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# **Script**

# Has The Government Actualized The Organic Farming Policies To Maintain Soil Fertility?

Most of the agricultural land in Indonesia is in critical state due to pollution from industrial waste. Chemical fertilizers are also used and thereby making soil nutrient decreases.

Agricultural land that has been entered in a critical condition has reached 66% of the approximately 7 million of agricultural land in Indonesia. If this is allowed, land productivity will continue to decline and eventually the land itself will die.

Similar conditions happened in Jombang, Related to agricultural land, which largely suffered damage as a result of the application of an non-organic farming system that was not environmentally friendly.

This was revealed by Hadi Purwantoro, Chairman of the Agriculture Department in Jombang district. According to him, the setbacks and the degradation of soil fertility occurs not only in Jombang district but also in the other districts. This condition occurs because the soil is too saturated by the use of chemical fertilizers.

#### Insert 1:

"The deterioration of soil fertility indeed almost happened everywhere, not only in Jombang district but also in other districts. The degradation of fertility was due to the saturated use of chemical fertilizers for a very long time. The green revolution in Indonesia began around the 1970's and the use of chemical fertilizers continued. The amount did not decrease, it even increased eventually making the soil saturated with chemicals. In the future, there is a need to refund the soil fertility or improve the soil structure by going back to nature or using organic fertilizer".

He said that currently the agriculture department has a laboratory of soil to see the level of organic material in the soil. They analyze a sample of soil at the each district level.

#### Insert 2:

"Since 2007, we are working with soil in the laboratory, the agriculture department is aiming to look at the level of organic material in the soils. Every year the agricultural laboratories analyze the soil samples sent by agricultural officials at the sub district level. Almost every year at least 500 points are analyzed. In 2007-2008, organic matter in the soil of Jombang district averaged less than 2%, whereas the need for a plant to grow is least 3% to 5%. The optimal is 5%. Almost all the results that we analyzed was below 2%".

He said the chemical fertilizers that are added to soils can be toxic and that the plants in it cannot grow optimally.

## Insert 3:

"The chemical fertilizers eventually saturated the soil. For examples, for our area, fertilizers that are given to soils just cannot be utilized, they can even be toxic. The problems about the reaction of plants, I don't understand but clearly the soil becomes unhospitable and prevent the effort of the plants to grow optimally ".

According to Hadi, other things that also reduce the soil fertility is the habit of farmers who do not want to leave hay or residue of post-harvest crop on their agriculture lands.

## Insert 4:

"Including the reduction of soil fertility, this habit of farmers (after harvest of rice, farmers usually bring the hay home even though the hay should stay in the fields to restore the organic matter so the rest of the plant (while it decompose)) should stop so the hay would contribute organic material to the soils in the fields".

Furthermore, Hadi delivered the agriculture department's vision in Jombang. Currently, the department is working toward a prosperous farming policy through sustainable agriculture. He added that the agriculture department has provided the means and knowledge about organic farming.

# Insert 5:

"Currently, our vision is towards the prosperity of farmers through sustainable agriculture. Past program that we have implemented, namely the return or use of organic material in the soils have been successful so we proceed. We expect the farmers are willing and able to make their own fertilizer, organic fertilizers from residue of plant as well as manure of livestock. In addition, the government has been providing assistance to make organic fertilizer. The tools for organic fertilizer breaker (APO) have been given to least there 272 units in Jombang. It could be even more than that. We

also train the farmers to make MOL (local micro-organisms). We teach the farmers to make solid organic fertilizers and liquid organic fertilizer. We teach them that all organic fertilizer and organic materials are useful to improve the soil fertility".

Different statements were submitted by Muhammad Subhan - chairman of LPPNU (Agricultural Development Organisation of Nahdlatul Ulama) in Jombang. According to him, the government's role in encouraging and developing the organic farming is still normative and not in accordance with the needs and expectations of farmers.

## Insert 6:

"Normatively, they encourage but in fact, there is also a lot of talk over there and the role of government is not in the most tangible form. It is not just what farmers most felt, they not only need to be given things and then this is finished... The most important is when they have a problem, they will ask (for help) to whom... (That's) the most important. Because then, at least, when the farmers are in need of a friend to think, a friend to solve... That role is still perceived by farmers for having very little to do with the government while the farmer's knowledge about organic farming that is still in early stage and is still in need of assistance and of being nurtured."

According to Subhan, the problem of degradation in agricultural lands is caused by irrigation from polluted sources of water from factory waste. Moreover, the processing of agricultural lands with a non-organic systems or with chemicals which is undertaken by most farmers also contributed to the occurrence of damages in agricultural lands.

## Insert 7:

"(Degradation) is something unavoidable and beyond the ability of farmers because of the irrigation system which is already polluted by factory waste. So it's this thing that is affecting and helped accelerate soils damage. If already the water is polluted, irrigation polluted coupled with farmer's practices (for most: minimal knowledge, minimal guidance). Most of them get the knowledge from hereditary. (I mean by) hereditary not from ancestors that used to be but from a generation in 1970s that was already introduced to chemical farming system. So they just know: the important thing is adding a lot of chemical fertilizers so their plants will be more fertile. They don't realize that, in fact, the chemical fertilizers will have an impact and damage the soils".

Furthermore, he added, the soil damage happen because of the use of chemical fertilizers and pesticides made by factory. It will ultimately have an impact on the decline and on the result of agricultural production.

#### Insert 8:

"Currently, there are still quite a lot of farmers who apply practices like that so they just know that with the use of a lot of chemical fertilizers, the plants and production will increase. The uses of pesticides are good. The factory will tell a version that you could

maintain a high productivity even though it all unwittingly have an impact on the environment and then in the end an impact on soils. Of the soil damage, the farmers are also not aware of the damages it has and of the impact on the decline in production. It does not actually increase but declines while stating that by using it, the production will increase".

Therefore, Mr. Subhan hopes that the government will be more active in doing awareness campaign to farmers and will support production facilities for the application of organic farming systems.

## Insert 9:

"The government should be more effective to provide awareness to farmers. Besides providing awareness, it should also supports how the farmers could apply methods of organic farming, including production facilities for organic farming. It should strengthen again the roles of farmers, so that group later will spearhead campaigns and help the government raising awareness. (It's time to) switch back to farmers or at least, slowly, (to give more space) to farmer's wisdom in the management of the agricultural lands".

Organic farming applied by farmers will greatly influence the level of soil fertility. The more farmers are using organic materials in managing the fields, the more improved the soil's health will be and vice versa. If more farmers continue to use chemicals in their agriculture, it will increasingly damage and pollute our soils and our ecosystems.

Then, will the programs and policies of the government develop to include organic farming and maintain soil fertility in agricultural lands?

This feature is presented by the Community Radio Network for Democracy (JRKDem), in cooperation with the World Association of Community Broadcasters (AMARC) and the FAO. I'm Noor Chasanah conveying to you.

"This segment is part of an audio series related to the International Year of Soils. It has been produced with the support of the World Association of Community Broadcasters, in collaboration with the Food and Agriculture Organization of the United Nations, celebrating its 70th anniversary in 2015."