

By e-mail

DIRECTOARTE OF AGRICULTURE AND FOOD PRODUCTION ,ORISSA

No VIIIIG-I-7/11- 1058 PP/Agril Dt. -27.06.2011.

To
The Project Director, ATMA
Sundargarh, Jharsuguda, Deogarh, Baragarh, Sambalpur,
Sonepur, Bolangir, Nuaparda, Kalahandi, Nawarangpur,
Rayagada, Koraput and Malkanagiri

**Sub: Revised Operational Guideline of e-Pest Surveillance Project
under RKVY -2011-12**

Ref: This office letter no 992 dt 17th June 2011

Sir,

I am to enclose herewith the Revised Operational Guideline of e-Pest Surveillance under RKVY Green Revolution II to be implemented during Kharif 2011 in Sundargarh, Jharsuguda, Deogarh, Baragarh, Sambalpur, Sonepur, Bolangir, Nuaparda, Kalahandi, Nawarangpur, Rayagada, Koraput and Malkanagiri districts. You are requested to go ahead with the work as per the guideline and start the trainings of the VAWs as per dateline out of the available funds under RKVY.

Yours faithfully,

Sd/-(R.S. Gopalan)

**Director of Agriculture &
Food production, Orissa**

Memo No1059

PP/Agril Dt.27.6.2011

Copy submitted to Principal Secretary to Govt. for kind perusal.

Sd/-(R.S. Gopalan)

**Director of Agriculture &
Food production, Orissa**

Memo No. 1060

PP/Agril.dt. 27.6.2011

1. Copy to Director IMAGE/ Director, NCIPM ,New Delhi/Dean Research ,OUAT/Prof and HOD Entomology/Plant Pathology for information and necessary action.
2. Copy to Computer Cell for sending through mail.

**Dy. Director of Agriculture,
(Plant Protection), Orissa**

REVISED

OPERATIONAL GUIDELINE
e-Pest surveillance
Kharif 2011

under RKVY
green revolution II
(FOR 13 DISTRICTS)

DIRECTORATE OF AGRICULTURE AND
FOOD PRODUCTION, ORISSA

OPERATIONAL GUIDELINE e-Pest surveillance 2011-12 (FOR 13 DISTRICTS)

Introduction

The project e-Pest Surveillance is funded under RKVY Green Revolution –II and will be implemented in 13 districts namely Sundergarh, Sambalpur, Jharsuguda, Deogarh, Baragarh, Bolagiri, Sonpur, Kalahandi, Nuapada, Koraput, Rayagada, Nawarangpur and Malkanagiri to render pest surveillance and monitoring in Kharif paddy. During the project period the paddy areas having endemic pockets of Swarming caterpillar will be given the top priority for monitoring and surveillance will be done by the VAWs through **roving survey**. There will be three to four rapid roving survey to be done by officials of line department i.e. OUAT, NCIPM, CIPMC and department officials. The schedule of rapid roving survey has already been communicated and is at Annexure –I. This schedule may vary depending upon the pest urgency. The total project cost is Rs 102.276 lakh and the PD wise allocation of funds is Annexure –II.

During last Kharif the project was taken on pilot basis in the same 13 districts and some changes in project component are done for the economic point of views. It was also proposed to SLSC that the project will take the assistance from the staffs to be engaged from Modified Extension Reform. But till date since no appointment of technical assistance or manager has been done so the project will be implemented by our existing staffs except few required cases. This time there will be field diagnosis camps @ one per each block to solve the day to day problem of farmer starting from soil health to pest control. More emphasis will be given to control and management of Swarming caterpillar by spot application method.

In addition to this there will be **pest monitoring of all the districts at directorate level** through tele-Conferencing and SMS based programme. The farmers can dial to **0674-6530653** to inform the village under pest attack and this information will be transferred to the concerned DDA/DAO/AAO/PPO at field level and DDA, PP/PPO(Hqr) at head quarter level in form of SMS for pest monitoring

and management. Further Advisory based pest management bulk SMS will be sent to progressive farmers of Orissa also.

