

The Role Played By Agricultural Extension for Protecting Environment from Pollution

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Abstract: Field research was implemented in 2016 A.D just to identify the role which agricultural extension plays for protection of environment in Qasser Ben Gashir, southern suburb of Tripoli- Libya which is known of its climatic circumstances specifically appropriate for agriculture and other activities in general, but environmental pollution feature will not keep component of this area as it was.

Economic and environmental loss will reflect its impact in the society as a whole an account of mis-management of surrounding environment. Results of the research, obviously shed light on the some and represent a warning for environment.

Keywords: Environmental Pollution, Environment, Insecticides, Biology, Agricultural Extension.

1. INTRODUCTION

Undoubtedly, agricultural extension plays a key role in protecting environment from pollution, and...hat will be able to address and understand the side role, it is necessary to identify the definitions relating to two basic conceptions, namely,(environment and pollution).

Environment: basically, it means the surrounding in which human being lives with other alive or not live creatures mutually reacting in conformity with an accurate order, namely, environment system.

Pollution: it is the undesirable change in natural, chemical and biological characteristics. In other words, it can be defined as follows: inserting an unfamiliar material to anyone environment mediums (water-air-soil) causing a change in its components, being detrimental or in- detrimental, directly or in indirectly. Environmental pollutions might be summarized as follows:-

- Pollution due to using unsafe o overdoses of agricultural insecticides.
- Air pollution by one of environmental pollutions.
- Pollution of water resources.
- Pollution of soil, being agricultural or not.
- Pollution by insects which are attached for reproduction and fading on domestic garbage.
- Biological pollution of the three environmental mediums air-water-soil.
- Pollution with organic waste missed with solid waste.

Environmental pollution and its problems became one of the most important addressable issues nowadays due to the relation between human being with surrounding environmental pollution.

Since environmental pollution has extended to include everything .e.g. the air we breathe, the food we consume, our agricultural crops which we cultivate and our animal production (meat and milk), the matter threatening food security and stability of human beings.

Thus, this research paper aims to shed light in the role of agricultural extension and its relation with environmental protection, plus unveiling of the causes latent behind pollution as projected on economic development.

Cases leading to environmental pollution and extension role which is represented in:-

Firstly: agricultural lethal and its detrimental side effect : unbalanced arouse of lethal for purposes of stopping the spread of agricultural lethal. Agricultural extension has a key role in protecting the environment simply because its participations in increasing awareness of farmers who use lethal and encouraging them to stop using chemicals.

Secondly: air pollution

Air is polluted with toxic gases, accordingly, extension role is lethal in spreading awareness towards changing of using pollutants via meetings, seminars and media programs plus warning tem rom the risk of environmental pollution.

Thirdly: Soil pollution

Soil pollution with lethal which long-lasting prior being dissolved (more than twenty years), may, according to recent studies, cause direct cancerous tumors to human being plus decrease of soil lethality the matter leading to decrease productivity.

Fourthly: pollution of water resources

Water resources might be polluted due to intrusion of waste water, chemicals and other pollutants, and since large areas depend up on groundwater for drinking and irrigation, while other depend on river and spring waters.

Fifth: pollution due to insects attracted to domestic garbage, and the role of extension

Like domestic fly and spiral fly plus meat black fly and Tsoe Tsee fly, mosquitos, fleas, cockroaches and ticks, due to accumulation domestic waste and lack of collection, skirting and circulation.

Sixth: biological pollution

Biological pollution means the existence organisms visual or nonvisual by naked eye (animal or botanic) polluting environmental medium (water-air-soil). Organisms causing biological pollution include bacteria, fugues, viruses, animal like Bilharzia, hepatic warm, tapeworm. Polluted air plays a role infections like pneumonia, tuberculosis and cough ...etc.

Water or food polluted biologically by some nurses may cause diseases like typhoid, cholera, desentaria, virus c .. etc.

Eighth: Pollution by organic waste is usually missed with glass, metal, bones, plastic materials, cloth, ceramic, lethal, wood and organic material. He world now use treatment processes represented in collections, setting and circulation plus manufacturing fertilizers via mechanical crumpling the said waste to be usual as fertilizers for agricultural soil. This of course reduce potential air pollution resulting from crimination. This supports the idea of re-using organic waste which is a process economically feasible and good environmental perspective. Moreover it is a way for getting red of waste and maintained of natural environmental balance.

The role of agricultural extension here is to spread awareness relating to the important of disposal of domestic waste safely and environmentally.

Problems of research inquires:

Problem of the research lies in indication of the role which agriculture extension plays in environmental protection. Research problems might drafted through the following questions:

- 1- What is the level of awareness of research targeted citizens?
- 2- What is the role played by agricultural extension in environmental protection field
- 3- The extent of citizens response to extension programs targeting environmental protection?

