400	14	1	1
	Nandurbar	2	6	30300	58100	18200	20500	127100	11	1	1
	Jalgaon	3	15	12200	522800	100	19100	554200	44	4	4
Nashik Div.	4	10	40	113300	768300	86200	60300	1028100	90	8	8
Pune	Pune	3	12	3300	0	59800	3400	66500	12	1	1
	Ahmednagar	4	14	50300	109000	13100	22600	195000	17	2	2
	Solapur	3	8	4100	3000	600	38800	46500	1	1	1
Pune Div.	3	10	34	57700	112000	73500	64800	308000	30	4	4
Kolhapur	Satara	4	11	40900	1200	49000	4100	95200	11	1	1
	Sangli	3	10	57000	3000	19300	10700	90000	8	1	1
	Kolhapur	3	12	47900	100	102100	2700	152800	25	3	3
Kolhapur Div.	3	10	33	145800	4300	170400	17500	338000	44	5	5
Aurangabad	Aurangabad	3	9	7700	332900	0	60800	401400	26	3	3
	Jalna	2	8	46500	289300	0	63700	399500	27	2	2
	Beed	3	11	61800	286300	700	72800	421600	27	3	3
A. bad Div	3	8	28	116000	908500	700	197300	1222500	80	8	8
Latur	Latur	2	10	191500	4600	6700	93000	295800	17	2	2
	Osmanabad	2	8	66500	18400	13000	105200	203100	8	1	1
	Parbhani	1	9	79400	202300	4700	75700	362100	24	2	2
	Hingoli	1	5	153400	77100	400	30500	261400	19	2	2
	Nanded	3	16	131100	312000	5300	73500	521900	36	4	4
Latur Div.	5	9	48	621900	614400	30100	377900	1644300	104	11	11
Amravati	Amravati	3	14	267700	207600	4000	123000	602300	40	3	3
	Buldana	3	13	228100	252500	0	78100	558700	38	3	3
	Akola Dist	2	7	121800	168100	0	66500	356400	25	2	2
	Washim	1	6	208200	63300	0	63800	335300	23	2	2
	Yeotmal	4	16	187300	489800	100	122200	799400	56	4	4
Amravati Div.	5	13	56	1013100	1181300	4100	453600	2652100	182	14	14
Nagpur	Chandrapur	4	15	142400	96700	157700	37300	434100	48	4	4
	Gadchiroli	3	12	4400	3700	160300	7300	175700	32	3	3
	Wardha	3	8	136900	189300	0	71100	397300	28	3	3
	Nagpur	4	13	242200	94200	77100	66100	479600	42	4	4
	Bhandara	2	7	6500	0	182000	9100	197600	34	3	3
	Gondiya	2	8	0	0	188800	6100	194900	35	3	3
Nagpur Div.	6	18	63	532400	383900	765900	197000	1879200	219	20	20
State Total	33	90	348	2600200	3972700	1546600	1368400	9487900	835	80	80

Statement showing District, Subdivision & Talukwise number of Pest Scouts, Agril Sup. & Data Entry Operators required under Soybean, Cotton, Paddy Crop Pest Surveillance and Advisory Project (CROPSAP)

Division	District	Sub-division	Taluka	Area in ha.				Total area ha.	Pest Scout	Pest Monitor	Data Entry Operator
				Soybean	Cotton	Paddy	Tur				
Thane	Thane	Palghar	Palghar			15100		15100	3	1	1
			Talasari			6400		6400	1	Palghar	Palghar
			Dahanu			14400		14400	3		
			Vasai			12400		12400	3		
			Thane			300		300			
			5			48600		48600	10	1	1
		Wada	Wada			13400		13400	3	1	1
			Jawhar			7000		7000	2	Wada	Wada
			Mokhada			1900		1900			
			Vikramgad			6000		6000	1		
			Bhivandi			18000		18000	4		
			5			46300		46300	10	1	1
		Kalyan	Kalyan			6700		6700	1	1	1
			Shahapur			15400		15400	3	Kalyan	Kalyan
			Murbad			14900		14900	3		
			Ambarnath			6700		6700	1		
			4			43700		43700	8	1	1
	Thane Dist	3	14			138600		138600	28	3	3
	Raigad	Khopoli	Khalapur			7700		7700	2	1	1
			Karjat			13200		13200	3	Khopoli	Khopoli
			Uran			2600		2600	1		
			Panvel			11200		11200	2		
			4			34700		34700	8	1	1
		Alibag	Alibag			17300		17300	3	1	1
			Pen			13000		13000	3	Alibag	Alibag
			Murud			2800		2800	1		
			3			33100		33100	7	1	1
		Mangaon	Mangaon			13100		13100	3	1	1
			Tala			2200		2200		Mangaon	Mangaon
			Roha			10800		10800		2	
			Pali			6500		6500	1		
			4			32600		32600	6		
		Mahad	Mahad			13900		13900	3		
			Poladpur			4400		4400	1		
			Mhasala			2300		2300	1		
			Shrivardhan			3600		3600			
			4			24200		24200	5	1	1
	Raigad Dist	4	15			124600		124600	26	3	3
	Ratnagiri	Dapoli	Dapoli			8800		8800	2	1	1
			Khed			11200		11200	2	Dapoli	Dapoli
			Mandangad			4700		4700	1		
			3			24700		24700	5		
		Chiplun	Chiplun			11500		11500	2		
			Guhagar			4700		4700	1		
			Sangmeshwa			12600		12600	3		

