The Pharma Innovation Journal 2023; 12(5): 1225-1227

www.ThePharmaJournal.com

The Pharma Innovation

ISSN (E): 2277-7695
ISSN (P): 2349-8242
NAAS Rating: 5.23
TPI 2023; 12(5): 1225-1227

www.thepharmajournal.com
Received: 15-02-2023
Accepted: 30-03-2023

Gayakwad VS
Assistant Professor, Agricultural Extension Education, Late R G Deshmukh College of Agriculture, Tiwasa, Maharashtra, India

Deshmukh AN
Head, Department of Agricultural Extension Education, Shri Shivaji Agriculture College, Amravati, Maharashtra, India

Lade AH
Assistant Professor, Agricultural Extension Education, G H Raisoni University, Saikheda, Madhya Pradesh, India

Corresponding Author:
Gayakwad VS
Assistant Professor, Agricultural Extension Education, Late R G Deshmukh College of Agriculture, Tiwasa, Maharashtra, India

Preventive measures being taken by farmers in controlling agricultural pollution

Gayakwad VS, Deshmukh AN and Lade AH

Abstract
The present study was conducted in Amravati district of Vidarbha region of Maharashtra state. The study "Preventive measures being taken by farmers in controlling agricultural pollution" was conducted in Amravati and teosa talukas of Amravati district, from this talukas ten villages selected and from each village eight respondents were selected, 80 respondents were purposively selected for study. Exploratory research design was used for the research study. It was noticed that, forty percent (40.00%) of the respondents had taken preventive measures as use protective wears at the time of handling of pesticides, half (50.00%) of the respondents were used organic manure, slightly more than forty percent (41.25%) of the respondents carried out repairing and services of implements and farm machinery frequently, 42.25 percent of the respondents were deposited crop by-products in pit and after decomposition it is added to soil to enrichand, 25.00 percent of the respondents utilize sewage water as irrigation to inedible crops only, 30.00 percent of the respondents were made dung pit away from residential area, slightly less than three fourth (70.00%) of the respondents were irrigate the crop as per their requirement of water, Half of the respondents (50.00%) take preventive measure as dead animal buried under ground deeply and away from residential area,

Keywords: Agricultural pollution, preventive measures, SSAC, Amravati

Introduction
In India after green revolution use of agricultural chemicals got momentum and rose by many folds. It is the period when agriculture in India improved due to the adoption of novel methods and technology in agriculture. As these were used more unscientifically, they started showing negative impact on the soil, water, and as whole on the environment, which otherwise could be termed as pollution. The report of workshop on climate change and sustainable agriculture have opined that the green revolution has done more harm than good to the agriculture sector in the country from a long-term perspective (Anonymous, 2009). They suggested that farmers return to traditional practices in farming in order to make the vacation sustainable future. In other word agriculture pollution is defined as the phenomenon of damage, contamination and degradation of environment and ecosystem and health hazard due to the by-products of farming practices. Some forms of agriculture pollution would be excess fertilizer run off, polluted streams also polluting ground water. Pollution with some pesticides, air pollution causes due to dust, burning of field harvest waste. Livestock waste is responsible for greenhouse gas emission, some air pollution with odour from feeding flocks and large chicken houses. With this some agricultural practices like use of sewage water for irrigation purpose affects the PH of soil. Throwing of dead animal near the residential area or in the water resources causes pollution. Farm mechanisation also contributes to this in the form of noise pollution, oil toxins from farm equipment makes soil unfertile, and excessive use of heavy machineries for farm operation causes soil compaction, with this there are also other agricultural pollutants.

Specific objectives of the study
To know the preventive measures being taken by farmers in controlling agricultural pollution

Materials and Methods
The exploratory research design of social research was used for the present investigation. The present study was undertaken in Amravati district of Vidarbha in Maharashtra state.

Total 80 farmers were selected from two taluka Amravati and Teosa randomly. Data were collected by personally interviewing the respondents with the help of pretested and structured interview schedule. The data collected were tabulated and the statistical tools namely mean, standard deviation, percentage, frequency, correlation coefficient were employed for interpretation of the findings.

Result and Discussion

1. Preventive measures taken by farmers in controlling agricultural pollution: To identify the preventive measures taken by the farmers in agriculture in selected area was one of the objectives of the present study. The preventive measures are the practices that reduce the amount of pollution generated by agriculture, and minimize the practices which cause pollution.

