

REPORT OF SPECIAL INVESTIGATION TEAM WITH REGARDS TO POISONING TO SOME AND DEATH OF SOME FARMERS/FARM WORKERS DURING SPRAYING PESTICIDES IN YAVATMAL DISTRICT.

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REPORT OF SPECIAL INVESTIGATION TEAM WITH REGARDS TO POISONING TO SOME AND DEATH OF SOME FARMERS/FARM WORKERS DURING SPRAYING PESTICIDES IN YAVATMAL DISTRICT.

- Agri and P.D.M. department, ministry, government resolution no.:CPS-1117/P.Κ.193/17Λ Madam Kama road, Mumbai, dated
 13th October 2017
- 2. Agri and P.D.M. department, ministry, government resolution no.:CPS-1117/P.K.193/17A(1) Madam Kama road, Mumbai, dated 14th November 2017

PREFACE

Incidences such as poisoning and deaths of some of them owing to poisoning have taken place in large number in Yawatmal districts during the spraying of pesticides on crops in Kharip season of 2017. In cabinet meeting of 10TH October 2017, state cabinet decided to constitute Special Investigative Team to investigate incidence of farmer/farm labourers dying due to impact of pesticides. In connection therewith, government resolution as per serial no.1 above came to be passed. As per government resolution no.2 said committee has been given time period till 27.11.2017 to present its report to the government.

SPECIAL INVESTIGATION TEAM

Sr.N	NAME	Designation	Post
1.	Shri. Piyush Singh (I.A.S.)	Divisional Revenue Commissioner	Special Imvestiga tion Team, Head

2.	Shri Chagan Wakade (I.P.S.)	Special Inspector General Of Police, Amravati Range, Amravati	Member
3.	Dr. Nitin Ambadekar	Deputy Director Health Services akola	Member
4.	Dr. Dharaj Undirwade	Head of Department, Insectology Department. Dr PDK Uiversity Akola	Member
5.	DR. Vijay Waghmare	Director, Central Cotton Research Institute	Member
6.	Dr Kiran Deshkar	Deputy Director, Plant Protection, Quarentine and Storage, Faridabad	Member
7.	Dr Subhash Nagare	Divisional Joint Director Agriculture, Amravati Division	Member

Note: help as an expert was taken from Dr. Vijay Jayawantrao Thakre, Deputy Director, Regional Forensic Lab, Amravati.

JURISDICTION

- 1) To determine causes of said man made disaster and make prohibitory suggestions.
- 2) While preventing the said manmade disaster, mistakes that occurred in implementation of law and to determine persons, institutions, govt/semi-govt/employees responsible for the same.
- 3) Action taken in the district, against sell of non-recommended pesticide, as also in the matters in which samples of the pesticide were found uncertified, qualitative analysis of action taken and to make suggestions.
- 4) To make recommendation, if sale of any existing sale permit holders, pesticide, spray pump etc. needs to be prohibited.
- 5) To identify lacuna's in reporting about such main/crucial incidences to the State Governments' Administrative Department as per existing procedure and to fix up information about responsible department.
- 6) Conclusions with respect to aid offered subsequent to the incidences and supervision, control done by District disaster control room (District disaster control room) with respect to this mishap.
- 7) To make recommendations, about urgent steps that need to be taken so as to prevent re-occurrence of such incidence in future.

Proceedings about meetings, visits made by the special investigation team under chairmanship of Hon'ble Divisional Commissioner (Revenue), Amravati with regards to poisoning to some and death of some farmers/farm workers during spraying pesticides in Yavatmal district.

S.N	Date	Place	Description of work
о.		*	
1.	25.10.2017	Divisional commissioner (Revenue) office, meeting	Under chairmanship of Hon'ble Divisional Commissioner (Revenue) Amravati division, first
		hall, Amravati	review meeting of special investigation team came to be organized, where in the meeting jurisdiction mentioned in the government resolution was discussed at length and further course of
			action was decided.
2.	30.10.2017	Collector office Yavatmal, Revenue meeting hall	Meeting in the Revenue meeting hall, Yawatmal District Collector office with all district level head with SIT and proceedings Visit to the patients and
		Yavatmal Darvha	review of work thereat in late Vasantrao Naik govt. Medical College, Yavatmal Visit, discussion and proceeding with poison
		Village Sevadas nagar	affected patients at rest house Daryha Visit to the house of late Shri Ravi Dulsing Rathod, consoling, enquiry and discussion with village farmers
3.	01.11.2017	Divisional commissioner (Revenue) office, meeting hall, Amravati	Special investigating Team meeting and proceeding under chairmanship of Hon'ble Divisional Commissioner (Revenue)

ГА	03.11.2017	Collector office	Discussion with
4.	03.11.2017		representatives of pesticides
		Lokshahi,	company, agriculture service
		meeting hall,	
	•	Λkola	centre and proceedings
			Akola. Discussion with
			representative of Akola PGR
		_ 2	Company, under
	31		chairmanship of hon'ble
			Divisional Commissioner
n le			(revenue), Amravati
			Division. And review and
	-		discussion with district
	=		collector Akola and other
(4)			
			district heads of Akola.
	10	GMC Akola	Visit to patients and review
	*		of work there at.
		Village Aagar,	Visit of SIT, to the house of
		Tq-Akola	late Rajesh Manohar
			Fukat,r/o village-Azgar, tq-
-			Akola, consolation and
			inquiry with villagers,
25			farmers and work
		*	proceeding.
-	06 11 2017	Divisional	Under chairmanship of
5.	06.11.2017	Part I America Control of Control	
		commissioner	
	₽	(Revenue)	Commissioner (Revenue)
a A		office, meeting	Amravati Division. Meeting
		hall, Amravati	and proceedings of Special
			Investigation Team
6.	15.11.2017	Divisional	Under chairmanship of
	Δ.	commissioner	hon'ble Divisional
		(Revenue)	Commissioner (Revenue)
		office, meeting	Amravati Division. Meeting
		hall, Amravati	and proceedings of Special
		man, minavan	Investigation Team
7	21 11 2017	Divisional	Under chairmanship of
7.	21.11.2017	46	hon'ble Divisional
		commissioner	
		(Revenue)	Commissioner (Revenue)
		office, meeting	Amravati Division. Meeting
		hall, Amravati	and proceedings of Special
			Investigation Team
8.	27.11.2017	Divisional	Under chairmanship of
	Antonio America de April de Ap	commissioner	hon'ble Divisional
		(Revenue)	Commissioner (Revenue)
		office, meeting	Amravati Division. Final
		hall, Amravati	meeting and proceedings of
		nan, Amavan	Special Investigation Team
			and prepared final report.

Public appeal was made through all newspaper of Amravati and Nagpur to give publicity in public interest in which suggestion, intimation were invited from farmers, vigilant citizens, voluntary organizations/representatives through Deputy Director Information, Amravati. In that view following representations till 31.10.2017 have been received.

