

Republic of the Philippines  
**HOUSE OF REPRESENTATIVES**  
Quezon City

**FIFTEENTH CONGRESS**  
Second Regular Session

**HOUSE BILL NO. 5249**

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**Introduced by:**

**Gabriela Women's Party Reps. LUZMINDA C. ILAGAN and EMMI A. DE JESUS**

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**EXPLANATORY NOTE**

Article II, Section 15 of the 1987 Philippine Constitution provides that, "The State shall protect and promote the right to health of the people and instill health consciousness among them."

Furthermore, Section 16 of the same Article provides that, "The State shall protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature".

On the strength of the above-quoted provisions of the 1987 Constitution, this bill seeks to prohibit aerial spraying

Aerial spraying has recently become the preferred method of local commercial farms and agri-business TNCs in applying pesticides and herbicides on their export crops production. Among the country's export crop lines, it is most particularly used in the banana industry. According to the Philippine Banana Growers and Exporters Association (PBGEA), local commercial farms and agri-business TNCs prefer the use of aerial spraying because it is the cheapest method for applying pesticide and herbicide.

Be that as it may, such method has become a nuisance and a bane to residents living near banana plantations that it is about time the State uses its police powers to put a stop to aerial spraying in order to protect the health and well-being of its people as well as of the environment.

Decades ago, aerial spraying was not much of a social problem because local banana plantations were few, largely small scale and far from population concentration. Under a Letter of Instruction issued in 1973 by former Pres. Marcos, banana plantations were also contained and limited to 26,250 hectares in Mindanao<sup>1</sup>. Since then, however, as the crop turned into economies of scale and rose to become the country's leading agricultural export crop, banana production has expanded tremendously. In Mindanao alone, the expansion has been about 800 times bigger than the land size banana production covered in the 1970s. That translates to some 250,000 hectares and still expanding. Such an expansion has easily affected a population of millions.

More than the fact that communities had sprouted around banana plantations that were once sparsely populated, the expansion, aided in no small measure by weak environmental laws and official venality, has encroached on populated areas and emergent villages and towns, bringing into these populated areas the pernicious practice of using aerial spraying by local commercial farms and agri-business TNCs.

In expanding into these areas, local commercial farms and agri-business TNCs drummed up the economic advantages that expansion would supposedly bring such as employment and additional revenues for local government units. But in harping on these economic benefits, little attention was paid to the adverse effects of expansion on the ecological and health welfare of the people.

A study made by the Peasant Education Studies Center in 2007<sup>2</sup> shows how aerial spraying has become a nuisance to the affected population. In the victims' account on how aerial spraying has affected their lives, scenes shades of Hitler's blitzkrieg over London during WWII would come to mind that local folks, in what is an apt description of their predicament, have come to more popularly call it "aerial bombardment" (in contrast to insidious outsiders who prefer to call it "chemical showers" to blunt with euphemism the deadly implication of aerial spraying).

Once they hear the sound of a coming airplane, people would run to whatever "air raid shelters" they could find, be it their homes, chapel, or empty bodegas. Or they would seek cover under some thick canopy of trees which does not protect them at all. Once inside any enclosure, they would close its door and windows, thereby risking suffocation, just to shut off the nauseous odor that would engulf their whole immediate environment. Normally, they would remain in the enclosure hours after the airplane had left because the spraying would leave behind a foul odor that would last for days. The moment they ventured out, they would find their washed clothes in the clothesline soiled with black spots (like the color of "alkitran") that they have to wash them again. Those who happened to be away from their homes during the "attack" would also find their leftover food already discolored that they had to throw them away. In addition, the nausea that aerial spraying inflicts would leave the affected people losing their appetite for two or three days. On these counts alone, aerial spraying is truly a *perwisyo* – a nuisance!

Aerial spraying is not only a nuisance. It is also deleterious to the health of the people living near banana plantations. A 2006 study<sup>3</sup> made by the Department of Health on a village near a banana plantation in Hagonoy, Davao del Sur

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<sup>1</sup> Letter of Instruction No. 58, as amended by Letter of Instruction No. 790 issued in 1979. This was repealed in 2009 via Executive Order No. 807 issued by Pres. Gloria Macapagal-Arroyo. EO No. 807 lifted the limits on hectareage, paving the way for unbounded expansion for banana production.

<sup>2</sup> Peasant Education and Studies Center, A Social Investigation On CARP Implementation in TNC Lands in Mindanao, PESCC: Quezon City, 2007 (unpublished).

<sup>3</sup> Department of Health, A Health and Environmental Assessment in Sitio Camocnaan, Hagonoy, Davao del Sur, DoH: Davao City, 2006.

showed the presence of high levels of ethylenethiourea (ETU) in their blood samples. ETU is a breakdown product of Mancozeb, part of a group of fungicides called ethylenebisdithiocarbamates (EBDCs), which is widely used by large-scale banana growers. Mancozeb is a chemical classified as carcinogenic by the Swedish pesticide regulatory authority. It has been documented to have produced "follicular and papillary" thyroid cancer in rats and "hepatocellular" cancer in mice. Such documentation highly suggests that it can also induce thyroid and liver cancer in humans.