Table 1:List of districts covered under this project and funded under RKVY and the area of Kharif paddy

Sl. No.	Name of the District	No of PMU	G.P	No of Village	Paddy area In '000 ha
1	Balangir	3	285	1794	213.43
2	Sonepur	1	96	959	99.15
3	Sambalpur	2	148	1325	129.55
4	Deogarh	1		867	42.03
5	Baragarh	3	248	1208	236.55
6	Jharsuguda	1	78	356	57.32
7	Kalahandi	3	273	2205	220.96
8	Nawapara	1	109	659	105.69
9	Koraput	1	226	1997	111.14
10	Malkangiri	1	108	928	91.47
11	Nawarangpur	2	169	897	149.24
12	Rayagada	1	171	2667	67.45
13	Sundargarh	3	262	1744	214.19
TOTAL		23	2173	17606	1738.2

EXISTING INFRASTRUCTURES AT EACH PMU

1. LAPTOPS
2. DIGITAL CAMERA
3. GPS
4. 3G DATACARD

NEW INFRASTRUCTURES TO BE PROVIDED TO 126 BLOCK

126 DATA LOGGER DEVICE

Table 2. LIST OF PEST MONITORING UNITS

Sl. No.	Name of the District	Name of PMU	Location of PMU and Data to be entered at
1	Balangir	1. Bolangir 2. Patnagarh 3. Titilagarh	DAO office DAO office DAO office
2	Sonepur	Sonepur	DDA office
3	Sambalpur	1. Sambalpur 2. Kuchinda/Rairakhol	DAO office DDA office
4	Deogarh	Deogarh	DDA office
5	Baragarh	1. Baragarh 2. Bhatli &Sohela, 3. Padampur	DAO office DAO office DAO office
6	Jharsuguda	Jharsuguda	DDA office
7	Kalahandi	1. Kalahandi 2. Junagarh &Narla 3. Dharamgarh	DDA Office DAO office DAO office
8	Nuapada	Nuapada	DDA office
9	Koraput	Koraput	DDA office
10	Malkangiri	Malkanagiri	DDA office
11	Nawarangpur	1. Nawarangpur 2. Papadahandi/Umarkote	DAO office DAO office
12	Rayagada	Rayagada	
13	Sundargarh	1. Sundargarh 2. Panposh 3. Lephripara/Rajgangpur	DDA office DAO office DAO office
TOTAL		23	23

Table 3

PROJECT COMPONENTS & MODE OF IMPLEMENTATION

Sl. No.	Project Components	(Rs. In lakhs)
1	Incentive 126 BTM or AAOs for 5 months @ Rs. 500/-per month	3.15 PD
2	a. Incentive for the 23 VAWs for 5 months @ Rs.800/- per month. b. TA to VAWs for 5 months @ Rs.200/-	20.075 PD
3	a. Budget proposal of NCIPM vide letter no OR-RICE II/12 dt 23.05.11 towards compiling & monitoring data and maintenance of server, visit of NCIPM scientist for imparting training to PPOs and other project staffs, for roving survey to verify the pest situation, development and maintenance of server / website and to ensure regular online reporting of online data, modification /up gradation of the software as per the requirement. b. VAWs SMS PROGRAMME in 30 districts and purchase of phone conferencing device, internet facility. c. Advisory based Bulk SMS to progressive farmers of 30 districts d. Pest Monitoring at head quarter : purchase of a laptop , Auto registration of farmers and development of software	10.50 <u>NCIPM</u> 2.50 1.00 1.00 DDA,PP
4	Provision of 126 GPS with Pest monitoring data logger device to block AAOs will be provided by NCIPM at RITE Bolangir	21.00 NCIPM
5	Pheromone Trap and lures for YSB for road side villages for control of YSB infestation @ Rs.15/- each @ 2 per village : to be provided by NCIPM at RITE Bolangir .	5.28 NCIPM
6	Critical input (PP Chemicals) at 50% subsidized cost @ Rs.0.50 per district.	6.50 PD
7	Printing and distribution of common surveillance proforma for roving survey a. SURVEILLANCE DATA SHEET -126 X15 X 5 =6300 Booklets are to be printed by JDA ,Information and DDA to send special messenger by 1 st week of July 2011 b. Alert message for Swarming caterpillar and BPH or any pest urgency c. Advertisement on e- Pest surveillance in Doordarshan /AIR/local dailies d. Printing of 2000 training manual e. Scroller on seed treatment	8.00 JDA,Inf
8	Internet connection charges @ Rs.2500/- per set for 23 PMUs for compiling the data uploading and entering them online to be provided to the PPOs (Rs 500x5)	0.575 PD
9	Misc. Contingency charges and mobility charges @ Rs.1000 / for 5 months to be provided to 23 PPOs towards purchasing stationeries, CDs, and monitoring field visit and surveillance	1.15 PD