S.N	Name and designation (all)	Address
0.		99 (1986)
1.	Brij Oberoy Chief Executive Officer.	Crop life India, 226-228 Ansal chamber 2, 6 Bhikaji
	Officer.	Cama, New Delhi
2.	Shetkari Jagar Manch	Dist Akola
3.	Manohar Parchure, vigilant	285, Ramnagar, Dist-
	citizen as also Honorable	Nagpur
	member of Govt of India	
	Organic Farming expert	- 1
	committee	
4.	Dr. Priti Joshi	National organization for
	8	community welfare, Dist-
		Wardha
5.	Vivek Dange	Centre for sustainable
	29	agriculture, Dist- Wardha
6.	Mahendra Fate	Kamal Nagar Jamnalal
		Bajaj foundation, Dist
		Wardha
7.	Bandu Vittalrao Ambatkar	Saibaba Gramin Vikas
	2	Sanstha, Chandur Railway,
		dist Amravati.
8.	Aam Admi Party	Dist Amravati
9.	Raju Shrof	Crop care foundation of
		India, UPL House, 610 3/2
		Bandra village, Bandra
		eașt, Mumbai

REPORT OF SPECIAL INVESTIGATION TEAM ABOUT THE POISONING AND DEATHS OF FARMERS/FARM LABORERS DURING THE SPRAYING OF PESTICIDES ON FIELD CROPS IN YAWATMAL DISTRICT

Incidences such as poisoning and deaths of some of them owing to poisoning have taken place in large number in Yawatmal districts during the spraying of pesticides on crops in Kharip season of 2017. In year 2017, as per the statistics that are available from Jan 2017 to Oct 2017 of Amravati division, it appears that poisoning patient's ratio has relatively increased compared to that of January 2016 to October 2016. In that view as per State Governments decision Special Investigation Team that was constituted, studied it and with respect to increase in the ratio of poisoning after examination gave following observations, opinions and recommendations.

Point No.1- To determine causes of said man-made disaster and make prohibitory suggestions.

Crop situation, climate and man-made issues.- Since years together cotton crop is sown in traditional manners. 9 lakh 70 thousand hectare land is under cotton, 2.55 lakh hectare under soyabean, 1.35 lakh hectare under toor (pigeon pea). Of the total cotton area of the state, Yavatmal covers 10% area approximately. Cotton is taken as single crop in large area in Yavatmal district, and over above 99% of it is done with Genetically modified (B.T.) Cotton per the information received from Meteorological Department, as compared to year 2016, temperature has risen by 1.1 degree in average minimum and maximum temperature during June to October months of 2017, at the same time morning humidity has increased by 2.8% and evening humidity by 12.1%. Also the average rain is reduced by 77mm. in year 2017 rains commences early, but there was break for 17 days in month of June, 16 days in month of July, 17 days in month of August and 17 days in month of September. In kharip season of year 2017 growth of cotton plant was seen to be 1-1.5 feet (5-6 feet) higher compared to previous years crop growth. Same situation with more or less variation could be seen in the other districts of the division. Enhanced temperature and increase in humidity, further owing to congestion because of increase in expanse of the dense thicket, no space was left between two rows of cotton crop resulting in no air ventilation. Spraying of pesticide became necessary, given that BT Cotton fell prey to sap sucking pests and mostly to white fly, jassids, thrips, including bollworm and pink bollworm, relatively more than the previous year. Number of spraying of pesticides increased owing to adverse temperature and climate change.

• Due to height of the cotton crop, while spraying the pesticide, pipe of the spray pump had to be held up higher than the shoulder level. This increased the proportion of insertion of pesticides in the body through inhalation since the particles of the spray were at parallel level to that of face/mouth of farmer/farm laborer. At the same time, after spraying in one row and while spraying in second row, against the current of air particles of spray got onto the body of the farmer/farm laborers also got in the body through inhalation and skin, because of which proportion of poisoning increased. Normally pesticide spraying requires to be done while air current and sunlight is lesser, and possibly in morning or post noon. On the contrary, it has come to the notice that, spraying was done from morning 9 till 6 in the evening, 3 to 4 days regularly/continuously. It has also come to the notice that at some places, spraying was done till evening 8 at some places.

Annually seen, high temperature (October heat) which comes in October month was observed in month of September this year. In this period, there was more perspiration due to 2 Degree C. rise in maximum temperature due to which there was more sucking of pesticides in body through skin, enhancing the possibility of poisoning. Similarly due to increased temperature proportion of conversion pesticides in the fumes (poisonous fumes) increased.

It has come to the notice that, while spraying pesticide on crops in farm, farmer/farm laborers only tied napkin to mouth and with naked body/ bare cloths without any protective clothes, protective mask (mask), goggle, hand gloves, cap, boot, apron etc material owing to which chances of poisoning increased.

- It is necessary to spray different pesticides on different crops in the farm depending on different pest and infections. However with view to reduce the cost of spraying, despite there not being any recommendation to do it unscientifically, farmers using their own experience and with guidance of Agriculture service centers, have been spraying mixture of various pesticides. Because of such mixtures possibility of formation of new compound (poison) and increase in the concentration of mixtures of the compound, cannot be ruled out.
 - Also due to use of regulators for plant growth alongwith pesticides, intensity of the poison of the mixture increases and possibility of formation of new poison cannot be ruled out. Because of which possibility of poisoning increases. It has come to the notice that such mixtures were rampantly sprayed. Thus poisoning caused out of such not recommended and unscientific pesticide mixtures becomes impossible to be treated by choosing specific antidote and primary health care.
 - Plant Growth Regulators such as Gibbralic Acid(GA) Indol Acidic Acid (IAA), Indol Buteanic Acid (IBA) are registered as per the law by Central Insecticide Board, Faridabad, Haryana. Humic acid, Nytrobenzin Amino Acid etc unauthorized products (tonic) are manufactured by the industrialists and sold through agriculture science centers. Such crop growth analeptics are rampantly used sprayed by mixing with pesticides. As per the rules of chemistry such mixtures undergo chemical reactions and form third chemical or secondary product. By not ascertaining such chemicals on scientific tests, possibly of posing danger to human health cannot be ruled out. Therefore committee is of the opinion that such unregistered Plant Growth Regulators (PGR) and other products

- may not permitted to be sold without permit increase the possibility of poisoning.
- For spraying purposes two types of spraying pumps are mostly used i.e. High Volume Spray and Ultra Low Volume spray. Since droplet size of High Volume Spray Pump, they do not remain in the air and fall down/ fall on the plant. However droplets of spray of Ultra Low Volume Spray are extremely small (Micro) because of which dense mist gets formed and these droplets keep floating in the air for long time and because of this portion of pesticide spray gets in more quantity in body through inhalation.
- It has been seen that in last few years automated spraying pumps are being used in large number in Yavatmal district. These pumps are ultra low volume spray pumps and produce dense mist in the farm Due to spraying with such pumps, not following any safety provisions, not following timing of spraying, same person spraying on large areas continuously, which keeps the person in constant touch of the poison therefore catalyzing the process of poisoning in the body. By using automated spraying pumps, more than necessary quantity of pesticides are used.
- Strict adherence to the instruction given on the information booklet of each pesticides company is not done. In such information booklets, information is provided as to which crop and pest it to be used and in which proportion, and it is necessary to spray it accordingly. However alphabets on the information booklets are non-legible thus it cannot be comprehended or followed. At the same time, farmers/farm labourers as per their own experience, use more proportion of pesticides and spray it, similarly Agriculture service centers propose unscientific and un-recommended mixture of various pesticides (pesticide + PGR+ Water soluble manure), which increases intensity of poison. Possibility of poisoning increase if proportion of pesticide is more than prescribed. At the same time since farmers have credit accounts with Agriculture Service centres, farmers remain in constant touch with Agriculture

- Science Centre and with his advice, highly concentrated mixtures and those which are not recommended for cotton and other crop (e.g. fimonil 40%+ indica cloride40%) are seen to have been used.
- After finishing the spraying, not taking clean bath, not changing
 the clothes used during spraying, using same clothes without
 washing and reusing it. Using lesser clothes due to increase heat at
 the same time while spraying without washing hands, chewing
 tobacco/guthka, smoking bidi, and other habits intensity of the
 poison cannot be ruled out