			r								
			3			28800		28800	6	1	1
		Ratnagiri	Ratnagiri			8800		8800	2	1	1
			Lanja			6700		6700	1	Ratnagiri	Ratnagiri
			Rajapur			8700		8700	2		
			3			24200		24200	5	1	1
	Ratnagiri Dist	3	9			77700		77700	16	2	2
	Sindhudurg	Kankavali	Kankavali			14800		14800	3	1	1
			Malvan			13000		13000	3	Kankavali	Kankavali
			Devgad			6600		6600	1		
			Vaibhavvadi			4300		4300	1		
			4			38700		38700	8	1	1
		Sawantwadi	Sawantwadi			8600		8600	2	1	1
			Dodamarg			3200		3200	1	Sawantwadi	Sawantwadi
			Vengurla			6200		6200	1		
			Kudal			18100		18100	4		
			4			36100		36100	8	1	1
	Sindhudurg dist	2	8	0	0	74800		74800	16	2	2
D. Total	4	12	46	0	0	415700		415700	86	10	10
Nashik	Nashik	Nashik	Nashik	2500	0	4600	200	7300	1	1	1
			Peth	400	0	9500	1700	11600	2	Nashik	Nashik
			Egatpuri	1000	0	15600	100	16700	3		
			Trambakeshwar	100	0	8500	500	9100	2		
			4	4000	0	38200	2500	44700	8		
		Niphad	Niphad	19300	100	100	500	20000	2		
			Chandwad	3300	100	100	1400	4900	2		
			Yewala	3000	12200	0	1400	16600	2		
			Sinnar	16000	1000	700	700	18400	2		
			4	41600	13400	900	4000	59900	6	1	1
		Malegaon	Malegaon	100	24900	0	700	25700	2	1	1
			Satana (Baglan)	200	0	1700	1000	2900	2	Malegaon	Malegaon
			Nandgaon	200	12300	0	600	13100	2		
			3	500	37200	1700	2300	41700	4		
		Kalvan	Dindori	3400	0	4300	1000	8700	1		
			Surgana	200	0	11000	800	12000	1		
			Kalvan+Devala	2600	0	4000	800	7400	1		
			4	6200	0	19300	2600	28100	3	1	1
	Nashik Dist.	4	15	52300	50600	60100	11400	174400	21	2	2
	Dhule	Dhule	Dhule	3500	48500	0	2500	54500	4	1	1
			Sakri	10700	8600	7800	2200	29300	3	Dhule	Dhule
			Sindakheda	1500	35300	0	1500	38300	3		
			Shirpur	2800	44400	0	3100	50300	4		
			4	18500	136800	7800	9300	172400	14	1	1
	Dhule Dist.	1	4	18500	136800	7800	9300	172400	14	1	1
	Nandurbar	Nandurbar	Nandurbar	5600	20700	800	3900	31000	2	1	1
			Akkalkuwa	5400	700	5300	3700	15100	2	Nandurbar	Nandurbar
			Navapur	9100	3500	10600	4100	27300	3		
			3	20100	24900	16700	11700	73400	7		

		Shahada	Shahada	5900	29900	0	6400	42200	3		
			Akrani	1800	0	300	1300	3400	1		
			Taloda	2500	3300	1200	1100	8100			
			3	10200	33200	1500	8800	53700	4		
	Nandurbar dist.	2	6	30300	58100	18200	20500	127100	11	1	1
	Jalgaon	Jalgaon	Jalgaon	1300	34900	0	1100	37300	3	1	1
			Yawal	1400	28600	0	2600	32600	2	Jalgaon	Jalgaon
			Raver	1700	25100	100	1900	28800	2		
			Bhusawal	800	19000	0	1100	20900	3		
			Bodwad	1500	18700	0	800	21000			
			Mukatainagar	200	25500	0	1700	27400	2		
			6	6900	151800	100	9200	168000	12	1	1
		Amalner	Amalner	600	33600	0	500	34700	3	1	1
			Chopda	2000	63300	0	1800	67100	5	Amalner	Amalner
			Erandol	700	14900	0	500	16100	4		
			Dharangaon	400	28900	0	600	29900			
			Parola	100	34000	0	1800	35900	3		
			5	3800	174700	0	5200	183700	15	1	1
		Pachora	Pachora	600	35100	0	1000	36700	3	1	1
			Jamner	500	69900	0	1500	71900	6	Pachora-1	Pachora-1
			Chalisgaon	100	58400	0	1400	59900	5	1	1
			Bhadgaon	300	32900	0	800	34000	3	Pachora-2	Pachora-2
			4	1500	196300	0	4700	202500	17	2	2
	Jalgaon Dist.	3	15	12200	522800	100	19100	554200	44	4	4
D. Total	4	10	40	113300	768300	86200	60300	1028100	90	8	8
Pune	Pune	Pune	Haveli	400	0	2800	400	3600	3	1	1
			Mulshi	0	0	12000	100	12100		Pune	Pune
			Vadgaon-Maval	0	0	9700	100	9800	2		
			Velha	0	0	6000	0	6000	3		
			Bhor	300	0	7500	300	8100			
			5	700	0	38000	900	39600	8		
		Baramati	Baramati	800	0	0	500	1300	1		
			Purandar	300	0	1400	100	1800			
			Indapur	100	0	0	200	300			
			Daund	0	0	0	200	200			
			3	1200	0	1400	1000	3600	1		
		Rajgurunagar	Rajgurunagar	300	0	6400	400	7100	2		
			Junnar	700	0	9300	300	10300			
			Ambegaon	200	0	4700	500	5400	1		
			Shirur	200	0	0	300	500			
			4	1400	0	20400	1500	23300	3		
	Pune Dist	3	12	3300	0	59800	3400	66500	12	1	1
	Ahmednagar	Ahmednagar	Pathardi	0	31100	0	3900	35000	3	1	1
			Parner	200	0	0	700	900		Ahmednagar	Ahmednagar
			Ahmednagar	600	0	0	1100	1700			
			3	800	31100	0	5700	37600	3		
		Karjat	Karjat	300	4200	0	900	5400	2		

			Shrigonda	0	100	0	600	700			
			Jamkhed	400	12000	0	4800	17200			
			3	700	16300	0	6300	23300	2	1	1
		Sangamner	Sangamner	5200	200	0	400	5800		1	1
			Akole	1400	0	13100	300	14800	5	Sangamner	Sangamner
			Rahata	13100	500	0	300	13900			
			Kopargaon	8600	4900	0	100	13600	1		
			4	28300	5600	13100	1100	48100	6		
		Shrirampur	Newasa	2100	12100	0	5200	19400	1		
			Shrirampur	11000	3200	0	300	14500	1		
			Rahuri	7300	2500	0	600	10400	1		
			Shevagaon	100	38200	0	3400	41700	3		
			4	20500	56000	0	9500	86000	6	1	1
	A.nagar Dist	4	14	50300	109000	13100	22600	195000	17	2	2
	Solapur	Solapur	South Solapur	100	100	100	500	800		1	1
			Akkalkot	100	0	400	15200	15700		Solapur	Solapur
			Mohol	100	0	0	1500	1600			
			North Solapur	100	0	0	1300	1400			
			4	400	100	500	17200	18200			
		Pandharpur	Malshiras	100	0	0	200	300			
			Sangola	0	2700	0	500	3200			
			Mangalvedha	100	100	0	400	600			
			3	200	2800	0	1100	4100			
		Kurduwadi	Barshi	3500	100	100	20500	24200			
			1	3500	100	100	20500	24200			
	Solapur Dist.	3	8	4100	3000	600	38800	46500	1	1	1
D. Total	3	10	34	57700	112000	73500	64800	308000	30	4	4
Kolhapur	Satara	Satara	Satara	11500	0	7200	500	19200	2	1	1
			Koregaon	9000	0	100	600	9700			
			Khatav	1800	600	200	1000	3600	1	Satara	Satara
			3	22300	600	7500	2100	32500	3		
		Karad	Karad	7900	0	7500	800	16200	2		
			Patan	4600	0	17200	400	22200	3		
			2	12500	0	24700	1200	38400	5		
		Phaltan	Phaltan	200	0	0	200	400			
			Man-Dahiwadi	0	600	0	300	900			
			2	200	600	0	500	1300	1		
		Wai	Wai	4800	0	4900	100	9800			
			Jawali	1000	0	7700	100	8800			
			Mahabaleshwar	0	0	3400	0	3400			
			Khandala	100	0	800	100	1000	2		
			4	5900	0	16800	300	23000	3		
	Satara Dist	4	11	40900	1200	49000	4100	95200	11	1	1
	Sangli	Miraj	Miraj	15200	0	100	700	16000	1	1	1
			Valva	17300	0	3100	400	20800	2	Miraj	Miraj
			Shirola	3900	0	14700	100	18700	3		
			3	36400	0	17900	1200	55500	6		
		Jat	Kavathemankal	500	300	0	1200	2000			
			Jat	100	1600	0	800	2500	1		

