

“Communicating Development”
An international audio series of AMARC
by JRKDem



Mitigasi dan Adaptasi terhadap Dampak Perubahan Iklim di sektor pertanian dan wilayah pesisir (Mitigation and Adaptation to Climate Change Impacts in the agricultural sector and coastal areas)

Please listen to (this program part of) “Communicating Development” an international audio series of AMARC.

Global warming and climate change have bad impacts on human survival throughout the world including Indonesia. The UN Food and Agriculture Organization (FAO) stated that climate change caused by the global warming could lower food production and cause starvation in all parts of the world. As a result, global warming can also decrease agricultural land area and increase the range of pests and diseases.

To find out more about the impacts and efforts of climate change adaptation in the agricultural sector and coastal areas, let us listen to our interview with Mr. Kustiwa Adinata, Secretary General of IPPHTI (Ikatan Petani Pengendalian Hama Terpadu Indonesia/ Indonesian Farmers Association of Integrated Pest Management). Happy listening.

"My name is Kustiwa Adinata from [Ikatan Petani Pengendalian Hama Terpadu Indonesia](#) (Indonesian Farmers Association of Integrated Pest Management) or IPPHTI."

Mr. Kustiwa, could you briefly explain the profil of IPPHTI and what it is focussed on?

"IPPHTI was founded and declared by 541 participants consisting of the alumnae of the field school of the integrated pest management in Jogja on July 20, 1999. At first, it consisted of 11 provinces and now it is scattered in 16 provinces consisting of 138 districts. IPPHTI members are farmers of the Alumnae of PHT or carrying out the ecological agriculture. The focus is realizing a farming that is just and sustainable and it is one of thing to be achieved through the defense of the rights of farmers to food, land rights, the rights for fair information and so on."

What is your position in IPPHTI right now, Mr. Kustiwa?

"I just finished doing a national work conference on the 29th of February and reaffirmation of the organization as a National General Secretary; meanwhile I am a farmer, I have a group and farmland in Pangalengan, Bandung, West Java."

Before talking about agriculture, could you talk a little bit about climate change?

"In our understanding and experience in the field, currently people have felt the impacts of disasters, one of (many) examples are flood. There are two types of flood, tidal flood and rainwater flood. One concrete example is in Pangandaran and Cilacap. More than 3000 hectares are routinely flooded every year. The second is drought, a drought that we can feel in Java, Sumatra, and it occurs more often in NTT (East Nusa Tenggara) or Mount Kidul Yogyakarta. It is very detrimental to all the production and harvest processes. Then, the next disaster is tornado which not only destroys buildings or trees but also, the plants that are about to be harvested fall down. Then landslides in some assisted areas befall buildings, homes, and also agricultural land although the impacts of agricultural products resulted of landslides is not too big but the effect of the loss of material is high enough. Those are the examples from the field of the impacts due to climate change. Well, globally, we all know that the temperature rises, sea level rises, sea

surface temperature rises. The weather is unpredictable, the rainy season comes uncertainly and is difficult to predict. In the field level, pests are associated with plants and humans but based on our analysis of plants, there are many new pests and they are difficult to predict. Explosion of pests occurs suddenly. Again, those are examples from the field of the impacts caused by climate change."

In the level of the community itself, who are the most vulnerable or most felt the impact of the climate change?

"From our side, from farmer organizations, it is the fishermen or people living on the coast who actually feel most of the impacts, because when there is a problem or a disaster occurs unexpectedly, such as rainwater flood or tidal flood, it has significant impacts. If it occurs far from the coastal areas, it can last for a month, half a month or a month and a half, but if it occurs close to the coastal areas it can last 4 to 5 months. There is a term called 'begu' it is water flow coming into the paddy fields but it cannot get out if there is no push from fresh water during the rains and it occurs during the dry season. Then in terms of access to aid or any sort including coastal infrastructure, it is much more vulnerable. (There is) big potential for tornado."

What activities have you already carried out with IPPHTI in your efforts against the impacts of climate change?

"Our focus, our goal is... we have patterns or programs that are relevant to the target groups who are the most vulnerable and the poor. For flood, for example, we do two things; mitigation and adaptation, for example, controlling/levee, planting of mangrove so that when the tide comes it will not run too hard and salt levels is not going too high into the rice fields so the plants will not die. Attempts at adaptation level, for example, now we are developing floating rice so when the flood comes it will follow the height level of the flood, so when the flood is at 50 cm it goes down but if the flood is at 3 meters it will rise. Then for the tidal flood, because the land is often affected by the tide, automatically the salt content becomes high and our effort is developing rice seeds that are resistant to salinity. We call it 'Tadas' that is resistant against saltwater. Then technologically we do efforts adjusting with rainfall, cropping patterns. It is not conventional, but adapted to the climate, and of the improvement of their skills, they have training with a variety of technologies relevant to the issues faced. Then for drought for example the most important is that the timing must be right in reading when to begin planting and we have to change the pattern of seedlings. Usually they sow when the rain came. Now we can sow in the yard only. Because with the SRI method, we do not need a vast land. Using trays or a simple tool behind our houses, it is enough for one hectare sowing. Then for the efforts made with regard to other drought, it is a combination of vegetables and other plants particularly because the use of water is less than that of paddy rice. If we promote the seeds that are resistant to drought as well as promoting rice relevant to the issue of climate change, the cropping patterns will lower in water usage."

Concerning the efforts that have been made to mitigate the climate change impacts, what are the responses of the community itself?

