

Abuja, Nigeria

AFRICA

G

A

S

A

T

2

0

0

0

GLASAT

PROCEEDINGS

*Linking Formal and Informal Science
For Sustainable Development*

SUSTAINABLE AGRICULTURE: WOMEN AND PESTICIDES

*OPEOLU, Beatrice O. and FADINA, Olubunmi O.

*Department of Environmental Management and Toxicology,

University of Agriculture, Abeokuta, Nigeria

Department of Crop Protection and Environmental Biology,

University of Ibadan, Nigeria.

ABSTRACT

All over the world, women are the primary producers of food for their families and extended communities. In sub-Saharan Africa, more than half of the farm labour force consists of women yet they have little or no knowledge of the hazards of pesticides that are often applied at the various stages of crop production. Numerous studies on pesticides related poisoning have been reported on many male farmers but relatively fewer studies have been conducted on women because of their subordinate position in the society. At the superficial level, it is believed that women do not spray pesticides, but they are exposed to pesticides during the washing of sprayers and clothing, and the processing and consumption of treated crops. Women are particularly vulnerable because of the aggravating conditions like poverty, ignorance, malnutrition that are caused by their subordinate roles in the society. Pesticides are known to cause breast cancer, infertility, spontaneous abortion, still – birth and birth defects in exposed women. To achieve sustainable agriculture, it is therefore important that women indigenous knowledge and skills are used for the development of less hazardous crop production practices.

THE INVISIBILITY OF WOMEN FARMERS.

In most African nations, due to traditional and religious beliefs, men generally make important decisions. In some rare cases, women are given the opportunity to bring ideas often times, in form of advice to their husbands. This can be affirmed for example by the way parents treat their male wards vis-a-vis their female counterparts. For example, in modern South Western Nigeria, parents prefer to invest in male education than female education because according to them, the girl child will soon marry, drop their name and be subordinate to 'another person' son' (her husband). This has deprived many women that would have made impact in different walks of life of such.

Rural women after being deprived of Western education continue their lives in the farms and villages assisting their parents and eventually, their husbands. These women are involved in agricultural practices right from the tillage operations to storage. She does many tedious activities on the farm both in crop and livestock production.

In crop production, women involvement include land clearing, sowing, thinning, weeding, harvesting, threshing sorting of produce, storage, disposal of husks and other wastes, treating seeds and processing. In livestock production, women often clear the shed of dung, feed the animals, give water to them, milk cows, take care of sick and lactating animals and most times, prepare the feeds of these animals. They also perform such functions like childbearing and rearing, household management and petty trading.

Despite the important parts they play in agriculture, they are yet to be recognized. For instance, in government oriented agricultural programmes, women are not considered in terms of grants and loans. For example, projects like National Agricultural and Commerce Bank (N.A.C.B.), National Agricultural and Land Development Authority (NALDA) and the National Directorate of Employment (NDE) loans require some collateral in terms of landed property, formal education certificate, guarantors, etc. which most women farmers lack. They are therefore automatically disqualified from such loans. Even the so called women programmes like 'Better Life for Rural Women' were restricted to the State capitals, local government secretariat and some towns that have elite's as indigenes. There is therefore urgent need to make visible our invisible women farmers. This is necessary since they are the most exposed to pesticides toxicity's through their various activities in the farm.

ACUTE AND CHRONIC TOXITY OF PESTICIDES

Pesticides are natural and synthetic substances that are needed to eliminate organisms that are considered as pests. They include fungicides, rodenticides, algicides etc. They can also be classified based on their chemical compositions. Hence, we have organochlorines, organophosphates, carbamates, pyrethrins and pyrethroids.

As mentioned earlier, Women are exposed to pesticides through their various activities of washing sprayers, clothes, treating seeds, amongst others. The effects of such exposures may be acute or chronic. Acute effects normally occur shortly after contact with a single dose of poison. Acute responses include muscle twitching, nausea, dizziness, skin rash, convulsions, tremors, and sensory dysfunctions. A

chronic effect on the other hand, occurs when an organism is exposed to repeated doses of potentially harmful substances. Well-known chronic responses to various pesticides include breast cancer, infertility, foetal deformation, lung cancer, brain damage liver and kidney necroses, cardiac dysrhythmia and psychiatric disorders.

RELEVANCE OF WOMEN INDIGENOUS CROP PRODUCTION KNOWLEDGE AND SKILLS

The importance of indigenous crop production knowledge and skills of women for sustainable agriculture cannot be over emphasized. Rural women are quite knowledgeable in farming activities, which include food processing, and crop protection.

Rural women use citrus peels to ward off insect pests, *Capsicum* sp. And neem oil/water extract to preserve seeds. In food processing, they used natural plant products as food flavours rather than synthetics like glutamates. Such include harbinger and locust beans. Also, the processing of harvested crops into consumables are carried out by women.

Most times, the indigenous skills are often more tedious than the modern ones. Though, most times, products of indigenous knowledge are of higher quality than those by machines and risk of human poisoning is often less. For example, it has been found that metal chips and lubricating oils/grease gets into food products during milling using modern techniques. This causes heavy metal poisoning with their associated ill – health effect like depression, neo – natal mortality, metal fume fever, behavioral disorder, amongst others (Murti and Nag, 1991).

RECOMMENDATION AND CONCLUSION

From the foregoing, it is strongly recommended that women should be adequately compensated for the hazards they pass through by their exposure to pesticides. This is because they bear the greatest risks because of their roles as farmers, wives and mothers. Also health care facilities for routine check – ups and treatment should be available at affordable rates. The woman race should also be properly educated to created amongst them the awareness of their rights which include right to health.

Finally, unless something is done about the attitude of society to women's problems of neglect and subordination, this societal ill will continue to perpetuate itself from generation to generation; and by this, millions of women will continue to suffer and die annually with attendant problems of single parents, wayward children, malnutrition, unsanitary living conditions, AIDS and pesticide poisoning amongst others.

REFERENCES

- Forastieri, Valentina (1997); Children at work; Health and Safety Risks. International Labour Office, Geneva Pp. 8 – 12.
- Habib, Nasira (1996) Invisibile farmers – A study of Women in Agriculture and the impact of pesticides on them Pp. 41 – 87
- Murti, C.R.K. and Nag, D. (1991) Human health impact of pesticides in the environment: Chemistry, Agriculture and the Environment L.R. Mervyn (Ed) The Royal Society of Chemistry, Cambridge. Book Craft (Bath) Ltd. Pp. 491 – 505.
- Pesticides Action Network (PAN) Asia and the Pacific (1997) Forging our Future – Women in Agriculture Pp. 56 – 62.
- Sarojeni, V.R. (1998) Harvesting Hope – Empowering Women in Pest management. Pesticide Action Network (PAN) Asia and the Pacific. Pp. 16.