			2	600	1900	0	2000	4500			
		Vita	Palus	6400	0	1100	400	7900			
			Tasgaon	5900	0	100	2200	8200			
			Kadegaon	4000	100	100	700	4900	1		
			Aatpadi	0	700	0	700	1400			
			Vita-Khanapur	3700	300	100	3500	7600			
			5	20000	1100	1400	7500	30000	2		
	Sangli Dist.	3	10	57000	3000	19300	10700	90000	8	1	1
	Kolhapur	Kolhapur	Shahuwadi	100	0	14100	100	14300	3	1	1
			Hathkanangale	14500	0	1800	200	16500	2	Kolhapur	Kolhapur
			Panhala	1900	0	9800	200	11900	2		
			Shirol	5900	0	500	100	6500	1		
			4	22400	0	26200	600	49200	8	1	1
		Karvir	Karvir	4800	0	10800	200	15800	2	1	1
			Radhanagari	0	0	12100	200	12300		Karvir	Karvir
			Gaganbavda	0	0	2100	0	2100	3		
			Kagal	7600	0	7400	500	15500	2		
			4	12400	0	32400	900	45700	7	1	1
		Gadhinglaj	Gadhinglaj	12400	0	7000	600	20000	2	1	1
			Aajra	700	0	10100	400	11200	2	Gadhinglaj	Gadhinglaj
			Bhudargad	0	0	13600	100	13700	3		
			Chandgad	0	100	12800	100	13000	3		
			4	13100	100	43500	1200	57900	10	1	1
	Kolhapur Dist.	3	12	47900	100	102100	2700	152800	25	3	3
D. Total	3	10	33	145800	4300	170400	17500	338000	44	5	5
Aurangabad	Aurangabad	Aurangabad	Aurangabad	800	25100	0	14100	40000	2	1	1
			Phulambri	0	28400	0	3000	31400	2	Aurangabad	Aurangabad
			Paithan	500	41200	0	15500	57200	3		
			3	1300	94700	0	32600	128600	7	1	1
		Sillod	Sillod	2200	37500	0	2200	41900	3	1	1
			Soygaon	800	29800	0	2400	33000	2	Sillod	Sillod
			Kannad	200	49500	0	7000	56700	4		
			3	3200	116800	0	11600	131600	9	1	1
		Vaijapur	Vaijapur	600	48300	0	2800	51700	4	1	1
			Khultabad	100	17100	0	4800	22000	1	Vaijapur	Vaijapur
			Gangapur	2500	56000	0	9000	67500	5		
			3	3200	121400	0	16600	141200	10	1	1
	A. bad Dist	3	9	7700	332900	0	60800	401400	26	3	3
	Jalna	Jalna	Jalna	11300	42200	0	9200	62700	5	1	1
			Badnapur	1100	28100	0	5900	35100	2	Jalna	Jalna
			Bhokardan	4100	48500	0	4400	57000	4		
			Jafarabad	11000	27000	0	4500	42500	3		
			4	27500	145800	0	24000	197300	14	1	1
		Partur	Partur	3500	38000	0	10500	52000		1	1
			Mantha	11800	21900	0	9300	43000	6	Partur	Partur
			Ghansangavi	2600	40900	0	8800	52300			
			Ambad	1100	42700	0	11100	54900	7		
			4	19000	143500	0	39700	202200	13	1	1
	Jalna Dist.	2	8	46500	289300	0	63700	399500	27	2	2

	Beed	Beed	Beed	1000	42000	0	7000	50000	3	1	1		
			Patoda	2100	14300	0	3100	19500	1	Beed	Beed		
			Ashti	400	14000	0	5000	19400	1				
			Shiruksar	200	26500	0	2000	28700	2				
			4	3700	96800	0	17100	117600	7	1	1		
		Majalgaon	Majalgaon	600	46500	0	16500	63600	4	1	1		
			Dharur	2400	17900	100	1800	22200	2	Majalgaon	Majalgaon		
			Gevarai	200	52000	0	11500	63700	4				
			Vadvani	700	16800	100	3200	20800	1				
			4	3900	133200	200	33000	170300	11	1	1		
		Ambejogai	Ambejogai	31500	9800	200	8300	49800	6	1	1		
			Parali	10700	18500	200	5400	34800		Ambejogai	Ambejogai		
			Kej	12000	28000	100	9000	49100	3				
			3	54200	56300	500	22700	133700	9	1	1		
	Beed Dist	3	11	61800	286300	700	72800	421600	27	3	3		
D. Total	3	8	28	116000	908500	700	197300	1222500	80	8	8		
Latur	Latur	Latur	Latur	31800	0	1300	7100	40200	3	1	1		
			Renapur	24200	300	400	5800	30700	2	Latur	Latur		
			Ausa	25600	100	1300	18700	45700	2				
			Nilanga	29200	0	800	9200	39200	3				
			Shirur-Anantpal	9600	0	300	5000	14900					
			5	120400	400	4100	45800	170700	10	1	1		
		Udgir	Udgir	9900	100	500	9100	19600	3	1	1		
			Chakur	19000	0	600	13100	32700		Udgir	Udgir		
			Ahamadpur	26400	3200	200	14300	44100	2				
			Jalkot	7800	700	600	5100	14200	1				
			Devni	8000	200	700	5600	14500	1				
			5	71100	4200	2600	47200	125100	7	1	1		
	Latur Dist	2	10	191500	4600	6700	93000	295800	17	2	2		
	Osmanabad	O.bad	Osmanabad	26000	200	1100	19800	47100	2	1	1		
			Tuljapur	10800	0	5800	25000	41600	2	Osmanabad	Osmanabad		
			Lohara	2900	0	800	4900	8600	1				
			Umarga	3200	0	3600	15500	22300					
			4	42900	200	11300	65200	119600	5				
		Bhoom	Bhoom	2100	4500	200	10900	17700	2				
			Vashi	6700	8800	200	7600	23300					
			Paranda	1500	500	100	8100	10200	1				
			Kalamb	13300	4400	1200	13400	32300					
			4	23600	18200	1700	40000	83500	3				
	Osmanabad	2	8	66500	18400	13000	105200	203100	8	1	1		
	Parbhani	Parbhani	Parbhani	24300	37400	600	13100	75400	5	1	1		
			Jintur	5000	26400	1500	12500	45400	3	Parbhani-1	Parbhani-1		
			Sonpeth	8900	18000	200	7000	34100	2				
			Gangakhed	6000	12600	700	5500	24800	2				
			Palam	6700	18000	800	5800	31300	2	1	1		
			Purna	14000	21500	500	8000	44000	3	Parbhani-2	Parbhani-2		
			Pathri	4000	20200	200	7000	31400	2				
			Selu	8000	29700	100	6300	44100	3				
			Manavat	2500	18500	100	10500	31600	2				
			9	79400	202300	4700	75700	362100	24	2	2		