"If we talk about theory of climate change to them, it is a bit difficult to understand. But we use a very simple pattern that can be understood and accepted by them. Because when speaking globally for example about mitigation of climate change, we say to them, we plant the mangroves. When we said to women and men "let us plant the mangroves because it's good for absorbing CO2 so that the temperature of the earth is not higher", they don't care and actually they do not respond but when we ask them to plant the mangroves, (it works). We plant the mangroves and look after them, they can use the fruits to make cakes; use the leaves to feed the animal, when they blossom, they can have bees, and then underneath we sow fish so that there is life under the mangrove roots, so they give high responses for it. The point is that there must be economic values for them. But another effort is that to provide paddy seeds for saltwater, rice floating for flood management, drought resistant seeds... that gets very positive responses because it is concretely felt."

If we talk about obstacles or barriers that you and IPPHTI faced while doing mitigation and adaptation; what is it?

"For the effort of mitigation, especially mangrove planting is a bit constrained because it is near the ocean so the waves often come unexpectedly and destroy. Then a tornado hit the plants so that many mangroves are dead. Secondly, the barrier of mitigation is giving awareness comprehensively not only to the target group because in that village there are other communities outside the direct beneficiary groups. It is not easy to provide an awareness process in order to participate and look after the plants. Moreover, people outside of the village also could be the barrier. For example, we plant mangroves by the beach then they park their boat or look for crabs but they do not care... Then when the plants have grown bigger, the problem we have is wood theft and it is often done by the people outside the village so there must be a solution from the government to make regulations to help protect our efforts. As for adaptation and other activities, actually there are not significant constraints. The problem is about floating paddy, for example, it is still too expensive because we have to prepare everything, but in fact there is no government policy that is concerned to help us."

So far, what efforts are already made to cope with the obstacles?

"So far, first, we create, arrange and encourage village regulation to protect the plants, so we'd give the process of awareness not a punishment. Second, campaign continuously involving elementary school children, junior high school, high school and other communities at the time of planting so that they all know that it's not a project submissions but it is an initiative of the local community. Then next we ask the County Government in particular mainly the forestry ministry and related institutions in order to reduce the problems in above."

What are the response and role of the Government both at local level and at the national level to overcome that effort?

"Their responses are quite good and there are no negative responses because they feel assisted but in fact until now still nothing has been concrete. The concrete support is in the form of being entered into the Regional Budgets, helping the budget for the implementation of the project. We have duplicated in some places. This time we're actually helping to make a RAD (regional action plans), in the center there is RANPI (national climate change action plan) well in regions there are still many who do not yet have RADPI (rencana aksi daerah perubahan iklim / regional climate change action plan); there are many regions that have not had RADPI because many regencies do not know how; meanwhile IPPHTI has already had some experience doing it in some other places so they just need to replicate the experiences and we once made cooperation with several universities such as IPB, ITB to make the efforts of adaptation and mitigation of climate change more effective."

In the future, what is the homework or what is still expected from you and IPPHTI in terms of adaptation efforts for climate change?

"First, of course, aid and awareness of the government through policies that favour towards these issues, the action by issuing policies that take the sides of the poor communities and specifically related to climate change through policies, either in the budget or the rules/regulations to them rather than to IPPHTI. The second one, by multiplying and replicating the programs like this elsewhere and it can be obtained not only from the Government. It could be from a private, personal or anyone. And then, third, hope for the media or public figures etc. continuous participation and campaign for things like this and for them to make positive initiatives to get the award."

What about the participation of women farmers and women in coastal areas? Are they also getting involved in the process of adaptation to climate change?

"Not only because of the demand or trend issue about gender, what we notice about women is... because women also become victims of climate change, for example when the drought

comes, the mothers (women) should provide clean water for washing, for cooking, for shower etc. then when farmers incomes get low due to harvest failure women are the victims because they have to work to meet the needs of their household. Therefore the efforts we are doing now are how women have access to local resources and the income that can manage by themselves."

What message do you want to convey to the rest of the community so that the community is aware and concerned with the efforts to minimise the impacts of climate change?

"My first message on this issue is need not be feared because it has happened and should not worry because, realised or not, it will happen gradually. But the important thing is to be prepared, and how to set it up? First is changing the way of farmers in particular change into the right ways, burning straw for example, burning the straw besides disrupting CO2 the most important it is the actual source of the fertilizer, the source of health and fertility of the soil. And there are a lot of efforts to obtain information related to the efforts of climate change. The farmers can share information and capabilities with other farmers who have already made efforts. Then hope from the Governments and other most important stakeholders is encouraging to issues several policies followed by the commitments listed in the regional budget of revenue and spending to support the pilot activities or lesson to learn existing modified by the Government. And for the companies, they could contribute in the form of funding, for example by providing CSR relevant to community needs and it can be related directly or indirectly in the long term they can give positive contribution to the environment, to the economic, social, cultural improvement, etc. So far, in social aspect that many farmers' communities go to the cities because they do not feel satisfied with the source of life available in their village."

Spot JRKDem

Listeners, we have heard the information and knowledge shared by Mr. Kustiwa Adinata, a farmer activist who concentrated on the issues of agriculture and climate change. Hopefully it will be useful for all of us.

Thank you very much for your attention. I'm Noor Chasanah who guides this interview, will withdrew from your listening room, greetings democracy.

This event is presented by the Community Radio Network for Democracy (JRKDem) in cooperation with AMARC and FAO

"This segment is part of an audio series highlighting the importance of Communication as a major tool for Development. It has been produced with the support of the World Association of Community Broadcasters and the Food and Agriculture Organization of the United Nations."