

Research article



# Pesticides: The Imperceptible Killer of Africa “A viewpoint”

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Pesticides are chemical formulations that confer protection on plants mostly against harm by pests, Fungi, insects, and herbs. The term also covers the use of disinfectants, repellants, and wood preservers alongside crop defoliant used to protect plants. The usage of pesticides predates the independence of most African states. It is believed that the colonial masters introduced it to the continents (Bertrand, 2019). It is a common practice among subsistence commercial farmers to apply pesticides to their plants to prevent diseases and thus increase crop yield. With the continuous usage, comes a plethora of problems, which are caused as a result of lack of adequate laws that guide the use of pesticides, lack or improper education on the use of pesticides, type of pesticide purchased, and lack of toxic vigilance systems to document poisoning cases amongst others (Bertrand, 2019). Another problem that is seldom talked about or not mentioned at all is the role developed countries play in the use of pesticides in Africa.

Pesticides have generally been considered to be a contributor to global food security, although the importance of that contribution, and how it is balanced against their potential to cause harm to human health and that of the broader environment, is a subject of fierce debate (EU, 2021). The debate on the use of pesticides should continue especially as evidence abounds of the potential harm. The disproportionate effect of pesticides in Africa is very alarming, where developing countries only use 25% of the entire pesticide produced and records 99% of death due to it (SEDI, 2021). Africa is a continent made up of mostly developing countries. Africa to a large extent is an agrarian continent, in which, most of the revenues made are obtained from the agricultural sector. Due to the apparent dependence on food the increase in the growth output of agricultural produce is of paramount

importance. To this end, agrochemicals such as fertilizers to boost crop growth and pesticides to prevent pests are used abundantly.

The use of these chemicals does not come without certain implications. A big question to be asked is – can Africa pay the cost? Knowing full well that there are short-term impacts and long-term effects. The short-term impact has been observed in the sickness of farmers that use pesticides, the pesticide-laden foods consumed, and the environmental impact of pesticides. The full extent of the long-term effect cannot be known in its entirety. However, studies have shown that some of these chemicals can persist in the environment for several years. With its persistence will also come the associated havoc.

The sale of banned pesticides to Africa (EU, 2021), should be termed unethical. Humanity is the same irrespective of location and economic status. Certain pesticides such as Acetochlor, Atrazine, Nitrogen, Benomyl, and other highly hazardous pesticides (HHPs), have been scientifically proven to be extremely dangerous to both man and the environment and have been banned in European countries and other developed countries that are scientifically advanced; should and must not be allowed for use in Africa. Several studies have revealed that pesticides are found in food consumed by people. Due to the lack of a toxic vigilance system, most deaths from pesticide consumption or poisoning are not recorded against pesticides. Farmers who apply pesticides are observed to suffer from certain health problems that eventually make them stop farming. Health-related problems associated with the use of pesticides include eye and skin irritation, nausea, vomiting, and headache (Tsimbriet *al.*, 2015).

### **The negative impact of Pesticides**

The negative effect of pesticides is seen when farmers are unable to farm, which could be due to the loss of health by the effect of pesticides. Such persons are not useful to society. Most times, they become dependent on their families or the government. What has occurred is the loss of a vibrant workforce. Africa is still in want of job opportunities. Agriculture produces a substantial amount of jobs. However, the harmful effect of pesticides discourages people, most especially the youth to go into Agriculture, because they don't want to be handicapped or sick as is characteristic of farmers that use pesticides. It also affects the farmers in many regards and invariably the killing of such a productive sector - Agriculture. When a reduction in farm workers occurs, it often leads to a concomitant decrease in farm produce. This would make certain food unavailable. Africa still grapples with food insecurity. The reduction in food production translates to a lack of food for certain persons. The lack of food can lead to ultimate death. Lack of farm produces; especially cash crops for exportation, can negatively

impact foreign exchange, affecting a nation's economy. This is a potential economic killer of a nation dependent on Agriculture. The environments are affected by pesticide presence. Adjourning water bodies to farms is highly affected (Agrawal *et al.*, 2010). The soil and the reduction in microbial diversity are prominent environmental hazards caused by pesticides. Problems related to pesticide use can extend beyond the farming area when residential areas are nearby. Pesticides pose a particular danger to children, not only through their use but through their storage within the household. Statistics show that pesticides are involved in a significant number of suicides every year (EU, 2021).

## Way Forward

The misuse, abuse, and indiscriminate use of pesticides in Africa will hinder the achievements of the Sustainable Development Goals (SDGs); because pesticides will affect underground water and the environment, which will lead to the eventual job loss for affected farmers, eventual loss of food (hunger), which are SDGs to be achieved. To achieve the Sustainable Development Goals, Pesticide use should be looked into, especially in Africa. To ensure that Africa does not die of pesticides, certain recommendations to be acted upon soonest are hereby presented. African researchers should embark on studies that would determine the presence of pesticides in food items, water, and the environment. Studies on the effect of this pesticide in all ramifications, especially as it pertains to health and the possible alteration of the genetic makeup should be performed alongside the remediation of pesticide affected environment. A scientifically informed government policy on the sale, use, and distribution of pesticides should be enacted by the act of law. Most importantly, the ultimate replacement of pesticides with eco-friendly crop Protectants. The use of biopesticides and organic fertilizer in sustainable farming should strongly be considered as it is highly promising. Africa must be willing to survive by enacting and strictly adhering to laws that will forbid the use, misuse, and abuse of pesticides. If the collegiate of world nations have agreed to the stoppage of certain pesticides at different world meetings (Erhunmwunsee *et al.*, 2012), then Africa should also see to it that she upholds and doesn't demand such proscribed pesticides. It is high time leaders of African states protected their population and the population unborn. African leaders should be firm and seen to be firm as it concerns the protection of lives of the citizenry from the harmful effects of pesticides. If nothing is done urgently regarding pesticide usage, Africa will be killed economically and physically eventually. This is a clarion call to the makers and keepers of laws to institute laws that would preserve the lives of Africans and enable them to thrive economically too.

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