	Parbhani Dist.	1	9	79400	202300	4700	75700	362100	24	2	2
	Hingoli	Hingoli	Hingoli	50100	11200	0	6000	67300	5	1	1
			Sengaon	26700	13500	0	3800	44000	3	Hingoli-1	Hingoli-1
			Kalamnuri	27000	15000	200	4800	47000	4	1	1
			Aundha-Nagnath	20100	18000	200	8400	46700	3	Hingoli-2	Hingoli-2
			Vasamat	29500	19400	0	7500	56400	4		
			5	153400	77100	400	30500	261400	19	2	2
	Hingoli Dist	1	5	153400	77100	400	30500	261400	19	2	2
	Nanded	Nanded	Nanded	7700	8200	200	2500	18600	2	1	1
			Mudkhed	4400	4300	100	1500	10300		Nanded	Nanded
			Loha	15000	23300	1200	9600	49100	3		
			Kandhar	11600	15300	200	8500	35600	2		
			4	38700	51100	1700	22100	113600	7	1	1
		Deglur	Deglur	4100	18900	600	3900	27500	2	1	1
			Mukhed	9500	15300	500	10200	35500	2	Deglur	Deglur
			Biloli	4200	14100	500	3900	22700	1		
			Ardhapur	4700	6300	0	1800	12800	1		
			Dharmabad	5000	12500	500	3000	21000	2		
			Naygaon	13800	11500	400	2500	28200	2		
			6	41300	78600	2500	25300	147700	10	1	1
		Kinvat	Kinvat	10200	45300	500	6900	62900	5	1	1
			Mahur	7000	36500	200	4400	48100	4	Kinvat-1	Kinvat-1
			Himayatnagar	3500	25000	100	2000	30600	2	1	1
			Hadgaon	22500	31500	100	6300	60400	4	Kinvat-2	Kinvat-2
			Bhokar	1700	31200	100	3900	36900	4		
			Umri	6200	12800	100	2600	21700			
			6	51100	182300	1100	26100	260600	19	2	2
	Nanded Dist.	3	16	131100	312000	5300	73500	521900	36	4	4
D. Total	5	9	48	621900	614400	30100	377900	1644300	104	11	11
Amravati	Amravati	Amravati	Amravati	27000	9300	0	10900	47200	3	1	1
			Bhatkuli	23000	8000	0	9000	40000	3	Amravati	Amravati
			Chandurrailway	11500	17300	0	9600	38400	2		
			Dhamangao n railway	21100	20300	0	7300	48700	3		
			Nandgaon Khandeshwar	29500	17800	0	10500	57800	4		
			5	112100	72700	0	47300	232100	15	1	1
		Morshi	Morshi	23000	29400	0	11400	63800	4	1	1
			Varud	9500	20000	0	9600	39100	3	Morshi	Morshi
			Chandurbazar	26800	16400	0	11100	54300	4		
			Tiwsa	21100	15900	0	6200	43200	3		
			4	80400	81700	0	38300	200400	14	1	1
		Achalpur	Dharni	34600	2800	2100	6200	45700	3	1	1
			Chikhaldara	12600	2200	1900	3800	20500	2	Achalpur	Achalpur
			Achalpur	12800	16200	0	8900	37900	2		
			Daryapur	2000	19500	0	10200	31700	2		
			Anjangaonsu rji	13200	12500	0	8300	34000	2		
			5	75200	53200	4000	37400	169800	11	1	1

	Amravati Dist	3	14	267700	207600	4000	123000	602300	40	3	3
	Buldhana	Buldhana	Buldhana	33900	8200	0	5200	47300	3	1	1
			Malkapur	3300	24100	0	3500	30900	2	Buldhana	Buldhana
			Motala	2100	30700	0	6900	39700	3		
			Chikhali	45600	14500	0	13000	73100	5		
			4	84900	77500	0	28600	191000	13	1	1
		Mehakar	Mehakar	43900	9900	0	9200	63000	4	1	1
			Lonar	29600	4200	0	5400	39200	3	Mehakar	Mehakar
			Sindkhedraja	31200	19600	0	4100	54900	4		
			Deolgaonraja	7100	21500	0	3000	31600	2		
			4	111800	55200	0	21700	188700	13	1	1
		Khamgaon	Khamgaon	15000	32800	0	9000	56800	4	1	1
			Shegaon	3100	21300	0	4500	28900	2	Khamgaon	Khamgaon
			Nandura	6200	24000	0	5500	35700	2		
			Jalgaon Jamod	4900	19200	0	5000	29100	2		
			Sangrampur	2200	22500	0	3800	28500	2		
			5	31400	119800	0	27800	179000	12	1	1
	Buldhana Dist.	3	13	228100	252500	0	78100	558700	38	3	3
	Akola	Akola	Akola	22000	33000	0	15100	70100	5	1	1
			Barshi Takali	24500	18200	0	6400	49100	4	Akola	Akola
			Murtijapur	23000	19100	0	13000	55100	4		
			3	69500	70300	0	34500	174300	13	1	1
		Akot	Akot	8600	27200	0	11300	47100	3	1	1
			Telhara	10300	25700	0	9700	45700	3	Akot	Akot
			Balapur	15200	24500	0	5700	45400	3		
			Patur	18200	20400	0	5300	43900	3		
			4	52300	97800	0	32000	182100	12	1	1
	Akola Dist	2	7	121800	168100	0	66500	356400	25	2	2
	Wasim	Washim	Washim	51200	3500	0	11100	65800	4	1	1
			Manora	14200	21400	0	8100	43700	3	Washim -1	Washim -1
			Risod	53000	500	0	13600	67100	5		
			Malegaon	41000	1300	0	13200	55500	4	1	1
			Mangalurpir	21000	19300	0	7900	48200	3	Washim -2	Washim -2
			Karanja	27800	17300	0	9900	55000	4		
			6	208200	63300	0	63800	335300	23	2	2
	Wasim Dist	1	6	208200	63300	0	63800	335300	23	2	2
	Yeotmal	Yeotmal	Yeotmal	13700	32000	100	6900	52700	4	1	1
			Kalamb	7100	33900	0	7600	48600	3	Yeotmal	Yeotmal
			Ralegaon	9200	42600	0	5600	57400	4		
			Ghatanji	8900	39100	0	7800	55800	4		
			4	38900	147600	100	27900	214500	15	1	1
		Pusad	Pusad	16200	30300	0	12200	58700	4	1	1
			Digranj	5500	27100	0	3700	36300	3	Pusad	Pusad
			Umerkhed	20300	28400	0	5600	54300	4		
			Mahagaon	16000	27200	0	9900	53100	4		
			4	58000	113000	0	31400	202400	15	1	1
		Darvha	Darvha	15900	29800	0	8300	54000	4	1	1
			Arni	11600	30500	0	7400	49500	3	Darvha	Darvha