Sl. No.	Project Components	(Rs. In lakhs)
10	a. Two days Training of 126 AAO, all VAWs by the Master Trainers and NCIPM staffs to be conducted at district level during July. b. Training on data logger of 126 AAOs, PPOs/ master trainers, data entering VAWs, OUAT, Departmental officers at RITE Boalngir by NCIPM staffs .This includes hotel accommodation of head quarter staffs, their TA and DA.	7.35 PD 1.046 DDA,Blgr
11	Hiring of Computer Operator cum Software expert at headquarter @ Rs.10000/- per month for 6 months and the RA engaged in OUAT for State Co-ordination and sending the advisory from department of Entomology and Plant Pathology @ Rs.18000/- per month for 5 months and including TA and contingency towards internet operation.	1.75 DDA,PP Yet to be decided
12	For over all coordination and Traveling Expenses or hiring a vehicle/ POL cost for monitoring the fixed plot and roving plot surveys randomly for field visits in case of emergencies, to attend meetings by State Coordinator	2.00 DDA,PP
13	Charges to meet out experimental materials, stationeries & miscellaneous expenses, postage charges, fax, etc. related to programme and development of by the State Co-ordinator and purchase of a Computer/ Computer peripherals.	1.00 DDA,PP
14	Remuneration and TA+DA for Chief Advisor to be outsourced having minimum qualification of M.Sc. (Ag.) with Plant Pathology/ Entomology discipline and minimum 15 years working experience in the field of Plant Protection & surveillance (20000/+5000).The head quarter of the CA is at Boalngir .He has to randomly visit all the districts and submit advance tour programme to DDA,PP and co-ordinate the officials of line department during rapid roving survey.	(1.25) Yet to be decided
15	Printing of publicity material posters / folders, etc. through electronic and print media districts for creating mass awareness and Krushi Mahostav through quotation	0.85 DDA,PP
16	Campaign on LEDA HATAO DHAAN BANCHAO and Organization of Block Level Field diagnosis camp @ Rs.5000/- per block.	6.30 PD
	Total	102.276

Objective

- To take surveillance and monitoring of pest- disease incidence
- To suggest appropriate pest management measures in paddy
- To avoid yield losses due to epidemics
- To develop Fore warning system & management of pest-disease
- To suggest plant protection strategy for affected area

- To create mass awareness through popular mass media

Mode of Operation

The programme consists of two parts i.e.,

PART I : Pest Surveillance and Pest Management

PART II : Awareness creation and Pest Based Advisory system

PART I Pest Surveillance and Pest Management

At the state level the project will be monitored by the project monitoring committee comprising of the members or as desired by the implementing authority (Director of Agriculture & Food production, Orissa)

1. Director of Agriculture and Food Production, Odisha	Chairman
2. Director, NCIPM	Advisor
3. Additional Director of Agriculture, (Extension)	Member
4. Joint Dir Agril SP&C	Member
5. Proff. Entomology /Plant Pathology	Member
6. JDA, Information	Member
7. PPO, CIPM Centre, Bhubaneswar	Member
8. Agriculturist, Agriculture Department	Member
9. In-charge RKVY Cell	Member
10. DDA (Plant Protection)	Member-Convener

And at the Dist.Level by

1. Deputy Director of Agriculture	Chairman
2. Scientist, KVK	Member
3. Dist. Agriculture Officer (s)	Member
4. Agronomist under DDA	Member
6. Asst. Agriculture Officer (PS)	Member
7. PPO	Member Convener

Responsibilities:

- To coordinate the overall programme through meetings
- To assign the work to different stake holders of the programme and to supervise its' proper implementation

Stakeholders and their Responsibilities:

1. NCIPM, New Delhi –

- To develop *On-line monitoring system*
- To attempt for the generation of automatic map based GIS application system
- To assist in training of the Surveillance Team and Pest Monitoring Team
- To develop popular dissemination material
- To coordinate the overall programme of pest monitoring and rapid roving survey
- To supply GPS enabled pest monitoring data logger device and traps -lures

2. Directorate of Agriculture

- Capacity building of field functionaries (all PPOs/AOs and VAWs).
- To train the farmers on IPM module by the field staff
- To monitor the pest population in different villages at block level and make it available online.
- To alert the farmers based on pest monitoring in case of alarming situations
- To provide inputs for control of pest/ pest management
- To monitor the pest population through on line data reports and to assist in alarming situations through field visits

3. OUAT, Bhubaneswar

- To train pest surveillance staff in respective districts (by KVK scientist).
- To assist in pest monitoring and development of IPM module
- To interpret and issue pest advisory once a week (on Thursday)
- To document weather information in pest surveillance area and to share the data with all the stakeholders.
- To work out crop pest weather relationship in surveillance area and to develop simple prediction models based on weather after the end of the season for future use in the surveillance area.
- To help in formulation of IPM strategies in Paddy
- To get feedback for future anticipatory research for developing IPM components

Pest Monitoring and Awareness Programmes

Director of Agriculture and Food production: Implementing Authority
DDA, Plant protection and PPO, Hqr- State Nodal Officer

DDA of the District

Dist Nodal officer

Plant Protection Officer of the district/DAO circle will be declared as the Coordinator for Pest Monitoring to

- facilitate between the district surveillance team and the State advisory committee and State Nodal Officer
- monitor the pest surveillance work done by the AAOs and VAWs and ensure the online feeding of the data in time
- report the DAO/DDA and DDA,PP/PPO Hqr in case of **pest urgency**

AAO of the Block head quarter will

- do the random pest surveillance by using pest monitoring data logger device
- To report to PPO/DAO on pest situation on every Wednesday
- To guide the VAWs on data collection and pest monitoring
- To gather the data from VAWs and enter it online during the crop season
- To conduct roving survey during the season on crops and on alternate hosts in off-season

VAW as Data Entry Operator

- DDA/DAO to select the VAW having well computer knowledge in data loading in off-line as well as on-line (as per Table 3).
- These VAW will get trainings by the NCIPM staffs at RITE, Bolangir
- In addition to his/her work the VAW will feed the pest surveillance data online on Wednesday (before 12 noon) at DAO/DDA office and he/she will get an incentive of Rs. 800/ per month .as per Table 4 : point 2.

VAW as Pest Scout

- All the VAWs will do the random pest surveillance of paddy fields of their concerned Gram Panachayat @ two villages per day for two-four days i.e. Monday, Tuesday, Thursday and Friday and to collect pest surveillance data during their scheduled field visit.
- The VAW has to hand over the surveillance data to AAO on Wednesday at 10 am at the Block head quarter and will eligible to get Rs. 200/ per month as per Table 4 : point 3.

2. Awareness and Pest-Based Advisory System

Coordinator (Awareness)

(District Agriculture Officer is the Coordinator for Awareness and Advisory)

- To facilitate between the Agriculture Department officers and monitoring Committee

- To coordinate the field staff for training by Master Trainers with technical assistance from SAU representative at district level
- To organize elite farmers training at Block level with assistance from Master Trainers and SAU representative at district level
- To ensure the entry of weekly data by the PPO/AAO

Master Trainer

(Ten per district: all PPOs / AAO (PS) from State Agriculture Department and KVK scientist who have already taken training from CRRRI last year)

- To train the AAO/VAW, other field staffs related to e pest surveillance

Field Staff (AAOs, DEO, VAW) State Agriculture Department)/ farmers

- To obtain training from Master Trainers
- To disseminate the knowledge to all progressive paddy farmers
- To disseminate the weekly pest advisory system to farmers in Oriya

Elite Farmers

(45 per block)

- To pass on the pest based advisory information to fellow farmers through village boards
- To participate in Field Diagnosis Camp and pass on the information to fellow farmers.