OBSERVATIONS OF AGRICULTURE DEPARTMENT

- · License to sell pesticides is given to the Agriculture Service Centers by the Agriculture Development Officer Zillah Parishad. There is provision in the Insecticides Act 1968 to incorporate source certificate in the said license. Since the source certificate mentions all the pesticides given production permission by the Central Insecticides bureau and registration committee, even those products which are not recommended become available for sale in the agriculture service centers of the area where there is no such crop. It has been observed that no action whatsoever has been taken against non recommended pesticides by the Agriculture Development Officer, Zilha Parishad through Quality Control Inspector during inspection, with regards to sale of non recommended pesticides. As a licensing authority, Agriculture Development Officer has not maintained proper control over the license procedure in past 5 years. Identical situation persists in other districts as well.
- Yawatmal district has 16 talukas and there is only one full time
 Quality Control Inspectors posts which is also vacant since past
 two years. Owing to lack of man power agriculture officer from the
 office of Taluka Agriculture Officer, Arni has been given two
 important additional charges of District Quality Control Inspector

and Technical Officer, Extension, from office of District Superintendent Agriculture, Yawatmal, which he is supposed to handle after finishing his regular work. All three works abovementioned are extremely important and of responsibility. At the same time as a half time inspector Sub Divisional Agriculture Officer, Technical officer through Sub Divisional Agriculture Officer also taluka agriculture officer handles work related to quality control. 1 out of 4 Sub Divisional Agriculture Officers, 2 out of 4 Technical Officers also, 10 out of 16 Taluka Agriculture Officer, posts are vacant, thus additional charge of the said vacant posts is given to agriculture officers, also at some places to agriculture supervisors. At the same time, Movement Officer, Ouality Control and Insecticide Inspectors important post under the Agricultre Development Officer in Quality Control Division of Zilha pariashad is lying vacant since past three years. At the same time, Taluka level half time Quality Control Inspectors Agriculture Officer, Panchayat Samiti level Inspectors had to perform other important works such as Jalpurti Dhadak Sinchan Yojana. District Quality Control Inspector, Movement Officer, Zilha Parishad & Panchayat Samiti's Quality Control Inspectors did not maintain effective control in their jurisdictions. In all 16 Talukas of Yawatmal 16 trainings of Agriculture Service Centre Directors have been conducted through Agriculture Department, as also under chairmanship of Hon'ble Collector district level training was conducted prior to kharip season. Also through taluka level flying squad out of 909 agriculture centres 909 centres have been 100 percent examined, by the end of month of October 2017, 205 (104%) samples as against target of 197 samples have been taken, thus as per report target of sample collection appears to be complete. Also, through the joint committee constituted after poisoning cases, 2 insecticide manufacturing companies which crimes have been registered against 10 were found guilty, agriculture centres, licenses of 5 agriculture service centres have

- been canceled at the same time in 76 cases of insecticides, sale prohibition orders have been given.
- Mass awareness carried out on regional level so as to avoid poisoning through insecticide spraying
 - i. Messages were written on notice boards of 1873 gram panchayats
 - ii. 1000 wallpapers were distributed
 - iii. 52,600/- leaflets were distributed
 - iv. In 1200 agriculture service centres, information posters were stuck
 - v. Orders were given by calling meeting of agriculture service centre directors of district and taluka
 - vi. Guidance was given by calling gramsabhas in 940 villages
 - vii. News through newspapers, and awareness messages were published through Akashwani
 - viii. 13340 safety kits were distributed
 - ix. Through joint venure of agriculture, revenue, and health department health check up camps were conducted in 9 talukas
 - x. Through Insect infection survey and information centre, for control over insects which are found to be above economic losses, 20,30,806 messages (SMS) were sent to 1,69,808 registered farmers by advice of university.
- Under the movement of Agriculture Department Unnat Sheti Samruddhi Shetkari in 1707 villages of Yawatmal District as also under various schemes 40 trainings were taken whereat approximately 2112 farmers were trained in crop management and insect control. (attachment -1)
- Every year new insecticides are given permission by Central insecticide agency and registration committee, Faridabad, Haryana (CIB & RC). After these new insecticides are available the market for sale, their recommendations do not appear in the agricultural bulletins issued by the agriculture university and therefore

agriculture department does not get information about the new insecticides and therefore they cannot guide farmers. Agriculture department recommends only those insecticides which are recommended by the agriculture university. On permission being granted to new insecticide large scale mass movement, canvassing, and publicity be given on State level.

- inorganic pesticides, are mainly sold through licensed agriculture service centres. Since the directors of such agriculture service centres are not graduate in agriculture they cannot effectively guide farmers. Hence sell of not recommended insecticides and recommending unscientific mixtures of insecticides is done by them. Also it has come to the notice that, information with respect to first aid to be provided or antidotes in case of poisoning as also precautions t,o be taken before spraying is not provided in details by the agriculture service centre.
- 17,92,135 packets of BG-2 seeds of cotton were sold through agriculture service centres which were sown in yawatmal district. In this, impact as compared to last year in year 2017 Kharip season juice sucking insect and pink boll worm was seen more and therefore proportion of spraying rose. In year 2006 BG-2 was given permission for sowing, which had two genes (Cry 1Ac+ Cry 2Ab). But in year 2009 infestation of pink boll worm was seen on BG-2 hybrid variety. It has been noted that in year 2014 infestation of pink boll worm occurred on all variety of BG-2 BT seed all over. Since immunity of pink boll worm has increased BG_2 variety is seen to have been not effective. That is why proportion of pesticide spraying on BG-2 hybrid variety is also seen to have increased.

OBSERVATIONS ABOUT MEDICAL EDUCATION AND HEALTH-

Number of patients admitted owing to insecticide spraying poisoning and insecticide consumption is highest in Amravati divisions yawatmal district in Maharashtra. As per the statistics of

yawatmal administration in year 2016-17, 434 patients and in year 2017-18, 886 patients were noted to have been admitted for treatment owing to poisoning through insecticide spraying. However it has come to the notice during visits to the yawatmal and akola government colleges, that despite large number of patients affected by the insecticide spraying/ consumption are getting admitted there is no dedicated intensive care unit (ICU) for poison affected patients in Yawatmal government college. At the same time cholinesterase test, which necessary for diagnosis of poison affected had to be carried out privately. Independent methodology for collection of reports with respect to patients affect by poisoning was not in existence in yawatmal till the time poisoning incidence took place.

Statistical information with respect to health facilities available in Amravati division, admission of patients at various level and statistical information with respect to heath of patients, statistical information with respect to poison affected patients and statistical information with respect to deaths of farmers is being attached herewith (Attachment no 2,3,4 and 5)

- Though medical college is tertiary care centre cum research centre and cholinesterase test is important to diagnose poisoning owing to organophosphates compound, this test was not available in Yawatmals Government Medical College. Though relatively number of patients admitted for treatment at akola Government medical college, is less than yawatmal medical college, since past three years no effort is made by hospital administration to make available facility of cholinesterase test.
- Because of which treatment was mainly given based on the patients history (history) and patients symptoms (symptomatic) in Yawatmal medical college. Though number of patients increased in august and September of 2017 symptomatic treatment was given.
 In opinion of special investigation team had this test been available more specific treatment could have been given.

- Geographically yawatmal district is wide and talukas like Wani, Pusad, Umarkhed, Morgaon, Zari are approximately 70 to 120 km away from headquarters. Because of which delay occurs in reaching to Yawatmal when patients are referred to medical college. However at rural hospital/sub district hospitals (30-50 Bed) levels intensive care units (ICU/ventilators) are not available since they are not provided for in design. And therefore as soon as symptoms of poisoning start appearing in the patients he is required to be referred to district level medical college, yawatmal where regular expert physician (MD Medicine) is available.
- It appears at primary health centre level, first aid was given by giving saline and patients were referred straight to medical college yawatmal.