			Ner	9800	22700	0	10700	43200	3		
			Bhabhulgao	14000	21300	0	7400	42700	3		
			4	51300	104300	0	33800	189400	13	1	1
		Pandharkawada	Pandharkawada	7600	34200	0	8600	50400	3	1	1
			Zarizamani	6100	28300	0	4600	39000	3	Pandharkawada	Pandharkawada
			Vani	15800	38200	0	8200	62200	4		
			Maregaon	9600	24200	0	7700	41500	3		
			4	39100	124900	0	29100	193100	13	1	1
	Yawatmal Dist.	4	16	187300	489800	100	122200	799400	56	4	4
D. Total	5	13	56	1013100	1181300	4100	453600	2652100	182	14	14
Nagpur	Chandrapur	Chandrapur	Chandrapur	11500	3500	3200	1800	20000	2	1	1
			Ballarpur	5100	700	3200	800	9800	1	Chandrapur	Chandrapur
			Mul	2200	0	18100	600	20900	4		
			Savali	1000	0	17800	600	19400	3		
			4	19800	4200	42300	3800	70100	10		
		Nagbhid	Nagbhid	100	0	24800	1800	26700	5	1	1
			Bramhapuri	300	0	24500	1200	26000	5	Nagbhid	Nagbhid
			Sindevahi	100	0	17800	1100	19000	3		
			3	500	0	67100	4100	71700	13	1	1
		Varora	Varora	26700	27200	3000	7900	64800	5	1	1
			Bhadravati	14000	13000	4900	2900	34800	3	Varora	Varora
			Chimur	25500	1400	20300	3600	50800	6		
			3	66200	41600	28200	14400	150400	14	1	1
		Rajura	Rajura	18100	16700	3000	5400	43200	3	1	1
			Korpana	12500	22300	200	5000	40000	3	Rajura	Rajura
			Gondpimpri	15000	1500	6800	3600	26900	2		
			Pombhurna	5100	700	10100	1000	16900	2		
			Jivati	5200	9700	0	2700	17600	1		
			5	55900	50900	20100	15000	141900	11	1	1
	Chandrapur Dist	4	15	142400	96700	157700	37300	434100	48	4	4
	Gadchiroli	Gadchiroli	Gadchiroli	200	0	16000	1000	17200	3	1	1
			Chamoshri	2900	700	28700	2800	35100	6	Gadchiroli	Gadchiroli
			Mulchra	100	0	5800	100	6000	1		
			Dhanora	300	0	17600	700	18600	3		
			4	3500	700	68100	4600	76900	13	1	1
		Vadsa	Vadsa (Desai ganj)	0	0	9800	400	10200	2	1	1
			Aarmori	0	0	18000	500	18500	3	Vadsa	Vadsa
			Kurkheda	0	0	15900	900	16800	3		
			Korchi	0	0	9200	200	9400	2		
			4	0	0	52900	2000	54900	10	1	1
		Aheri	Aheri	900	100	9200	400	10600	2	1	1
			Sironcha	0	2900	7600	300	10800	2	Aheri	Aheri
			Bhamaragad	0	0	8800	0	8800	2		
			Etapalli	0	0	13700	0	13700	3		
			4	900	3000	39300	700	43900	9	1	1
	Gadchiroli dist.	3	12	4400	3700	160300	7300	175700	32	3	3
	Wardha	Wardha	Wardha	10500	25900	0	10300	46700	3	1	1
			Selu	10500	21500	0	6500	38500	3	Wardha	Wardha

			Devli	15300	29400	0	11900	56600	4		
			3	36300	76800	0	28700	141800	10	1	1
		Arvi	Arvi	16700	21700	0	9600	48000	3	1	1
			Karanja Ghadge	24400	10000	0	7000	41400	3	Arvi	Arvi
			Aasti	9900	14000	0	4700	28600	2		
			3	51000	45700	0	21300	118000	8	1	1
		Hinganghat	Hinganghat	22100	32500	0	11600	66200	5	1	1
			Samudrapur	27500	34300	0	9500	71300	5	Hinganghat	Hinganghat
			2	49600	66800	0	21100	137500	10	1	1
	Wardha Dist.	3	8	136900	189300	0	71100	397300	28	3	3
	Nagpur	Nagpur	Nagpur	12100	8500	0	4300	24900	4	1	1
			Hingana	11000	18300	0	4600	33900		Nagpur	Nagpur
			Kamthi	13900	700	3600	1200	19400	2		
			Savner	9400	20900	0	10800	41100	2		
			4	46400	48400	3600	20900	119300	8	1	1
		Ramtek	Ramtek	4100	1600	18000	2700	26400	4	1	1
			Mauda	13100	0	32100	1300	46500	7	Ramtek	Ramtek
			Parshivani	8500	10800	6400	4600	30300	3		
			3	25700	12400	56500	8600	103200	14	1	1
		Katol	Katol	30400	6200	0	8100	44700	3	1	1
			Kalameshwar	19900	8800	0	8900	37600	2	Katol	Katol
			Narkhed	23000	12000	0	7600	42600	3		
			3	73300	27000	0	24600	124900	8	1	1
		Umardhed	Umardhed	32200	4800	2200	5600	44800	4	1	1
			Bhivapur	29100	1500	3800	3200	37600	3	Umardhed	Umardhed
			Kuhi	35500	100	11000	3200	49800	5		
			3	96800	6400	17000	12000	132200	12	1	1
	Nagpur Dist.	4	13	242200	94200	77100	66100	479600	42	4	4
	Bhandara	Bhandara	Bhandara	2500	0	25800	1700	30000	5	1	1
			Pauni	3700	0	26800	1300	31800	5	Bhandara-1	Bhandara-1
			Tumsar	0	0	28800	1100	29900	5	1	1
			Mohadi	100	0	32700	1400	34200	6	Bhandara-2	Bhandara-2
			4	6300	0	114100	5500	125900	21	2	2
		Sakoli	Lakhandur	200	0	26700	1600	28500	5	1	1
			Sakoli	0	0	19400	600	20000	4	Sakoli	Sakoli
			Lakhani	0	0	21800	1400	23200	4		
			3	200	0	67900	3600	71700	13	1	1
	Bhandara Dist.	2	7	6500	0	182000	9100	197600	34	3	3
	Gondiya	Gondiya	Gondiya	0	0	38600	900	39500	7	1	1
			Aamgaon	0	0	30400	1400	31800	6	Gondiy a-1	Gondiy a-1
			Tiroda	0	0	19700	400	20100	4	1	1
			Goregaon	0	0	20800	600	21400	4	Gondiy a-2	Gondiy a-2
			Salekasa	0	0	16100	300	16400	3		
			5	0	0	125600	3600	129200	24	2	2
		Devri	Devri	0	0	22100	800	22900	4	1	1
			Sadak Arjuni	0	0	18600	1000	19600	3	Devri	Devri
			Morgaon Arjuni	0	0	22500	700	23200	4		
			3	0	0	63200	2500	65700	11	1	1

