Climate adaptation versus mitigation

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Indonesia seems to be at the crossroads of the climate change issue. On the one hand, we have to stand together with the international community to push the mitigation agenda on decreasing carbon emission levels.

This nation, on the other hand, is already facing real problems with regard to climate alteration, especially in the agricultural sector, and it needs prompt adaptation action (see Teddy Lesmana, The Jakarta Post, July 26). Which one has to be prioritized?

Extreme weather for the last couple of months has adversely affected agriculture. The prolonged rainy season devastated many agricultural commodities, such as vegetables and rice, in many regions.

The price of those commodities, such as chili, has increased (The Post, July 18). The weather anomaly that has been happening is hypothesized to be linked with the very real and growing threat of climate change.

However, adaptation strategies to deal with the problem are still unclear (Kompas, July 19).

Climate pattern alteration has negative effects on farmers. Their list of questions when they begin the planting season is multiplying. They not only wonder about the selling price when they harvest their crops, but also start worrying about rain patterns or if the dry season will come early.

Sadly, these issues are being confronted without proper preparation. In the end, agriculture becomes a high-risk business.

Climate anomalies, in fact, are not only due to climate change linked to global warming. Indonesia experiences a routine incidence of climate anomalies due to natural processes, such as El Niño.

However, adaptation capacity to deal with this very natural event is still underdeveloped. In reality, the change in climate patterns directly affects our food security.

From another side, the willingness to become a main actor in the climate change mitigation agenda makes this country actively involved in the international diplomacy on the issue.

Recently, Indonesia signed a forestry partnership with Norway. This US$1 billion cooperation is under the reduction of emissions from deforestation and forest degradation (REDD) scheme umbrella.

The cooperation, in which one of the agreements is a two-year suspension on natural forest and peat land conversions, is in fact still opposed by several sectors, such as palm oil plantation companies, forest companies and the mining industry.

So, how should we view a climate change mitigation scheme like this?
Indonesia is frequently just following in any direction the wind blows and is trapped by current issues. The opportunities to get fresh funds from the climate change mitigation scheme make us excited. There is absolutely nothing wrong with this.

Moreover, this scheme could be utilized as part of a solution to the forestry problems of this country.

However, sometimes we forget other important things. Adaptation strategies to climate change impacts, such as in the agricultural sector, are not being developed. Yet agriculture has indeed significant impact on our nation’s life.

David Lobell et al (2008), in their projection on food security and climate change by 2030 published in Science Vol. 319, said there were 12 regions that had the potential to suffer food insecurity. Southeast Asia is one of the regions.

However, our position is much better than South Asia and Southern Africa, which will likely suffer most from food insecurity as an impact of climate change if sufficient adaptation measures are not taken.

However, there are several points worth highlighting. These 12 “hunger hotspots” have similar fundamental characteristics.

First, these regions are relatively unaware of the possibilities of climate change impacts on food security. Consequently, needed policies and actions are not taken.

Second, there is a lack of comprehensive knowledge and understanding on the responses of food crops to climate alteration. Lack of awareness and understanding, in addition to a lack of funds and time investment to deal with climate change impacts, result in no appropriate policies being delivered.

Our current situation is like a frog swimming in warm water. If the water is brought up to the boil, the frog will not realize it is being boiled until it is too late.

Our duties are not only stopping the water becoming hotter, but also saving the dying frog. The question is: Are we able to formulate appropriate and necessary climate change adaptation and mitigation programs?

Mitigation programs are necessary to avoid more complex problems in the future. A mitigation scheme such as REDD is indeed important to help us save our forest environment. The sustainability of forest ecosystems will directly affect the agricultural sector by, for example, minimizing the risk of floods.

Protected forest biodiversity could also become a source of plant genetic engineering.

Climate alteration is, in reality, difficult to control. What we can do is improve adaptation policies and capacities. However, although it is difficult to control, the pattern of climate alteration could be studied.

Therefore, this is the time to formulate policies based on accurate data. Results from research conducted by government bodies and universities have to be utilized well.

The knowledge of climate patterns, plant improvements and adaptive planting systems could become alternative solutions and farmers have to be well informed. The government also needs to examine the
possibility of providing social security systems for agriculture. The improvement of agriculture infrastructures, especially water irrigation, must still be prioritized.

Climate mitigation and adaptation are two things that should be simultaneously developed.

Inappropriate and short-term policies will cost us more in the future.

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