PROHIBITORY RECOMMENDATIONS

Agriculture Department-

- the farmers/farm laborers is mostly caused by the spraying of monocrotophos or by the mixture of other pesticides with monocrotophos. Monocrotophos being extremely poisonous (red triangle) and relatively cheap it is rampantly used for spraying. At the same time, despite there not being official recommendation for use of monocrotophos by central cotton research institute, Nagpur and Agriculture Department on cotton or any other crop it is used in large proportion. Monocrotophos is prohibited for use on vegetable crop, however control on its actual use is impossible.
 - Therefore pesticide Monocrotophos be prohibited immediately.
- 2) Pesticides that are newly supplied in market by companies (eg, Nicotinamide, from Group of Thyrourea) do not have specific antidotes therefore the information booklets mention that symptomatic treatment be given. It becomes impossible to give proper treatment to poison affected patient based on symptoms and

in absentia of antidotes and thus the chances of patients mortality increases. For the registration of pesticides, central insecticide bureau and registration committee (CIB & RC), Faridabad is the apex body, which has powers to register the pesticides and guide central and state government on technical issues under insecticides act 1968. Committee is of the clear opinion that unless specific antidote is available prior to registration of new pesticide, it shall not be given permission.

- 3) Before registering pesticide, it shall be made compulsory to write compatibility chart of pesticide with other pesticides. At the same time since the characters on the information leaflet are not legible its comprehension and compliance does not happen, at the same time for most of the farmers/farm laborers the information leaflet should be pictorial form also along with each container of the pesticide a quantity compatible cap (scale) providing shall be made compulsory. So that it will be convenient to use proper amount of pesticide while spraying the pesticide, a recommendation is being made that central insecticide bureau and registration committee (CIB & RC), Faridabad shall take appropriate action in this regards.
- 4) Chemical pesticides and crop growth analeptic are mostly sprayed together due to their exposure during spraying, process of spreading of poison in the body enhances. For all kind of Plant Growth Regulator registration shall be made through central insecticide bureau and registration committee (CIB & RC), Faridabad, and on state level only after receiving the licence of production, shall they be permitted to sale it in the State. Agriculture development officer, Zilha Parishad shall grant permit for sale to those Plant Growth Regulator (PGR) which are registered and permitted for sale, in their district. CPS-1117/PRA resolution Maharashtra government KRA.16/17A(2) Ministry Mumbai dated 3.10.2017, sale of unregistered Plant Growth Regulator and products, as per the

prevalent agriculture input act, which are not included, have been prohibited from sale through license holder shops. However there is no such prohibition in sell of such un registered crop growth analeptic through non licensed shotps. Therefore it is necessary that a provision is made that no Plant Growth Regulator shall be registered or permitted to be sold unless it is proved on the basis of scientific tests that it does not pose any harm to human health itself, or if used by mixing with other pesticides; for the same the manufacturer shall present information with respect to chemical compound that would be formed by its mixture with other pesticides. At the same time, it is must that a provision is made that sell of Plant Growth Regulator by producing the same unless it is registered shall be a considered as a grave crime and harsh punishment shall be provided for the same, this issue being associated with human health and in totality with environment conservation, state government shall forthwith make a proposal to Central government for amendment in the central laws. It is recommended that, till then, so as to not sell Plant Growth Regulator through permit holders as also through non permit holders sellers, State government shall prepare a comprehensive law for Maharashtrta State.

5) To stop the poisoning, it is necessary that non poisonous bio pesticides (bio pesticides & Bio Agents) are given boost as alternative for chemical pesticides. However, it is the opinion of the Special Investigation Team, that process of registering pesticide with central insecticide bureau and registration committee (CIB & RC), Faridabad, Haryana is too complicated and therefore production of bio pesticide is not getting encouraged. At the same time, central government bio insect control laboratory, central cotton research centre, centre agriculture university, agricultural science centre, government bio insect control laboratory shall be given registration by central insecticide bureau and registration committee (CIB & RC), Faridabad, Haryana by making easier the

- procedure of registering for the production, and large scale production shall be made. State government shall make appropriate proposal with respect to this.
- 6) Recommendation is being made that with intent to reduce the use of chemical pesticides, large scale production of organic pesticides, its propaganda is necessary.
- 7) For spraying pesticides, every year new spraying pumps get available in market for sale. Since farmers/farm labouers remain unaware about ways to use it, chances of poisoning owing to it cannot be ruled out. Therefore any pump coming in the market for spraying pesticide shall be made compulsory to obtain certification through BIS. Also pictorial representation of "Does And Donts" shall be made compulsory.
- 8) At the same time similar system as that of developed for control over sell of manures by Central Government (POS), be developed for pesticides. At the same time by creating data base of use of pesticides from that of village level to State Level in terms of its production, storage, sell, benefit and harms, which will be helpful for public purpose and because of the same, it will be easier to control production, transfer and sales. For that State Government shall create e-portal of immediately is the recommendation of the Committee.
- 9) when hot spots of pests are decided after survey of Agriculture Departments Pest Infection Survey and Advisory Project (Crop Sap), district administration alongwith team of scientists should visit the spot and immediately give advice.
- 10) In Amravati division, cotton crop is taken repeatedly on the same piece of land and extended (extended cotton crop) is taken in large proportion. Because of which pink boll worms infection is seen in large proportion. That state government should take a policy decision, to prevent it is necessary that pheromone traps are set up in ginning and pressing factory to control reproduction of

- future generation of pink boll worm, this responsibility should be shouldered on Cotton Ginning and processing centres.
- 11) In the given situation powers with respect to issuance of license shall be taken away and to ensure proper control over quality control government shall formulate uniform plan of action thereby prepare an independent mechanism and the quality control inspector carrying out work related to quality control shall not be given any other additional work apart from quality control.
- trainings minimum twice before season (kharif & rabi) for directors/distributors of agricultural service centres on the issue of poisoning through agricultural university scientist, agriculture department, insecticides production companies, associations of insecticides producing companies, agricultural science centers, agricultural universities, Indian Council of Agricultural Science (ICAR), private and government related research institutions, regional forensic libraries(FSL).
- On village level "village agricultural committees" be 13) constituted and in every periodical meeting during season, leaflets shall be distributed and discussion shall be held on precautions to be taken with respect to poisoning. At the same time only those persons should be encouraged to carry out spraying who have obtained medical fitness certificate through health department. Committee shall appraise farm lord that it is responsibility of the farm lord to provide security kit for spraying to the farm labourer. At the same time if farm labourer or any other person gets poisoned than he shall be immediately be given first aid. In order to discourage farmers from using any crop growth analeptic and at the same time those unscientific mixtures which are not recommended in the relevancy indicating table, appropriate guidance shall be given by government machinery available on village level.

14) Court cases filed against the samples which showed uncertified pesticides shall be conducted in fast track courts so that guilty insecticide producing companies can be timely acted against and strict action can be taken.