The study also found high levels of ETU and chlorothalonil (a broad spectrum fungicide used to control molds, mildew, bacteria and algae) in the soil and air in the village and, because of chemical drift, even in nearby areas.

Furthermore, the study found that 52 % of the village residents who reported to have been exposed to aerial spraying showed post-exposure symptoms like eye redness, eye pain, eye tearing, eye and skin itchiness, headache and spells of vomiting and dizziness. These health conditions were not found in villages not exposed to aerial spraying.

Aerial spraying also affects the vegetation and animal life in the vicinity of banana plantations. Residents of villages would report that the growth of plant life in their backyard and farms had been seriously stunted. Since being exposed to aerial spraying, coconut and fruit trees and local varieties of banana have stopped bearing fruits. The soil has become infertile that people now find it difficult to grow food crops. Even grass grows scantily among the place. People also find it harder to raise pigs and chickens and other animals as they just die out. They also believe that their streams have been contaminated because a lot of animals refuse to drink from these and the animals that do eventually die.

This should point out to what could be the worst destructive impact of aerial spraying: its defilement of the environment and local ecosystems. Since the pesticides and herbicides are released into the air, the method has absolutely no means of controlling the chemical fallout to ensure that the harmful chemicals would hit only their targeted areas. The air-borne harmful chemicals are usually swept by the winds, dispersing them over wide areas that include rivers, lakes, streams, and other water systems that in many rural parts of the country are used for personal hygiene and, most importantly, as sources of aquatic food and potable water.

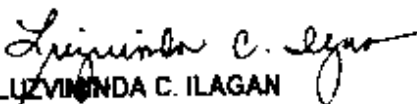
Chemicals from pesticides and similar harmful substances accumulate through the years. In the absence of deep-going study on the geo-ecological effects of chemical accumulation from pesticides released into the environment, one can only imagine the long term implications on communities and the environment long exposed to aerial spraying. Moreover, in some provinces, it must be noted that banana production expansion, having exhausted the prime agricultural lands in the plains, has crept into areas that are near watersheds and aquifers.

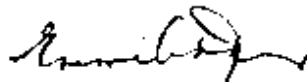
What gives added compulsion for the state to intervene into this social bane is that local commercial farms and agribusiness TNCs have turned a deaf ear to complaints brought to their attention by the affected population. Refusing to take responsibility for the damage they wreaked on communities, they have used their corporate might to resist and foil attempts of people's organizations and some local government units to curb aerial spraying in such places as Davao City, Davao del Sur, and Bukidnon.

Local commercial farms and agribusiness-TNCs have argued that the use of aerial spraying is part of their property rights which cannot be curtailed by law. Their defenders in the Department of Agriculture contend that the affected people should be kind to our banana industry because it is the Number 1 dollar earner among our agricultural export crops, as if saying that people must bear with the destructive effects of aerial spraying for the dollars that the industry brings.

Such arguments are self-serving and specious. The property rights of local commercial farms and agn-business TNCs should end where the right of the people to sound health and environment begins. And there should be no argument that between profits and dollars earned from banana exports and the health of our people, the latter should come first. To postulate that the people should bear with aerial spraying because this country owes a good amount of dollars to the banana industry is to grossly misplace our priorities.

Given all the premises, it is but fitting and proper for the state to intervene into this social bane in behalf of the affected people and for this bill to be urgently passed into law.

  
LUZVIMINDA C. ILAGAN  
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EMMI A. DE JESUS  
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Introduced by:

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**AN ACT**  
**PROHIBITING AERIAL SPRAYING AS A METHOD OF APPLYING CHEMICALS**  
**AND SIMILAR SUBSTANCES ON AGRICULTURAL CROPS**

*Be it enacted by the Senate and House of Representatives of the Philippines in Congress assembled:*

SECTION 1. *Title.* – This Act shall be known as the “*Aerial Spraying Prohibition Act of 2009.*”

SECTION 2. *Declaration of State Principles and Policies.* – The State recognizes that, as an agricultural method of applying chemicals and similar substances, aerial spraying is vexatious to the peace of communities, detrimental to the health and well-being of the people, and destructive of the flora and fauna and the environment.