	Gondiya Dist.	2	8	0	0	188800	6100	194900	35	3	3
D. Total	6	18	63	532400	383900	765900	197000	1879200	219	20	20
State Total	33	90	348	2600200	3972700	1546600	1368400	9487900	835	80	80

Statement showing Districtwise number of Pest Scouts, Agril Sup. & Data Entry Operators required For Gram under Crop Pest Surveillance and Advisory Project (CROPSAP) 2011-12

Division	District	Sub-Division	Taluka	Area of Gram (Ha.)	No. of Pest Scouts	No. of Agril. Supervisors	No. of Data Entry Operators
Nashik	Nashik	4	14	42700	13	1	1
	Dhule	1	4	31400	10	1	1
	Nandurbar	2	6	17800	7	1	1
	Jalgaon	3	15	63400	21	2	2
Nashik Div.	4	10	39	155300	51	5	5
Pune	Pune	3	13	47600	17	2	2
	Ahmednagar	4	14	100200	32	3	3
	Solapur	3	11	36700	14	2	2
Pune Div.	3	10	38	184500	63	7	7
Kolhapur	Satara	4	11	26200	9	1	1
	Sangli	3	10	35200	12	1	1
	Kolhapur	3	9	8700	4	1	1
Kolhapur Div.	3	10	30	70100	25	3	3
Aurangabad	Aurangabad	3	9	59900	21	2	2
	Jalna	2	8	27200	9	1	1
	Beed	3	11	51100	16	2	2
A. Bad Div.	3	8	28	138200	46	5	5
Latur	Latur	2	10	75100	24	3	3
	Osmanabad	2	8	72400	23	2	2
	Parbhani	1	9	58800	20	2	2
	Hingoli	1	5	42900	15	1	1
	Nanded	3	16	52900	17	2	2
Latur Div.	5	9	48	302100	99	10	10
Amravati	Amravati	3	14	75000	25	3	3
	Buldana	3	13	74500	25	3	3
	Akola Dist	2	7	78500	24	2	2
	Washim	1	6	77600	27	3	3
	Yeotmal	4	16	59100	20	2	2
Amravati Div.	5	13	56	364700	121	13	13
Nagpur	Chandrapur	4	14	16600	7	1	1
	Gadchiroli	3	11	9000	4	1	1
	Wardha	3	8	28600	10	1	1
	Nagpur	4	13	102200	33	3	3
	Bhandara	2	7	8500	4	1	1
	Gondiya	2	8	3500	1	1	1
Nagpur Div.	6	18	61	168400	59	8	8
State Total	29	78	300	1383300	464	51	51

Statement showing District, Subdivision & Talukwise number of Pest Scouts, Agril Sup. & Data Entry Operators required For Gram under Crop Pest Surveillance and Advisory Project (CROPSAP) 2011-12

Division	District	Sub-Division	Taluka	Area of Gram (Ha.)	Pest Scouts	Pest Monitor	Data Entry Operators
Nashik	Nashik	Nashik	Nashik	2800	1	1	1
			Trambakeshwar	500		Nashik	Nashik
			Egatpuri	1900	1		
			Peth	1000			
			4	6200	2		
		Niphad	Niphad	6400	1		
			Chandwad	2200	1		
			Yewala	5500	2		
			Sinnar	1400	1		
			4	15500	5		
		Malegaon	Malegaon	3400	1		
			Satana(Baglan)	4200	1		
			Nandgaon	3700	1		
			3	11300	3		
		Kalvan	Dindori	3800	1		
			Surgana	1900	1		
			Kalvan+Devala	4000	1		
			3	9700	3		
	Nashik Dist.	4	14	42700	13	1	1
	Dhule	Dhule	Dhule	4200	1	1	1
			Sindkheda	6600	2	Dhule	Dhule
			Shirpur	12100	4		
			Sakri	8500	3		
			4	31400	10		
	Dhule Dist.	1	4	31400	10	1	1
	Nandurbar	Nandurbar	Nandurbar	2600	2	1	1
			Navapur	3400	1	Nandurbar	Nandurbar
			Akkalkuwa	1800	1		
			3	7800	4		
			Shahada	6200	2		
			Taloda	2500	1		
			Akrani	1300			
			3	10000		3	
	Nandurbar Dist.	2	6	17800	7	1	1
	Jalgaon	Jalgaon	Jalgaon	7600	4	1	1
			Yawal	4500		Jalgaon	Jalgaon
			Bhusaval	1000	1		
			Bhodwad	700			
			Muktainagar	2300			
			Rawer	13800	5		
			6	29900	10		
			Amalner	3000	1	1	1
		Chopda	4500	2	Amalner	Amalner	
		Erandol	3500	1			
		Dharangaon	2800	1			
		Parola	4100	1			
		5	17900	6			
	Pachora	Pachora	Pachora	4200	1		
			Chalisgaon	3900	1		
			Bhadgaon	2600	1		
			Jamner	4900	2		
			4	15600	5		
	Jalgaon Dist.	3	15	63400	21	2	2
Nashik Div.	4	10	39	155300	51	5	5
Pune	Pune	Pune	Haveli	1100	1	1	1
			Mulshi	700		Pune	Pune
			Vadgaon Maval	500			
			Bhor	800			
			Velha	200			
			5	3300	1		