Agriculture Service Centre and Pesticide production related conclusions:

- i. While giving new licenses to sell pesticides to agriculture service centers strict compliance shall be ensured of central governments Agriculture, Co-operation and Farmer welfare department's gazette dated 05/11/2015 and license shall be given to persons holding degree or relevant syllabus in farming. At the same time those old pesticide sales license holders who do not hold requisite qualifications as per the gazette shall appoint qualification holder person as mentioned in the gazette.
- pesticides which are recommended. If possible pesticides which are recommended in bulletins of agricultural universities and central cotton research institute shall be sold and for the same proper advice and guidance be given to farmers. At the same time it shall be made mandatory to effectively and clearly guide farmers about precautions that are required to be taken by the farmers to prevent poisoning during season about pesticide propaganda, distribute pesticide spraying safety kits received from companies, first aid in case of poisoning and antidotes.
- To give clear and effective information to farmers about how iii. hazardous can be the mixture of plant growth regulator and unscientific mixture of two pesticides and mixtures not recommended in relevancy indicating chart. For that copies be made available to the directors of agriculture service centers of 12/10/2017 of Maharashtra government's dated circular agriculture, animal husbandry, milk development department and **CPS** circular no. government fisheries department,

- 1117/PRA.KRA.193/17-A, ministry Mumbai giving 20 precautionary measures to be taken while spraying pesticides on the crop in the farm by the farm lord and farm laborer so as to prevent poisoning.
- iv. Central insecticide institute, Faridabad, Haryana, shall suggest amendments to law for use of pesticide in accordance with label, at the same time while giving sanction to new pesticide, only those pesticides be registered which have antitodes.
- w. At the same time, POS System created for control over sales of manure, be created for pesticides. At the same time by creating data base of use of pesticides from that of village level to State Level in terms of its production, storage, sell, benefit and harms, which will be helpful for public purpose and because of the same, it will be easier to control production, transfer and sales. For that State Government shall create e-portal of immediately is the recommendation of the Committee.
- vi. Licensing authority shall in pesticide origin letter shall not alone mention name of the company it shall also mention crop wise recommended pesticide in the license. So that timely ban can be imposed on not recommended pesticides.
- vii. It shall be made mandatory for pesticide producing companies to distribute free of cost spraying safety kits, conducting mass awareness about poisoning, and trainings in those concerned areas according to their surveys based on previous year's sale and expected sales.

HEALTH RELATED RECOMMENDATIONS

1) Yawatmal and Akola Medical Colleges, are both tertiary care centres in Amravati division. In these colleges, poison affected patients from pesticide spraying and consumption regularly visit. Therefore it is necessary that in both these hospitals updated and

- independent facility is created. For that it is the recommendation of the committee that in Yavatmal medical college 30 bedded and in Akola government medical college 20 bedded independent and updated intensive care units are started.
- 2) It is being recommended that, considering the geographical situation of Yavatmal district in sub-district hospitals of Vani and Pusad 5 bedded updated intensive care unit is started.
- 3) Now cholinesterase test has been commenced in Yavatmal medical college, however, it is being recommended that along with it for poison testing by pesticides other that organo-phosphorous (to test proportion of pesticide in body), a toxicology lab be started in coordination with Home Department and Medical Education Department.
- 4) It is recommended that for modern treatment on poisoning a modern centre of excellence be created in Yavatmal medical college.
- 5) health department and medical education department shall take caution that in every 6 months, medical officers/Doctors in college who give treatment/private professional doctors are given updated information by conducting workshop and detailed trainings about pesticide poisoning diagnosis and treatment.
- 6) Health department shall examine registered spray workers and distribute half yearly fitness certificate.
- a standard operating procedure for referring pesticide poison affected patients and it shall be made mandatory to give such SOP to all rural hospitals, sub-district hospitals, district hospitals, medical colleges and private professional doctors. At the same time management protocol be prepared for reference "through 108 ambulance" and accordingly training be organized and all the doctors in district be given updated SOP.
- 8) At present as per section-37 of insecticide rule 1971 under insecticides act, 1968 procedure in existence to register and carry

out medical examination of labourer or worker carrying out spraying work in institutions, farmers/farm labourers. Similar procedure for keeping control over farmer/ farm labourers carrying out spraying in the farms is necessary and for that registration through agricultural assistant after effective physical check up related to health on Gram Panchayat level in every village is necessary. To ascertain Whether such farmers/farm labourers are physically fit or not their medical examination be conducted at nearest rural hospital, sub district hospital, district hospital and government medical college. At the same time medical examination be conducted in prescribed performa and physical fitness certificate be obtained. Such certificate shall be obtained twice a year. Only on perusal of such certificate farmer shall provide safety kit and then pesticide spraying work be done. A copy of that certificate be made available in health centre, concerned farmer/farm labourer, agriculture assistant and in the gram Panchayat. Accordingly agriculture assistant/talathi/gram sevak shall ascertain the referred certificate by inspecting it in village level committee from time to time.

If it is found during inspection that any farmer/farm labourer who has not obtained certificate or he is not physically fit for spraying, an offence under section 309 of Indian Penal Code (I.P.C.Section 309 attempt to suicide) for attempt to suicide be through against gram registered such persons sevak/talathi/agriculture assistant. Also offence under section 304 IPC for culpable homicide (I.P.C.Section 304 culpable homicide) be registered through gram sevak/talathi/agriculture assistant, against those farmers who have given work to such farm labourer who is not physically fit for spraying or is spraying without spraying kit and a report to that effect be sent to district superintendent agricultural officer through proper channel. District superintendent agricultural officer shall take the action after giving said report to collector and police administration. A prescribed

- performa be prepared by agriculture department for presenting the report. This is the recommendation of the committee.
- 9) Concerned subject be added as disaster in district disaster control agency (district disaster control room). Pre and post disaster management redressal steps be carried out firmly, promptly and effectively. Pesticide spraying duration is during months of August to November and during those times government machinery, police machinery, medical machinery be put on high alert intimation (High alert) preparation and arrangement be made to face the situation effectively. During the peak period of pesticide spraying, health department shall immediately convey the daily report of poisoning to the collector via telephone, mobile, email or letter by obtaining the same from primary health centre, rural hospital, subdistrict hospital, district hospital and medical colleges. Collector shall convey the same on daily basis to divisional commissioner and agricultural commissioner and in the areas where proportion of poisoning and intensity is high, collector shall immediately do the inspection by forming a joint committee of health department, agriculture department, agriculture scientist and police department. At the same time immediate action shall be taken with respect to cause of poisoning and precautionary measures.
- 10) It shall be made mandatory for all concerned officers of the machinery to give regular monthly report about poisoning to collector and government in accordance with notification dated 16th May 1980.

POINT NO.2- WHILE PREVENTING THE SAID MAN MADE DISASTER, MISTAKES THAT OCCURED IN IMPLEMENTATION OF LAW AND TO DETERMINE PERSONS, INSTITUTIONS, GOVT/SEMI-GOVT/EMPLOYEES RESPONSIBLE FOR IT.

