

# FACTS AND LIES

## on the DOH Study on the Health and Environmental Assessment of Sitio Camocaan, Hagonoy, Davao del Sur

Various stories and columns came out in the national and local newspapers hitting the Department of Health (DOH) study that investigated the effects of pesticides on the health and environment of Camocaan village in Davao del Sur and that recommended the banning of aerial spraying, among others. Vain attempts to discredit the DOH study cannot hold ground against the public health professionals who made the study, whose expertise are poisons and their impact on peoples health and whose only bias is protecting public health.

### LIE # 1

The study was conducted using very small population just 38 patients.

#### FACT

Statistical randomization has been used by researchers since time immemorial to ensure that their smaller samples are, indeed representative of the larger population.

Just like in professional polling about poverty or the popularity of a potential presidential candidate, a randomly selected sample of 1 person out of every group of 75,000 from the entire country of 90 million is interviewed. Conclusions derived from such surveys are believable because the process of randomization makes sure that the sample is not biased but rather is truly representative of the entire nation.

The study had 38 subjects out of a total Camocaan population of 1,057; or 1 out of every 28 residents was randomly selected, far better than the 1 out of 75,000 in the polling data that we routinely believe to be reliable. The 38 respondents are clearly representative of the population of Camocaan.

Extrapolating the results would mean 80% of all people in Camocaan are similarly exposed to the aerial pesticides, drifting beyond the boundaries of the plantation. Camocaan is just one of thousands of communities living within and around banana plantations all over Mindanao.

### LIE # 2

It was found beyond reasonable doubt that the air ETU monitored in one sample out of six were found in statistically negligible levels.

In fact, one sample taken from an irrigation canal in a banana plantation did not contain fungicide residues but only the degradation product because the area was sprayed seven days earlier.

This finding demonstrated that fungicides are degraded when exposed to sunlight, rainwater and dew under the torrid climatic conditions of the country.

#### FACT

The words "statistically negligible" are not found in any part of the report. In fact, the report states the opposite -- that in one of the air samples from an irrigation canal in Camocaan, ethylenethiourea (ETU) exceeded the level for which a clean up should be done in order to prevent any harm that may result from exposure to it.

ETU is a degradation product of mancozeb, one of the aerially sprayed fungicides. Yes, certain fungicides are degraded when exposed to sunlight or rain but in the case of mancozeb, it is degraded into a more dangerous chemical called ETU. In fact, it is classified as a probable carcinogen, even "extremely small amounts" can get the cancer going. Thus, the research was specifically looking for ETU and not the parent material mancozeb.

### LIE # 3

Dr. Dionisio, in his opening statements, was quoted as saying that his team 'does not know anything about aerial spraying and the kind of formulations used in said spraying. We need to learn exactly how aerial spraying works'.

#### FACT

There was no such opening statement.

The researchers simply answered the question of Councilor Aznar, of Hagonoy asking them if they had listened to the lecture of a PBGEA resource person describing how accurate aerial spraying is using the latest technology.

The researcher simply answered NO to the question being asked and added that regardless of the technology being used in aerial spraying, the proof of its effectivity / efficiency is the absence of pesticide and its byproducts in the air, soil, water, and the bodies of community members.

But the study clearly showed residues and byproducts in the air, soil, and in the blood of almost a third of the study subjects in Camocnaan. Until now despite the alleged accuracy of high tech aerial spraying method, eyewitness reports within Camocnaan still attest to their being periodically sprayed with fungicide. A proof that aerial spraying causes pesticides to drift outside the target area and contaminate the environment and people living close to plantations.

#### **LIE # 4**

...the connection of the health findings with pesticides is suspected but not confirmed.

...insufficient ground to stop aerial spraying and the researchers are being unreasonable.

#### **FACT**

Yes, the researchers state that they found possible pesticide-associated cases (thyroid disorder, neurodevelopmental delay, cutaneous lupus) but also state that at the moment, the connection with pesticides is suspected but not confirmed. The banana industry made it appear that this was the only finding of the study.

But what they DON'T mention are the other findings of the study that are clearly connected to aerial spraying:

- ★ that 80% of those interviewed in Camocnaan said that they were hit by aerial spraying 10-12 times a year and half of them would get sick because of the exposure;
- ★ that 1/3 of those tested in Camocnaan had detectable blood levels of ETU, a probable carcinogen that is a byproduct of aeriially sprayed fungicides;
- ★ that in one air sample--5 DAYS AFTER aerial spraying--the levels of ETU EXCEEDED the level at which the US Environmental Protection Agency would have insisted on a clean up;
- ★ that ALL the soil samples contained levels of aeriially sprayed chlorothalonil 5 DAYS AFTER the last spraying.

And what might those levels have been if they had been taken immediately after spraying? **Certainly much higher.**

#### **LIE # 5**

The DOH study released by Dr. Quijano is not accurate enough to be believed about. The agricultural sector has strong evidences that the report of Dr. Quijano is fabricated and fictitious.

#### **FACT**

Dr. Quijano is not part of the DOH commissioned study, which was released recently, and being questioned by PBGEA. DOH formed a research team composed of medical doctors belonging to different field of specializations such as toxicology, neurology, pediatrics, family medicine and psychiatry.

Dr. Quijano in a statement has said, "I was not involved in any way in the DOH study and the companies' reference to my previous findings on the Camocnaan situation is erroneous and misleading".

#### **LIE # 6**

Mr. Stephen Antig says that the aerial spray is not harmful because this is 85% water, 14% banana oil and only 1% of fungicide chemical.

#### **FACT**

Pure or concentrated pesticides are designed to be mixed with water at a certain ratio before they will be sprayed to kill pests. Companies will not waste their money if what they spray will not kill the pests in their plantations. Thus, the mixture's intent is really to kill pests. So it is still very much harmful to whoever or whatever get exposed to it.