Operational Guideline and Execution procedure (13 districts)

Project Period: July-November (five months)

Step 1:

JDA, Information to print 6000 Pest Surveillance data sheet and the Pest 2000 Surveillance Training Manual by 1st July **2011**. DDAs to send special messenger to JDA, Information to receive the above printed materials for disbursement during 1st week of **July 2011**.

Step 2: DDAs/DAOs to select and declare the VAW for Data Entry work. Provide necessary fund to PPOs for recharge of 3G data card and ensure the on line /net connection.

Step 3: Training on data logger device and DEOs for the data up loading

There will be two days training at RITE Bolangir on **11th -12th July 2011** where all the AAOs, PPOs /AAO PS, DEOs including state level officials will be trained by NCIPM staffs on data logger device and feeding the online data or data uploading. The required fund i.e Rs 1.046 lakh will be placed with DDA, Bolangir towards incurring expenditure of the training. The approximate per head expenditure is Rs.400/ including honorarium and training materials. This also includes the expenditure towards lodging and boarding of staffs of NCIPM, head quarter officials etc.

District level training

There will be one district level training of all VAWs and AAOs for one day. In this training the master trainers will train the VAWs and AAOs on surveillance, collection of data in the pest surveillance data sheet, pest management, random and roving survey, how to send SMS etc. The VAWs will be assigned with the villages for random survey @ approximately 8 village per VAW from where regular data will be collected and the head quarter village will be for collection of data from the fixed plot and pheromone traps and lure will be allotted to those plots having YSB infestation. During the training the VAWs will be given charge of villages for pest surveillance. Since the VAWs are in charge of more than one GP the distribution of village basing on the past record of pest attack may please be done and intimated to them in the training itself. The scout data sheet along with the training materials will be handed over to VAWs in the training .So before starting the training the required booklets should be taken from JDA Information. During the training the mobile numbers of the VAWs should be collected and intimated through e mail ppohqagril@gmail.com or diragror@nic.in. DDAs to complete the district level training of all filed staffs by **15th July 2011**.The expenditure towards this will be met out of training head and the per head expenditure is Rs.200/ per one day approximately including honorarium ,training material etc.

Step 4: Execution procedure

All the VAWs are to be trained to have idea on collection of pest surveillance data and pest monitoring .In addition to their assigned work the VAW of a GP will do the pest surveillance work and collect surveillance data from the village in addition to their scheduled work. For this they will get monthly incentive of Rs. 200/ during the project period. A VAW has to cover 2 villages per day for four days i.e **Thursday, Friday and Monday, Tuesday** and do the random / roving pest surveillance and to enter the Pest Surveillance data sheet village wise and hand over the data sheet to respective AAO at Block head quarter on every **Wednesday at 10 am**. Their work will be monitored by AAO. In each village the observation is to be taken from four random plots. Simultaneously the AAO will submit the block wise Pest Surveillance data collected either in the data logger device or in the PS data sheet to the PPO at DAO/DDA office. The data entry

operator (here VAW selected by the DDA/DAO) will feed the Data received from the VAWs and AAOs in a prescribed format after it is verified by the PPO. They will meet at every **Wednesday** at the unit (DAO/DDA office). DAO will supervise the work and ensure regular feeding of data. The entered data will be compiled online through the software automatically and reports are to be prepared village wise and Block/Unit and district wise.

The data are to be interpreted by Research Associates at SAU under the guidance of Head, Department of Entomology and Head, Department of Plant Pathology of OUAT and the pest advisory system is to be entered online the RA under OUAT. This advisory system should be completed on Thursday. The advisory will be in two types, i.e. one in detailed form to be disseminated to the villages through field staff of State Agriculture Department and also popularized through radio bulletins. Another in the form of short SMS which is to be disseminated through SMS to elite farmers, elected representatives such as MPs, MLAs, Panchayat Presidents, etc. AAO will download both the advisories and transmit to the farmers through field staffs.