- 1) It was mandatory in view of notification dated 16th May 1980 under insecticide act, 1968 to give report on poisoning in prescribed performa by district level constituted district health officer, Zilla Parishad, District Civil Sergeon, Medical officer, Primary health centre, Maleria Officer, Police inspector, concerned police station, Range forest officer forest department, Veternary officer, all private hospitals, block development officer, Zilla parishad, district superintendent agriculture officer, agriculture development officer, zilla parishad, sub-divisional agriculture officer, Block agriculture officer, Circle Agriculture officer. However no such report has been presented by any of the department to the government, however it is the fact that procedure for presenting the report as per the circular did not get activated. At the same time on government level also no follow up was done about the report.
- 2) As per the statistics of Yavatmal administration with respect to poisoning due to pesticide spraying, it is noted that 433 patients in year 2016-17 and 886 patients in year 2017-18 got admitted for treatment. During the visit of special investigation team in Yavatmal government medical college the facility of cholinesterase test which is necessary for diagnosis of poison affected patient was not available in medical college Yavatmal and therefore patients had to get it done privately. Because of which patient's time and money got wasted.
- 3) Considering the increasing number of poison affected and poison consumed patients consistently in Yavatmal district, medical college Yavatmal in its medicine department did not appear to have

- made any special improvement for modern treatment facility and research with respect to pesticide poisoning.
- 4) Since adequate number of experts, cholinestrase test and other blood investigation facility which are necessary for treatment were not available with primary health centre, rural hospitals, sub district hospitals in Yavatmal for further treatment were sent to medical hospital. Yavatmal district is geographically too wide and from headquarters taluqas like Vani, Pusat, Umerkhed, Maregaon, Zari are on an average 70 to 120 kilometers farther. Because of which on referring patients (refer) to Yavatmal's medical college delay occurs. Hence it is being recommended that cholinesterase test and other blood investigation test facilities be made available in sub-district hospitals.
- 5) The joint committee (Revenue department, police department, agriculture department) which was constituted by district administration after poisoning matter in Yavatmal district inspected 227 agriculture service centres and out of it police crime came to be registered against 2 pesticide producing companies and 10 agriculture centres. At the same time licenses of 5 agriculture service centres came to be cancelled. However inspections done prior to this by quality control inspector of Yavatmal were not effective but were mere formalities and lacunas identified in the inspections were not followed up with or no strong action appears to have been taken.
- 6) It has come to the notice that concerned department did not constitute monitoring mechanism for implementation of provisions in Insecticide act 1968 section 37 (Registration and medical examination), 38 (first aid), 39(safety kit), 41(antidote and availability of first aid)

POINT NO.3- ACTION TAKEN IN THE DISTRICT
AGAINST NON-RECOMMENDED SELL OF PESTICIDE,
AS ALSO THE MATTERS IN WHICH SAMPLES OF THE
PESTICIDE WERE FOUND UNCERTIFIED,
QUALITATIVE ANALYSIS OF ACTION TAKEN AND TO
MAKE SUGGESTIONS.

- 1) Action taken against pesticide license holder agriculture centres in Yavatmal district- during inspection of Yavatmal district as such crime has been registered against 10 agriculture service centres and 2 pesticide producing companies (Annexure No.-6) licenses of 5 agriculture service centers came to be cancelled. Licenses of 6 agriculture service centre have been suspended (Annexure No.7).
- 2) Action taken against culprit pesticide companies-

Of all major companies pesticide storage centre for Central India is in Akola. From said pesticide storage centre supply of the pesticide is made to entire division including Yavatmal. Those found guilty during the inspection of these storage centre, action was taken in accordance with law on pesticide storage licenses and stock came to be seized.(Annexure No.8) at the same time in Akola inspection sale prohibition order has been issued against the stock of 2.79 lakh litres (Cost of rupees 13.96 crore).

3) In Amravati division including Yavatmal district 4706 samples were taken of the pesticides for analysis from year 2013 to 2017. Of those 240 pesticides samples have been found to be uncertified. Action accordance with law has been taken against those samples which were found to be uncertified. At the same time in the year 2017-18 till October 2017, 940 samples were taken. Of which 13 samples were found to be uncertified in the analysis and thus further action in accordance with law is being taken against uncertified samples.

4) In Amravati division 3 in year 2015-16, 1 in year 2016-17 and 1 till September 2017, thus in 5 such cases crime has been registered and after poisoning 10 crimes came to be regiostered in Yavatmal district, further police action is underway.(Annexure No.10)

POINT 4-TO MAKE RECOMMENDATION, IF SALE OF ANY EXISTING SALE PERMIT HOLDERS, PESTICIDE, SPRAY PUMP ETC. NEEDS TO BE PROHIBITED.

- 1) It has come to the observation after consultation with patients fallen sick due to poisoning while spraying the pesticides as also with the family members of the persons who died and villagers that most of the people sprayed pesticide monoprotophos by mixing it with other pesticide. Monochrotophos falls in 1B category according to world health organization. Accordingly it falls in extremely poisonous category (Red). Therefore use of Monochrotophos in large proportion can cause poisoning. At the same time Monochrotophos being partially prohibited (for vegetable crops) and hence control over the use of the same is not possible. Because of which it can be seen that even for prohibited crops it is being used. At the same time though central cotton research institute Nagpur and agriculture universities donot recommend officially use of pesticide monochrotophos on cotton, its use is happening in large proportion. Therefore it is being prohibited recommended pesticide monochrotophos be immediately.
- 2) Production and sale, registration certification and licensing shall be made compulsory for unregistered crop growth analyptic (PGR). According to Maharashtra government resolution no. CPS 1117/PRA.KRA16/17A-2, Ministry Mumbai 32 dated 03.10.2017, plant growth regulators and their products have been prohibited from sales from licensed shops. However there is no prohibition on sale of these unregistered plant growth regulators from unlicensed shops. Therefor it is necessary that information with respect chemical reactions that would occur on mixture of each such plant growth regulator with other pesticides is presented and only after ascertaining on scientific tests and confirmed that it does not pose any threat to human health, registration and permission to sale such

plant growth regulator be not given, such type of provision requires to be made in the law. At the same time, production and sale of plant growth regulator without registration shall be made a grave offence by incorporating such provision in the insecticide act(IPC304, Culpable Homicide). Therefore it is being recommended that, this matter being connected with human life and in totality with environment preservation State Government shall immediately propose change in the Central Law and in the mean time, a comprehensive law be made by Maharashtra State Government for Maharashtra so as to not sale plant growth regulator from licensed or non licensed shop.

3) During the special investigation team's area visit it has come to the notice that farmers are getting inclined towards Automated spraying pumps for spraying since it gives more outcome out of lesser efforts. However possibility of poisoning become strong if during spraying through pumps farmers/farm labourers do not use protective gears which would result into infiltration of pesticide in larger proportion through inhalation or through skin. Referred pesticides spraying pump do not appear to have been certified in present scenario. Therefore to reduce danger of poisoning all the automated spraying pump in the market be certified through BIS before those are sold, at the same time it shall be made compulsory to give pictorial presentation of Do's and Don't's(Do's and Don't's). After agriculture department immediately develops a protection kit (PPE-Personal protective equipment kit) for spraying of pesticides in future, it shall be the responsibility of the vendor to give the same along with spraying pump.

Point No.5-TO ASCERTAIN LACUNAS IN REPORTING TO
THE STATE GOVERNMENTS ADMINISTRATIVE
DEPARTMENT AS PER EXISTING PROCEDURE ABOUT
THE MAIN/IMPORTANT INCIDENCES AND TO
ASCERTAIN THE INFORMATION OF THE RESPONSIBLE
DEPARTMENT.

1) It was mandatory in view of notification dated 16th May 1980 under insecticide act, 1968 to give report on poisoning in prescribed performa by district level constituted district health officer, Zilla Parishad, District Civil Sergeon, Medical officer, Primary health centre, Maleria Officer, Police inspector, concerned police station, Range forest officer forest department, Veternary officer, all private hospitals, block development officer, Zilla parishad, district superintendent agriculture officer, agriculture development officer, zilla parishad, sub-divisional agriculture officer, Block agriculture officer, Circle Agriculture officer. However no such report has been presented by any of the department to the government, however it is the fact that procedure for presenting the report as per the circular did not get activated. At the same time on government level also no follow up was done about the report.

Had the information being supplied on time the administration could have taken preventive steps.