It is hereby declared the policy of the State to promote the welfare of the people, including the succeeding generations, by protecting their well-being, health and environment from any agricultural activity, practice or method that will lead to the exposure of any person and the environment to hazardous chemicals, substances, or similar materials

SECTION 3. – *Definition of Terms.* - For purposes of this Act, the following terms shall be understood as follows:

a. **Aerial spraying** refers to the application of chemicals, substances, or similar materials on crops by releasing them into the air from an aircraft.

b. **Agricultural practices** refer to the practices that any person, natural or juridical, may conduct in relation to his agricultural activities.

c. **Agricultural activities** refer to activities involved in the process of agricultural production, be it small, medium and large scale farming.

d. **Hazardous chemicals** refers to any substance or product, or mixture intended to control, prevent, destroy, repel or mitigate directly or indirectly, any pest. The term shall be understood to include insecticide, fungicide, bactericide, nematocide, herbicide, molluscicide, avicide, rodenticide, plant regulator, defoliant, desiccant and the like, same as hazardous substances or hazardous material.

e. **Buffer Zone** refers to an identified 50-meter zone within and around the boundaries of agricultural farms/plantations that need special monitoring to avoid or minimize harm to the environment and inhabitants. It is an area of land that must lie within the property which does not include public lands, public thoroughfares or adjacent private properties. It must be planted with diversified trees that grow taller than what are usually planted and grown in the plantation to protect those within the adjacent fields, neighboring farms, residential area, schools and workplaces.

f. **Global Positioning System survey** refers to a survey plan showing the mates and bounds of each agricultural farm/plantation that must be submitted to the Office of the Mayor of the municipality/city which has jurisdiction over the concerned agricultural farms/plantations.

**SECTION 4. *Prohibition of aerial spraying.*** – The act of aerial spraying is detrimental to the health and well-being of the people and destructive of the environment. It is hereby declared contrary to law and prohibited.

**SECTION 5. *Monitoring and enforcing agency.*** - The Office of the Provincial Governor of each province shall be the principal enforcement agency for monitoring and ensuring compliance of this Act and for apprehending and prosecuting violators thereof. The Provincial Governor of each province shall form municipality/city-based monitoring teams from among farmers/farmworkers organizations, environment protection advocates, civil society, church people, and youth organizations. The municipal/city mayor, municipal/city agriculturist, municipal/city health officer, and the municipal/city chief of police shall be automatic members of the monitoring team.

Upon authorization of the municipal/city mayor, the municipality/city-based monitoring teams shall have inspectional powers with respect to compliance of providing buffer zones as mentioned in Section 8.

The monitoring teams are hereby deputized by this Act to make citizens' arrest of persons who violate Section 4 hereof.

**SECTION 6. *Aircraft inventory.*** - To help the enforcing agency in monitoring and ensuring compliance of this Act, all persons, natural or juridical, who have practiced aerial spraying or have been engaged in the business of providing aerial spraying services before the enactment of this Act, shall be required to submit to the Office of the Provincial Governor an inventory of the aircrafts they used in aerial spraying. The inventory shall indicate therein a brief distinctive description of each aircraft, the company logo, and location of hangar and other relevant information for the facile identification of the aircrafts when airborne.

**SECTION 7. Corporate violators.** - If the violator of this Act is a corporation, partnership, or any other juridical entity, the penal provisions hereof shall be applied to the president or chief executive officer of the corporation, the managing partner in the case of partnership, or the equivalent head in the case of any other juridical entity or any other person acting in their behalf. In the case of corporations, the indictment shall include the manager of the department directly responsible for aerial spraying and similar operations.

**SECTION 8. Provision of Buffer Zone.** - All persons, natural or juridical, who are engaged in agricultural crop production of fifty (50) hectares and above and which makes use of hazardous chemicals substances or have an intent to improve productivity, must provide for a thirty (30) meter buffer zone within the boundaries of their agricultural farms/plantations. This buffer zone must be properly identified through Global Positioning System (GPS) survey.

if the agricultural crop production has an operation scale of three hundred (300) hectares and above, the buffer zone shall be fifty (50) meters.

**SECTION 9. Grace period for compliance of buffer zones.** - After the effectivity of this Act, there shall be a period of one (1) year within which the persons mentioned in Section 8 hereof shall comply the requirement of providing buffer zones in their agricultural farms/plantations as mentioned in the same Section.

**SECTION 10. Penal Provisions.** - Any person found to be violating the provisions of this Act shall be penalized as follows:

1. On violation of Section 4 hereof:

a. First Offense: Fine of Fifty Thousand Pesos (P50,000.00) and imprisonment of not less than three (3) months but not more than six (6) months.

b. Second Offense: Fine of One hundred Thousand Pesos (P100,000.00) and imprisonment of not less than six (6) months but not more than one (1) year and suspension of business permits and licenses for one (1) year.

c. Third Offense: Fine of One Hundred Fifty Thousand Pesos (P150,000.00) and imprisonment of not less than one (1) year but not more than one (1) year and six (6) months and perpetual cancellation of permits and licenses.

In the case of the pilot of the aircraft, the punishment for third violation shall include the cancellation of his pilot's license.

2. On violation of Section 8:

a. A fine of Fifty Thousand Pesos (P50,000.00).

**SECTION 11. Implementing Rules and Regulations.** - Within fifteen (15) days after the effectivity of this Act, the Department of Interior and Local Government, in consultation with the Department of Agriculture, Department of Health, Department of Environment and Natural Resources, and the Bureau of Rural Workers, shall issue the Implementing Rules and Regulations of this Act.