Emergency Situations:

In case of any pest emergency (attack of major pest like swarming caterpillar or BPH) VAWs will immediately send an SMS to AAO,PPOs and Directorate or data will fed on line for wide spread of message and the PPOs, DAOs , DDA and SAU representative at district level will immediately visit the pest attack areas and intimate DDA (PP) / DA&FP(O) .Village level Campaigns will be organised focusing incidence of major pest by district level pest control squad. The farmers will be provided with critical inputs (PP Chemicals) immediately at 50% subsidized rate for immediate control of the pest .Local and spot application of pesticides will be done on war foot basis where ever there will be swarming caterpillar to check the spread of pest. More efforts also will be made through trained field staff and elite farmers for creating awareness. All efforts should be taken to provide granular pesticides under subsidized rate for application in the upland paddy adjacent to hilly tracks to destroy the breeding place of the Swarming caterpillar during June-July. Pest Control squad should organise group meetings and keep inform the Directorate regarding the day to day situation of the pest.

Step 5: Field Diagnosis Camp (FDC)

Field Diagnosis camps and Campaign on management of Swarming Caterpillar in the name of "LEDA HATAAO DHAAN BANCHAHO" should be organised during the cropping period , July - August depending on pest urgency . Cost of one diagnosis camp is Rs. 5000/ and there will be one FDC at each block. The cost includes hiring of public address system, tent, banner, soil testing kit (if not available), permit coupons, POL, working lunch for officials, documentation etc.

N.B: The guideline proposed here is indicative only and the D.A. & F.P.(O) will have the prerogative to change the guideline and project component as per requirement for successful implementation of the scheme.

OTHER ALLOTMENT OF FUNDS

1. Training of DEOs and master trainer at RITE Bolangir Rs 1.046 lakh to be placed with DDA, Bolangir
2. Rs. 36.78 lakh to Director NCIPM ,New Delhi
3. Rs. 8.00 lakh to JDA, Information
4. Rs.11.35 to DDA,PP

NB: The funds are to be released on the basis of requisition.

No	Name of the District	No of Block	No of PMU	Incentive to BTM/A AO	Incentive to VAW @ Rs 800/- for data entry	TA to VAW @ Rs 200/ per head	Critical input	Field diagnosis camp	Internet connection	TA to PPOs and Misc Contingency charges	Training head	Total
1	Balangir	14	3	0.35	0.12	2.105	0.50	0.70	0.075	0.15	0.70	4.7
2	Baragarh	12	3	0.30	0.12	2.70	0.50	0.60	0.075	0.15	0.70	5.145
3	Deogarh	3	1	0.075	0.04	0.50	0.50	0.15	0.025	0.05	0.30	1.64
4	Jharsuguda	5	1	0.125	0.04	0.60	0.50	0.25	0.025	0.05	0.40	1.99
5	Kalahandi	13	3	0.325	0.12	2.50	0.50	0.65	0.075	0.15	0.70	5.02
6	Koraput	14	1	0.35	0.04	1.30	0.50	0.70	0.025	0.05	0.70	3.665
7	Malkangiri	7	1	0.175	0.04	1.00	0.50	0.35	0.025	0.05	0.50	2.64
8	Nawapara	5	1	0.125	0.04	1.15	0.50	0.25	0.025	0.05	0.50	2.64
9	Nawarangpur	10	2	0.25	0.08	1.70	0.50	0.50	0.050	0.10	0.60	3.78
10	Raygada	11	1	0.275	0.04	0.70	0.50	0.55	0.025	0.05	0.60	2.74
11	Sambalpur	9	2	0.225	0.08	1.45	0.50	0.45	0.050	0.10	0.55	3.045
12	Sonepur	6	1	0.15	0.04	1.05	0.50	0.30	0.025	0.05	0.40	2.515
13	Sundargarh	17	3	0.425	0.12	2.40	0.50	0.85	0.075	0.15	0.70	5.22
Total		126	23	3.15	0.92	19.115	6.50	6.30	0.575	1.15	7.35	45.10

PROJECT YET TO BE APPROVED

PROJECT PROPOSAL FOR e- Pest surveillance 2011-12

(for rest 17 districts namely Angul, Bhadrak, Balasore, Boudh, Cuttack, Dhenkanal, Gajapati, Ganjam, Jagatsinghpur, Jajpur, Kandhamal, Kendrapara, Keonjhr, Khurda, Mayurbhanj, Nayagarh and Puri).