2) It has come to the notice that concerned department did not constitute monitoring mechanism for implementation of provisions in Insecticide act 1968 section 37 (Registration and medical examination), 38 (first aid), 39(safety kit), 41(antidote and availability of first aid)

POINT NO.6-CONCLUSION WITH RESPECT TO AID
OFFERED SUBSEQUENT TO THE INCIDENCES AND
SUPERVISION CONTROL DONE BY DISTRICT
DISASTER CONTROL ROOM (DISTRICT DISASTER
CONTROL ROOM) WITH RESPECT TO THIS MISHAP.

- 1) Chronology of action taken by Collector Yavatmal-
- i.On 11.09.2017 took charge as collector Yavatmal. After taking charge of collector, Yavatmal I first of all took necessary information as to geographical situation, crop situation and from officers working in the district and other departments and thereafter I visited Umarkhed, Pusad, Kalamb and Raregaon taluquas in the district.
- ii. However agriculture department, health department under zilla parishad and agriculture department, district civil surgeon office Yavatmal or any other department in Yavatmal did not bring it to my knowledge that farmers or farm workers are getting poisoned while spraying pesticides and are falling dead or sick and are being admitted in government hospitals in large number.
- brought it to my knowledge for the first time that while spraying pesticides some farmers/farm workers have got poisoned and their health condition is serious. On coming to know such fact immediately on 25.09.2017 at 5 in the evening a meeting came to be called out at district collector office of district superintendent agriculture officer, Yavatmal and agriculture development officer ZP Yavatmal. Λecordingly after taking preliminary information directions were given to all machineries in the district superintendent agriculture officer, Yavatmal and agriculture development officer Yavatmal to take appropriate steps. In this regard a report was called after enquiring as to whether farmers are using prohibited pesticides? Λt the same time a report was called out to give fact detailing as to steps taken for ensuring that no harm is caused to farmers due to use of pesticides, also district

superintendent agriculture officer, Yavatmal and agriculture development officer ZP Yavatmal came to be instructed that they shall prepare a notification detailing precautions that are required to be taken for spraying pesticides and said notification shall be jointly signed by district superintendent agriculture officer, Yavatmal and agriculture development officer ZP Yavatmal and district collector, Yavatmal.

iv. Vide letter dated 26.09.2017 of this office directions were given to district superintendent agriculture officer, Yavatmal and agriculture development officer ZP Yavatmal to present immediately a factual report on steps taken to preventto farmers owing to use of pesticides in view of the concerns raised in the news published in the newspapers, Also they were directed to conduct an enquiry and take immediate action with respect to subject matter in view of the complaints obtained and news published if prohibited pesticides are being used by the farmers.

v.Also with respect to subject matter again a meeting was called on 27.09.2017 at 6 in the evening of officers from revenue, agriculture and health department and complete review was taken. In the said meeting Dean, Shri Vasant Rao Naik government medical college and hospital Yavatmal, District Civil' surgeon Yavatmal, district superintendent agriculture officer, Yavatmal and agriculture development officer ZP Yavatmal and senior scientist Panjabrao Deshmukh agriculture university Yavatmal were present. In the said meeting a decision was taken that on the stroke of drum beats daily in the morning and in the evening in the form of dashing campaign, publicity be given to the precautions that are to be taken while spraying pesticides by the farmers and for the said work use of presently being used loan waiver village hall reading in Yavatmal district be used, at the same time talathi, gram sevak and agriculture assistant be got involved in this work so that information can reach out to maximum farmers. It was directed to all sub-divisional officers, tahsildars, taluqa agriculture officers and taluqa agriculture development officer ZP Yavatmal to take caution with respect to the same and action is being taken accordingly.

- vi.Intimation was given to Dean, Shri Vasant Rao Naik government medical college and hospital Yavatmal, District Civil surgeon Yavatmal and district health officer Yavatmal to immediately give detailed information by compiling the same with respect to patients admitted in the hospitals in the said matter and immediate services be made available to such patients through the hospital and intimations be issued on the local level.
- vii. That on the stroke of drum beats daily in the morning and in the evening in the form of dashing campaign, publicity be given to the precautions that are to be taken while spraying pesticides by the farmers and for the said work use of presently being used loan waiver village hall reading in Yavatmal district be used, at the same time talathi, gram sevak and agriculture assistant be got involved in this work so that information can reach out to maximum farmers to make sure the same, all sub-divisional officers and all tahsildars were sent letters by this office dated 27.09.2017.
- viii.Dean, Shri Vasant Rao Naik government medical college and hospital Yavatmal, was intimated to immediately present post mortem reports of farmers/farm laboureres who died owing to spraying of pesticides. Accordingly post mortem reports have been received by this office.
 - ix.Accordingly by taking prompt action a primary report was presented to the government on 27.09.2017
 - x.Under chairmanship of Hon'ble Guardian minister Yavatmal district and in presence of Hon'ble Chairman, Late Vasantrao Naik Sheti Swablamban Mission Amravati a meeting was called on the subject matter on 28.09.2017 at 3 in the noon in revenue hall in D.O. Yavatmal. In the said meeting Dean, Shri Vasant Rao Naik government medical college and hospital Yavatmal, District

Civil surgeon Yavatmal, district superintendent agriculture officer, Yavatmal and agriculture development officer ZP Yavatmal and senior scientist Panjabrao Deshmukh agriculture university Yavatmal were present. Also Hon'ble Secretary medical education was also present.

xi.At that time it was directed that agriculture science centre Yavatmal, Superintendent agriculture officer Yavatmal and district agriculture officer Yavatmal shall conduct awareness programme on how to do spraying of pesticides, workshops for guidance for farmers and by going in every village through taluqa agriculture officer and agriculture assistant, farmers be given guidance about spraying.

xii. Since poisoning is happening to the farmers because of spraying of poisonous pesticides, to make available (safety kit), mask and rubber hand gloves to the farmers, funds be made available under Bali Raja Chetna Abhiyan, considering the number of farmers in the village, village level committees shall purchase minimum 5 and maximum 10 kit per village and noting to that effect be taken in the register. Said kit be made available to the person going for spraying as per requirement. And after completion of work it be stored after cleaning and again on demand be given to others, was directed by Hon'ble Guardian minister Yavatmal district and Hon'ble Chairman, Late Vasantrac Naik Sheti Swablamban Mission Amravati in the said meeting. Accordingly for 1198 gram panchayats in Yavatmal district a fund totaling to Rs.11,60,500/ was made available. Accordingly 4642 safety kits have been purchased and work is underway on war footing to provide the same to farmers through taluqa machineries. At the same time 1800 kits have been distributed in 5 taluquas by intra private limited company and 200 safety kits have been distributed on district level by Bayer company. In accordance with the same further action is underway. At the same time as per the letter of shri K.S.Narayanan, General manager, Syngenta India ltd New Delhi 10,000 safety kits are being made available for farmers/farm labourers getting affected due to spraying of pesticides in Yavatmal district, thus vide letter dated 30.10.2017 direction has been given to chief executive officer zilla parishad Yavatmal to obtain the same and plan its distribution through gram panchayats.

xiii. That vide letter dated 27.09.2017 all tahsildars, district superintendent agriculture officers Yavatmal, district agriculture development officer ZP Yavatmal, district health officer Yavatmal and district civil surgeon Yavatmal were directed to give detailed enquiry report with respect to death and taluqua agriculture officer were directed to pay visit to the house of the concerned farmer/farm labourer on 28.09.2017 by taking along concerned medical officer of rural hospital/public health centre and taluqua level and village level officers of agriculture department along with officers/employees of revenue department shall visit village to village on how to spray the pesticides.