		Baramati	Baramati	8200	3		
			Indapur	2800	1		
			Daund	2400	1		
			Purandar	2000	1		
			4	15400	6		
		Rajgurunagar	Rajgurunagar	6600	2	1	1
			Junnar	11400	4	Rajgurunagar	Rajgurunagar
			Ambegaon	5000	2		
			Shirur	5900	2		
			4	28900	10		
	Pune Dist.	3	13	47600	17	2	2
	Ahmednagar	Ahmednagar	Pathardi	9700	3	1	1
			Parner	7500	2	Ahmednagar	Ahmednagar
			Ahmednagar	8800	3		
			3	26000	8		
		Karjat	Karjat	4200	1		
			Shrigonda	4100	1		
			Jamkhed	5400	2		
			3	13700	4		
		Sangamner	Sangamner	7800	3	1	1
			Akole	6300	2	Sangamner	Sangamner
			Rahata	4400	5		
			Kopargaon	9500			
			4	28000	10		
		Shrirampur	Nevasa	8900	3	1	1
			Shrirampur	7700	2	Shrirampur	Shrirampur
			Rahuri	11700	5		
			Shevgaon	4200			
			4	32500	10		
	Ahmednagar Dist	4	14	100200	32	3	3
	Solapur	Solapur	North Solpaur	500	1	1	1
			South Solapur	3600	1	Solapur	Solapur
			Akkalkot	6900	2		
			Mohol	1800	1		
			4	12800	5		
		Pandharpur	Malshiras	4800	2		
			Sangola	1100			
			Mangalvedha	2800	1		
			Pandharpur	1000	1		
			4	9700	4		
		Kurduwadi	Barshi	8000	3	1	1
			Madha	3100	1	Kurduwadi	Kurduwadi
			Karmala	3100	1		
			3	14200	5		
	Solapur Dist	3	11	36700	14	2	2
Pune Div.	3	10	38	184500	63	7	7
Kolhapur	Satara	Satara	Satara	2400	1	1	1
			Koregaon	5500	2	Satara	Satara
			Khatav	2800	1		
			3	10700	4		
		Karad	Karad	2800	1		
			Patan	3800	1		
			2	6600	2		
		Phaltan	Phaltan	1500	1		
			Maan-Dahiwadi	2200			
			2	3700	1		
		Wai	Wai	1900	1		
			Mahabaleshwar	100			
			Jawali	1300			
			Khandala	1900	1		
			4	5200	2		
	Satara Dist	4	11	26200	9	1	1

	Sangli	Miraj	Miraj	5900	2	1	1
			Valva	8500	3	Miraj	Miraj
			Shirola	2200	1		
			3	16600	6		
		Jat	Kavthemahankal	2900	1		
			Jat	3100	1		
			2	6000	2		
		Vita	Kadegaon	800	1		
			Aatpadi	1800			
			Vita-Khanapur	3100	1		
			Tasgaon	3000	1		
			Palus	3900	1		
			5	12600	4		
	Sangli Dist	3	10	35200	12	1	1
	Kolhapur	Kolhapur	Shahuwadi	700	1	1	1
			Panhala	900		Kolhapur	Kolhapur
			Hathkanagale	1600			
			Shirol	1200	1		
			4	4400	2		
		Karvir	Karvir	600	1		
			Kagal	700			
			2	1300	1		
		Gadhinglaj	Gadhingalaj	1500			
			Bhudargad	700	1		
			Aajra	800			
			3	3000	1		
	Kolhapur Dist.	3	9	8700	4	1	1
Kolhapur Div.	3	10	30	70100	25	3	3
Aurangabad	Aurangabad	Aurangabad	Aurangabad	15500	5	1	1
			Phulambri	3200	1	Aurangabad	Aurangabad
			Paithan	6600	3		
			3	25300	9		
		Sillod	Sillod	2700	1		
			Soygaon	2600	1		
			Kannad	7000	2		
			3	12300	4		
		Vaijapur	Vaijapur	8200	3	1	1
			Khultabad	5100	2	Vaijapur	Vaijapur
			Gangapur	9000	3		
			3	22300	8		
	A.bad Dist.	3	9	59900	21	2	2
	Jalna	Jalna	Jalna	3700	1	1	1
			Badnapur	1800	2	Jalna	Jalna
			Bhokardan	4100			
			Jafrabad	3000	1		
			4	12600	4		
		Partur	Partur	2800	1		
			Mantha	3200	1		
			Ghansangavi	3300	1		
			Ambad	5300	2		
			4	14600	5		
	Jalna Dist.	2	8	27200	9	1	1
	Beed	Beed	Beed	7000	2	1	1
			Patoda	2100	1	Beed	Beed
			Shiruksar	2000			
			Aasti	4400	1		
			4	15500	4		
		Ambejogai	Ambejogai	9100	3		
			Parali	5100	2		
			Kej	5200	2		
			3	19400	7		
		Majalgaon	Majalgaon	8500	3	1	1

			Dharur	1000		Majalgaon	Majalgaon
			Gevarai	5500	2		
			Vadvani	1200			
			4	16200	5		
	Beed Dist.	3	11	51100	16	2	2
A. Bad Div.	3	8	28	138200	46	5	5
Latur	Latur	Latur	Latur	8700	3	1	1
			Renapur	7800	3	Latur-1	Latur-1
			Ausa	13500	4	1	1
			Nilanga	18500	6	Latur-2	Latur-2
			ShirurAnantpal	5000	1		
			5	53500	17	2	2
		Udgir	Udgir	7600	4	1	1
			Chakur	5400		Udgir	Udgir
			Ahmedpur	4300	2		
			Jalkot	700			
			Devni	3600	1		
			5	21600	7		
	Latur Dist.	2	10	75100	24	3	3
	Osmanabad	Osmanabad	Osmanabad	13500	5	1	1
			Lohara	4200	1	Osmanabad	Osmanabad
			Tuljapur	6500	2		
			Umarga	12700	4		
			4	36900	12		
		Bhoom	Bhoom	6000	2	1	1
			Vashi	4300	1	Bhoom	Bhoom
			Paranda	12000	4		
			Kalamb	13200	4		
			4	35500	11		
	Osmanabad Dist.	2	8	72400	23	2	2
	Parbhani	Parbhani	Parbhani	14300	5	1	1
			Pathri	3100	1	Parbhani-1	Parbhani-1
			Gangakhed	6300	2		
			Sonpeth	5000	2		
			Palam	5000	2	1	1
			Purna	9500	3	Prbhani-2	Prbhani-2
			Selu	5800	3		
			Manvat	3600			
			Jintur	6200	2		
			9	58800	20		
	Parbhani Dist.	1	9	58800	20	2	2
	Hingoli	Hingoli	Hingoli	5500	2	1	1
			Aundha Nagnath	5000	2	Hingoli	Hingoli
			Sengaon	7800	3		
			Kalampuri	15400	5		
			Vasmat	9200	3		
			5	42900	15		
	Hingoli Dist.	1	5	42900	15	1	1
	Nanded	Nanded	Nanded	9000	3	1	1
			Mudkhed	2400	1	Nanded	Nanded
			Loha	3000	1		
			Kandhar	1000			
			4	15400	5		
		Deglur	Deglur	5900	2		
			Mukhed	3200	1		
			Biloli	2500	1		
			Ardhapur	1200	1		
			Dharmabad	5500	2		
			Naygaon	2000			
			6	20300	7		
		Kinvat	Kinvat	2200	1	1	1
			Umri	1000		Kinvat	Kinvat