Table 1: Distribution of respondents according to preventive measures taken by the farmers to minimize agricultural pollution and practices causing pollution

Sr. No.	Preventive measures taken	Respondents(n=80)	
		Frequency	Percentage
A	**Pesticide**		
1	Use of recommended pesticides only	24	30.00
2	Use of the protective wears	32	40.00
3	Use of recommended dose of pesticides	24	30.00
B	**Fertilizer**		
1	Use of recommended dose of fertilizers	32	40.00
2	Use of organic manures	40	50.00
C	**Noise pollution**		
1	Repairing and services of implements and farm machinery carried out frequently	33	41.25
2	Use of implements and farm machinery for limited time	22	27.50
D	**Harvest waste**		
1	Crop by-products deposited in compost pit and after decomposition of it added in to the soil to enrich	33	41.25
2	Crop by-products burred in soil to increase soil fertility	24	30.00
E	**Sewage water pollution**		
1	Sewage water used in irrigation to inedible crops only	20	25.00
F	**Livestock waste**		
1	Dung and urine stored in pit	16	20.00
2	Dung pit made away from residential area	24	30.00
G	**Irrigation water**		
1	Chemical analysis of irrigation water carried out	08	10.00
2	Crops irrigated as per their requirement of water	56	70.00
H	**Farm dead animals**		
1	Dead animals not thrown in tank or well	23	28.75
2	Dead animals buried under ground deeply and away from residential area	40	50.00

It was noted from Table 1 that, the data related to Pesticide Preventive measures, forty percent (40.00%) of the respondents had taken preventive measures as use protective wears at the time of handling of pesticides. more than one fourth (30.00%) of the respondents generally use recommended pesticide and dose of pesticides for preventing agricultural pollution. The data related to Fertilizer preventive measures depicted that, half (50.00%) of the respondents were used organic manure, more than one third (40.00%) of the respondents who utilize recommended dose of fertilizers for prevention of agricultural pollution. As per as Noise pollution Preventive measures is concern, slightly more than forty percent (41.25%) of the respondents carried out repairing and services of implements and farm machinery frequently and 27.50 percent of the respondents utilize implements and farm machinery for limited time.

It was reveled from the Table 1 that, the Harvest waste preventive measures were expressed by the farmers. 42.25 percent of the respondents were deposited crop by-products in pit and after decomposition it is added to soil to enrichand, and only 30.00 percent of respondents were expressed crop by-products burred in soil to increase soil fertility. The data related to Sewage water pollution preventive measures reveled that, 25.00 percent of the respondents utilize sewage water as irrigation to inedible crops only. In case of livestock waste management preventive measures, 30.00 percent of the respondents were made dung pit away from residential area, Whereas 20.00 percent of the respondents' stored dung and urine in pit.

It was noted from Table 1 that, the data related to Irrigation water Preventive measures, slightly less than three fourth (70.00%) of the respondents were irrigate the crop as per their requirement of water. Only 10.00 percent of the respondent's Chemical analysis of irrigation water carried out for control of agricultural pollution caused by irrigation water. As per as Farm dead animals preventive measures is concern Half of the respondents (50.00%) take preventive measure as dead animal buried under ground deeply and away from residential area and 29.17 percent respondents did not throw dead animals in tank or well. The findings were supported by Grower *et al.* (2015) [4], Dohare and Choudhari (2014) [3] and Madhuri Khairnar (2018) [5].

Conclusion

It was stated that, most of the respondents were irrigate the crop as per their requirement of water, used organic manure, dead animal buried under ground deeply and away from residential area, greater number of the respondents carried out repairing and services of implements and farm machinery frequently**,** use protective wears at the time of handling of pesticides, utilize sewage water as irrigation to inedible crops only, made dung pit away from residential area, Half of the

respondents, deposited crop by-products in pit and after decomposition it is added to soil to enrichand,

References

1. Amle SD. Safety measures adopted by vegetable growers in pesticide application. (Master's Thesis). Dr. PDKV, Akola; c2016.
2. Chaudhari J. Farmers awareness regarding agricultural pollution in anand district (Master's Thesis). Anand Agriulture University Gujarat; c2013.
3. Dohare A, Choudhari S. Study on Knowledge about Organic Farming Practices Possessed by Farmers of Khargone District, Madhya Pradesh, India. International J. of Science and Research. 2014;(3):37-39.
4. Grower D, Pradeep K, Sharma HR. Possible reasons and farmers awareness towards crop residue burning: An overview and case study from Mirzapur village of Kurukshetra village, India. Environmental J of Science and Technology. 2015;10:75-85.
5. Madhuri K Khairnar. Awareness of Farmers about Agricultural Pollution (Master's Thesis). College of Agriculture, Nagpur; c2018.