xiv.Hon'ble principal secretary (Agriculture) and commissioner (agriculture) took detailed review by organizing a meeting on 02.10.2017 at 1 o' clock in the noon at revenue hall, collector office Yavatmal. In the said meeting chief executive officer zilla parishad, Yavatmal, assistant director agriculture Amravati, district superintendent agriculture officer, Yavatmal, district agriculture development officer ZP Yavatmal Dean, Shri Vasant Rao Naik government medical college and hospital Yavatmal, District Civil surgeon Yavatmal, district health officer ZP Yavatmal, senior insect scientist Panjabrao Deshmukh agriculture university Yavatmal, insect scientist agriculture science centre Yavatmal, all sub divisional agriculture officer, district labour officer and Tahsildar Darva, Kelapur, Aarni, Maregaon, Ghatanji, Kalamb, Dighrash, Zarijamani were present. In the said meeting directions were also given to put up proposal under Hon'ble Chief minister relief fund for help to those farmers/farm labourers who died due to poisoning and by following up with the same relief shall be obtained for them. Proposals have been presented to hon'ble secretary,

secretariat of hon'ble chief minister for giving financial aid under hon'ble chief minister relief fund to 21 dead farmer/farm labourers. He also instructed that agriculture assistants be directed that through awareness campaign farmers/farm labourers be reached out to and maximum people be awakened on this subject.

xv. Hon'ble state minister (agriculture) Maharashtra state visited the family of the deceased farmer Shri Dipak Shyamrao Maravi on 04.10.2017 at village Shendur-Sani taluqa Aarni. And thereafter he enquired with the patients at Shri Vasantrao Naik government medical college and hospital Yavatmal by visitng the same. and thereafter by calling out a meeting at 2 o'clock in the noon in revenue hall collector office Yavatmal he ttok information about the actions taken with respect to poisoning caused due to pesticides spraying in Yavatmal district. in the said meeting hon'ble Commissioner Amravati division Amravati, chief executive officer zilla parishad, Yavatmal, district superintendent agriculture officer, Yavatmal, Dean, Shri Vasant Rao Naik government medical college and hospital Yavatmal, District Civil surgeon Yavatmal, district health officer ZP Yavatmal, Director trust and quality control, agriculture commissionerate Pune, regional agriculture joint director Amravati, Assistant commissioner (labour) Amravati, all sub divisional agriculture officer, district labour officer and all Tahsildar. In the said meeting hon'ble minister gave necessary instructions to the entire machinery.

xvi.He enquired with the officers and employees as to why information was not given to other departments even when farmers were dying due to poisoning out of spraying. Directions were given to help poison affected farmers and their relatives through patient welfare fund. Treatment in proper way be given to poison affected farmers and as per needs they be given vitamins, tablets, tonic. He directed medical officers to hold meeting of all the doctors and give its report to collector.

them medications may still face problem later on and therefore after examining them to give them necessary treatment again List of such admitted patients be made available to primary health centre/rural hospitals of the concerned area and by personally visiting such patients treatment be made available to them at the local level. Accordingly by issuing a letter dated 04.10.2017 instructions were given to Dean, Shri Vasant Rao Naik government medical college and hospital Yavatmal, District Civil surgeon Yavatmal, district health officer ZP Yavatmal.

xviii. Action be taken against those shops where despite prohibitions so some pesticides those are being rampantly sold in the shops. He directed that Stock, except in accordance with license be seized, companies responsible for this incidence and those agriculture centre directors selling those be booked under criminal offences. Committee be constituted under chairmanship of concerned subdivisional officer. Accordingly taluka agricultural officer, police inspector and Panchayat samiti agriculture officer shall inspect agriculture service centres and their godawns to take further action in the matters of unauthorized/bogus and without license sold/stored seed, inorganic manure and pesticides. As per the directions in the meeting enquiry committee as under was directed to be constituted, accordingly committee came to be constituted.

- 1) Concerned department's sub-divisional officer (revenue)-Chairman
- 2) Concerned sub-divisional agriculture officer- member
- 3) Concerned taluqa agriculture officer- member secretary
- 4) Concerned taluque police inspectors (Thanedar)- member
- 5) Concerned Panchayat samiti's agriculture officer(general)-member

xix.Said committee has presented its report in this office by conducting enquiries in appointed sub-divisions from 05.10.2017. same are presented herewith for perusal.

agriculture officer, agriculture assistant shall regularly visit villages, diaries updated and notings be taken in the same. by going into villages prohibitory measures be planned for preventing such incidences, appropriate information with respect to pesticides be given to farmers

xxi.On 06.10.2017 hon'ble minister (agriculture) and hon'ble minister (health) visited Yavatmal district. hon'ble minister (agriculture) visited deceased farm labourer Shri Bandu Chandrabhan Sonule's family at village Manoli taluqa- Ghatenji. At the same time he visited district government hospital and thereafter he took review meeting at Shri Vasantrao Naik government medical college and hospital Yavatmal at 11 in the morning. Also thereafter at 1 o'clock in the noon a meeting came to be organized at collector office Yavatmal. In the said meeting hon'ble minister (agriculture), hon'ble guardian minister Yavatmal district, hon'ble chairman late Vasant Rao Naik Shetkari Swawblmban Mission, hon'ble member of parliament Bhavna Tai Gawali and guardian secretary shri V. Giriraj were present. In the said meeting it was directed that if any incidence comes to the notice of police patil of that village he shall immediately inform the same to police machinery and police machinery to taluqa magistrate so that information will immediately be reached to district level about such incidences, orders to this effect be issued, with respect to this orders have been given vide letter dated 06.10.2017 to all sub divisional officers, tahsildars, sub divisional police officers and thanedars.

xxii.Also in the villages under the gram Panchayats campaigning and publicity be done about spraying through agriculture assistant and gram sevak, orders to this effect be issued name wise so that information about such incidences will immediately come to district level, instructions with respect to the same have been issued to all taluqa agriculture officers and all block development officers Panchayat samiti vide letter dated 06.10.2017

- xxiii.Vide letter dated 06.10.2017 orders were issued to district civil surgeon Yavatmal and district health officer ZP Yavatmal calling upon them to submit a report after issuing written form of instructions (SOP) as to care that is required to be taken with respect to death of farmer/farm labourers due to spraying of pesticides by employees in rural and primary health centres.
- Panchayat samiti to ensure by inspecting that pesticide or shop are regular. To carry out such type of inspections name wise orders be issued and daily review of inspection be taken and report of daily review be presented, such type of orders have been issued to all sub-divisional agricultural officer and block development officer Panchayat samiti vide letter dated 06.10.2017.
- xxv.At present in Yavatmal district 21 persons (14 farmers/07farm labourers) have died due to poisoning while spraying pesticides.

 Post mortem report of 15 deceased persons have been received.

 Last rites on 3 farmers/farm labourers came to be conducted without doing autopsy.
- xxvi. To take complete review of the prohibitory steps taken and actions taken by the administration and to collect information about deceased and under treatment farmers owing to spraying of pesticides hon'ble shri S.K.Srivastave upper chief secretary(home) visited Yavatmal district on 07.11.2017 and took meeting in collector office Yavatmal.
- xxvii.Also on 08.10.2017 upper chief secretary(home) visited some people who are affected because of the spraying and discharged from the hospitals at circuit house Kalamb and thereafter he visited house of deceased Gajanand Namdeo Phoolmadi at village Sawargaon Taluqa Kalamb.
- xxviii.Arrangement has been made that in events any unnatural incidence takes place police patils of the entire district by holding a meeting on a police station level will inform immediately to the police station, instructions in this regard have been given to all station in