			Hadgaon	7200	2		
			Himayatnagar	3500	1		
			Mahur	1400	1		
			Bhokar	1900			
			6	17200	5		
	Nanded Dist.	3	16	52900	17	2	2
Latur Div.	5	9	48	302100	99	10	10
Amravati	Amravati	Amravati	Amravati	6300	2	1	1
			Bhatkuli	11300	4	Amravati	Amravati
			Chandur railway	1000	1		
			Dhamangaon railway	3000			
			Nandgaon Khandeshwar	2400	1		
			5	24000	8		
		Morshi	Morshi	3400	1		
			Varur	1000	1		
			Chandur Bazar	2700			
			Tiwsa	2000	1		
			4	9100	3		
		Achalpur	Dharni	8500	3	1	1
			Anjangaon Surji	2400	1	Achalpur-1	Achalpur-1
			Chikhaldara	900	1		
			Achalpur	2100			
			Daryapur	28000	9	1	1
			5	41900	14	Achalpur-2	Achalpur-2
	Amravati Dist.	3	14	75000	25	3	3
	Buldhana	Buldhana	Buldhana	10500	3	1	1
			Motala	700	1	Buldhana	Buldhana
			Malkapur	1100			
			Chikhali	10600	3		
			4	22900	7		
		Khamgaon	Khamgaon	2700	1		
			Shegaon	1700	1		
			Nandura	2300			
			Jalgaon Jamod	500	1		
			Sangrampur	1100			
			5	8300	3		
		Mehakar	Mehakar	29400	10	1 (mehakar-1)	1 (mehakar-1)
			Lonar	8400	3	1	1
			Sindkhedraja	3400	1	mehakar-2	mehakar-2
			Deolgaonraja	2100	1		
			4	43300	15		
	Buldhana Dist.	3	13	74500	25	3	3
	Akola	Akola	Akola	20800	7	1	1
			Barshi Takli	4900	1	Akola	Akola
			Murtijapur	10400	3		
			3	36100	11		
		Akot	Akot	21900	7	1	1
			Telhara	8000	2	Akot	Akot
			Balapur	10700	3		
			Patur	1800	1		
			4	42400	13		
	Akola Dist.	2	7	78500	24	2	2
	Washim	Washim	Washim	23100	8	1 (Washim-1)	1 (Washim-1)
			Risod	32100	11	1 (Washim-2)	1 (Washim-2)
			Malegaon	14500	5	1	1
			Mangulpir	2700	1	Washim-3	Washim-3
			Manora	2400	1		
			Karanja	2800	1		
			6	77600	27		
	Washim Dist.	1	6	77600	27	3	3
	Yeotmal	Yeotmal	Yeotmal	1600	3	1	1
			Kalamb	4500		Yeotmal	Yeotmal

			Ralegaon	2000			
			Ghatanji	1600			
			4	9700	3		
		Pusad	Pusad	4900	2		
			Digraj	1600	3		
			Mahagaon	8000			
			Umerkhed	9100	3		
			4	23600	8		
		Darvha	Darvha	2700		1	1
			Arni	3000	3	Darvha	Darvha
			Ner	1400			
			Babhulgaon	1800			
			4	8900	3		
		Pandharkawada	Pandharkawada	6100	3		
			Maregaon	3800			
			Zarizamani	2800	2		
			Vani	4200			
			4	16900	6		
	Yeotmal Dist.	4	16	59100	20	2	2
Amravati Div.	5	13	56	364700	121	13	13
Nagpur	Chandrapur	Chandrapur	Chandrapur	1100		1	1
			Mul	200	1	Chandrapur	Chandrapur
			Savali	100			
			Ballarpur	1100			
			4	2500	1		
		Rajura	Rajura	1300	1		
			Korpana	1100			
			Gondpimpri	1200	1		
			Pombhurna	400			
			4	4000	2		
		Nagbhid	Nagbhid	500			
			Bramhapuri	500	1		
			Sindevahi	100			
			3	1100	1		
		Varora	Varora	5500			
			Bhadravati	2100			
			Chimur	1400	3		
			3	9000	3		
	Chandrapur Dist.	4	14	16600	7	1	1
	Gadchiroli	Gadchiroli	Gadchiroli	1100		1	1
			Charmoshi	900	1	Gadchiroli	Gadchiroli
			Mulchera	500			
			Dhanora	700			
			4	3200	1		
		Vadsa	Vadsa Desai	2000	1		
			Korachi	400			
			Armorli	900	1		
			Kurkheda	1300			
			4	4600	2		
		Aheri	Aheri	300			
			Sironcha	600	1		
			Etapalli	300			
			3	1200	1		
	Gadchiroli Dist.	3	11	9000	4	1	1
	Wardha	Wardha	Wardha	1200		1	1
			Devli	1900	1	Wardha	Wardha
			Selu	5200	2		
			3	8300	3		
		Arvi	Arvi	1800	1		
			Karanja Gadage	1800			
			Asti	900	1		
			3	4500	2		

		Hinganghat	Hinganghat	3900	1		
			Samudrapur	11900	4		
			2	15800	5		
	Wardha Dist.	3	8	28600	10	1	1
	Nagpur	Nagpur	Nagpur	4800	1	1	1
			Kamthi	4600	1	Nagpur	Nagpur
			Hingana	2800	1		
			Savner	5100	2		
			4	17300	5		
		Ramtek	Ramtek	3800	1		
			Parshivani	5700	2		
			Mauda	8000	3		
			3	17500	6		
		Katol	Katol	10100	3	1	1
			Narkhed	9800	3	Katol	Katol
			Kalmeshwar	4700	1		
			3	24600	7		
		Umerkhed	Umerkhed	20300	7	1	1
			Bhivapur	11400	4	Umred	Umred
			Kuhi	11100	4		
			3	42800	15		
	Nagpur Dist.	4	13	102200	33	3	3
	Bhandara	Bhandara	Bhandara	2300	1	1	1
			Mohadi	400		Bhandara	Bhandara
			Tumsar	1100			
			Pauni	1700	1		
			4	5500	2		
		Sakoli	Lakhandur	1100	1		
			Sakoli	500			
			Lakhani	1400	1		
			3	3000	2		
	Bhandara Dist.	2	7	8500	4	1	1
	Gondiya	Gondiya	Gondiya	500	1	1	1
			Tiroda	500		Gondiya	Gondiya
			Amgaon	500			
			Goregaon	400			
			Salekasa	500			
			5	2400			
		Devri	Devri	300			
			Sadak Arjuni	400			
			Morgaon Arjuni	400			
			3	1100	1		
	Gondiya Dist.	2	8	3500	1	1	1
Nagpur Div.	6	18	61	168400	59	8	8
State Total	29	78	300	1383300	464	51	51