2. AREA AND RESEARCH COMMUNITY

Ben-gashire area is the southern suburb of Tripoli Libya which is an urban and agricultural area with total area amounting to (300 km²) and about (100.000) inhabitants.

Research sample: simple randomly sample was taken

Because the community is homogenous and has very little differences. Accordingly, we insure collecting a sample truly representative to the community (about 382 entries), according to Kargassi and Morgan annexed table, which the questionnaire will be disputed to them.

Targets of the research:

Basically, the research aims to identify the role which agricultural extension plays in protection of environment in research area, while sub-target can be specified as follows:-

- 1- Fixing the percentage of farmers using lethal in research area and the extent of their awareness of its risk.
- 2- It aims to clarify direct and indirect passive risk of misuse of natural resources as reflected on surrounding environment.
- 3- Focusing light on key causes leading to environmental pollution and affecting its order.
- 4- Proposing appropriate solutions for treatment of misuse of natural resources and relevant feature affecting environment.
- 5- Identification of the role which agricultural extension plays for environmental protection from determined pollution.

3. RESEARCH METHODOLOGY

Basically this paper depends up n inductive descriptive style or historic and scientific facts extracted from specialized scientific studies and references relating the research subject.

4. RESULTS AND DISCUSSION

When we talk about environmental pollution in this research,

We talk about environmental pollution resulting from local pollution in research area. In this research, we will concentrate on the causality representing the basic point of this research, and we have nothing to do with global pollution dealing with pollution resulting from wars and Ozon layer... etc. Post collection of data, tabulation and analyses the same statically by computer using SPSS program.

The study demonstrated the following results:-

- From analysis of questionnaire data it was clear that average from areas ranging between 5-10 areas, and that 75% of farmers use agricultural lethal grossly for purposes of protecting their agricultural production from diseases regardless of environmental hazards arising therefrom.
 - Research result showed that 85 of pollution existing down town (urban) do not suffer from demotic garbage pollution because it is collected mixed and unsorted.
 - As for those who live in agricultural area 90% therefrom accumulate Garbage n hole locating in the corner of a small piece of land, and putting on fire therefrom the matter damaging environmental by polluted air.
 - Study showed that agricultural extension did not play its ole effectively due to weak contents between it and environmental protection authorizes, where 66% of farmers did not effective any extension program.
 - Research showed that an addition to the pollution resulting from gross use of chemical and domestic garbage, there are another passive features namely.
- 1- Pumping part of wastewater at Al-meginin valley heading north towards the sea causing damages in the course passing through.

- 2- Spread of plastic pages and bottles everywhere in the form an public roads.
- 3- Existence of services center for vehicle, Turks and heavy machinery for oil change and the hazards arising therefrom without any consideration for environmental criteria.

We notice that farms which did not overuse agricultural lethal represent 11% only of total farmers in research in spite of limited programs by agricultural extension aiming to instruct farmers about risk

In urban part,15% of its pollution suffer from heaped garbage vehicles did not reach then and consequently, did not benefit from the service. As a result nasty smell and flies spread in the area that is why residents burn the garbage.

5. RECOMMENDATION

Base up on study results, the following recommendation were adopted:

- Due the importance of protection to environmental, being the medium in which we live, it was necessary to activate the role of agricultural extension as well as enhancing environmental protection programs.
- Providing all environmental protection requirements plus training of cadres and giving them the freedom to participate in decision-making and troubleshooting.
- Activity organized collective work and giving laborers the chance to obtain knowledge and information.
- Giving more concern for management and performance assessment within clear criteria to be circulated on all environmental staff.
- Linking performance assessment results with environmental protection system and agricultural extension as well as creativity remuneration for achieving excellence and obtaining skills.
- paying more attention to cultural aspect plus explaining the importance of maintaining environmental order as a hole along with trying to change individual behavior and to direct it towards proper direction in order to protect environment, being the big house accommodating all.

REFERENCES

- [1] Public authority for information (2006), final results of population census 2006 (Tripoli-libya)
- [2] Bahloul a-yacoubi (2002), pollution, hazars and solutions (Tunis, administration of program and scientific research).
- [3] Salah Ali Saleh Fedalah (2001), environmental pollution and its impact on agricultural economic development (Assut- Assut magazine for environmental studies) issue No.20.
- [4] Ali Mohamed Fares, Assadek Saad Omran, Faisal Muftah Shalouf (2004), economic impacts resulting from misuse of lethal, faculty of economy, Omar Almkhtar University (Al-jabal Al-Akhdar - Libya), Al mukhtar for human sciences. Issue. No.2.
- [5] Agricultural insect ides committee (2014), extension for agricultural pilot training program and lethal users (Egypt, ministry of agricultural reform).