The project e-Pest Surveillance is funded under RKVY Green Revolution –II is under implementation in 13 districts namely Sundargarh, Jharsuguda, Deogarh, Baragarh, Sambalpur, Sonepur, Bolangir, Nuaparda, Kalahandi, Nawarangpur, Rayagada, Koraput and Malkanagiri. But now it is proposed to be implemented in rest 17 districts to render pest surveillance and monitoring in Kharif paddy and non paddy crops with the help of leading farmer per GP, either out of NABARD's farmers club.

Project Period: July-November (five months)

Step 1:

JDA, Information to print 6500 Surveillance Training Manual by end of July 2011. DDAs to send special messenger to JDA, Information to receive the above printed materials for disbursement .

Step 2: DAO to select a progressive /leading farmer per GP out of NABARD's farmers club for pest surveillance. Each progressive farmer should be minimum of 40 years age will get an incentive of Rs.1500/- per head for the entire season towards pest monitoring and informing the village wise pest situation to the AAOs .Further they have to inform the Directorate of Agriculture by dialing to 0674-6530653. They will be given training on pest management at DAO level.

Step 3: Training on data logger device and DEOs for the data up loading

There will be one day training where all the AAOs, PPOs /AAO PS, DEOs including state level officials will be trained by NCIPM staffs on data logger device and feeding the online data or data uploading .The approximate per head expenditure is Rs.200/ including honorarium and training materials.

District level training

There will be one DAO level training of all selected progressive farmers and AAOs for two days. In this training the master trainers will train the selected progressive farmers and AAOs on pest surveillance, collection of data in the pest surveillance data sheet, pest management, random and roving survey, how to send SMS etc. The selected progressive farmers will be assigned with the villages for random surveillance @ approximately 8 village per head from where regular data will be collected. The expenditure towards this will be met out of training head and the per

head expenditure is Rs.200/ per two days approximately including honorarium ,training material etc.

Emergency Situations:

In case of any pest emergency (attack of major pest like swarming caterpillar or BPH) VAWs will immediately inform AAO,PPOs and Directorate at 0674-6530653. The PPOs, DAOs , DDA and SAU representative at district level will immediately visit the pest attack areas and intimate DDA (PP) / DA&FP(O) .Village level Campaigns will be organized focusing incidence of major pest by district level pest control squad. The farmers will be provided with critical inputs (PP Chemicals) immediately at 50% subsidized rate for immediate control of the pest out of NFSM or State Plan .Local and spot application of pesticides will be done on emergency basis where there will be swarming caterpillar or any major pest to check the spread of pest. More efforts also will be made through trained field staff and elite farmers for creating awareness. All efforts should be taken to provide granular pesticides under subsidized rate for application in the upland paddy adjacent to hilly tracks to destroy the breeding place of the Swarming caterpillar during June-July. Pest Control squad should organize group meetings and keep inform the Directorate regarding the day to day situation of the pest.

Step 5: Field Diagnosis Camp (FDC)

Field Diagnosis camps and Campaign on management of Swarming Caterpillar and other major pest should be organized during the cropping period , July - August depending on pest urgency with the help of local NGOs. Cost of one diagnosis camp is Rs. 5000/ and there will be one FDC at each block. The cost includes hiring of public address system, tent, banner, soil testing kit (if not available), permit coupons, POL, working lunch for officials, documentation etc. This amount will be paid to NGOs during implementation.

ESTIMATED PROJECT COST AND ITS COMPONENTS

Project component	Rate	Total budget (Rs in lakh)
Incentive to SPF	Rs.1500/- per head for entire season	Rs. 55.50
One day Training of SPF at DAO level	Rs.200/- per head	Rs.7.40
Data Logger Training by NCIPM staffs		Rs.3.00
Cost of Data Logger	Rs.16500/- each	Rs.35.00
Miscellaneous Expenditures, FAX, Computer accessories & cost of monitoring		Rs.2.00
Field diagnosis camp	Rs.5000/- per block	Rs.9.40
JDA (Information) for Printing and publishing		Rs.8.00
NCIPM for Software and rapid roving survey		Rs.2.00
Total		Rs.122.30

N.B: The guideline proposed here is indicative only and the D.A. & F.P.(O) will have the prerogative to change the guideline and project component as per requirement for successful implementation of the scheme.