

## PHILIPPINE AGRICULTURE 2020 AND THE ENVIRONMENT

### OPEN FORUM

**Dr. LS Sebastian:** I commend the writing group and appreciate its adopting the agro-ecological system as a framework in the PA 2020. I also agree with Dr. Padolina that when we talk about sustainable development and sustainable agriculture, most of it is just a philosophy rather than a well-defined framework and this is where I would like to make my comment. With PA 2020, I'm just wondering if we can make that framework more attainable in 2020. Can we set some parameters or measurable targets by the year 2020? Our Philippine agriculture is really moving towards a sustainable agro-ecological framework. For example, can we set measures on carbon emission etc. How can we translate that in our Philippine agriculture so that in 2020, the country can be compliant with the Kyoto Protocol. I think this is the definition of agro-ecological framework and sustainable agriculture is a continuing struggle for us and making it work on the ground is really very difficult. But I think, with the 50 academicians and national scientists, you have experiences of more than 30 years in research and development, you can probably give us some guidance in the future. I hope this will not be again another assignment for us the next generation to work on. Maybe you can give us some ideas on what should it be to say we are indeed following that agro-ecological framework. What do we have to attain, what measures? Not just practices, because we have so many practices but I do not know whether such practices are contributing to sustainable agriculture. The use of organic fertilizers, for example may be attainable in the short term, but I do not know if it is sustainable in 10 years or 30 years of just organic agriculture.

What are the sub-parameters for measures that we have to attain? I think, we cannot attain these overnight. How many of our farmers should be moving into organic agriculture and in what way? By 2020 what level should we be?

**Academician AC. Alcala:** Let me give specific examples and observations on coastal areas. The plan calls for more protected areas. You can quantify that. For example at this time, we have 20 million ha of coral reefs. Of

these only 22,000 sq. km. constitute the protected areas, or about 10%. We can put indicators, targets for these reefs and then quantify the amount of fish that can be generated by protected areas. This can be done because we have preliminary empirical data to base these projections on.

**Dr. A. Revilla:** About benchmarks, when we say sustainable, you have to have benchmarks. At the local level, we now have a set of C & I— Criteria and Indicators for sustainability. The present set has been approved by a UN body, the International Tropical Timber Organization (ITTO). But this is for the forest management system, sustainable forest management. The project that we are presently conducting is going to expand, test, expand and revise if necessary the set of criteria and indicators for sustainability at the SDU level. I think one of the best indicators could be water quality. You can drive along the rough roads of Surigao del Sur, for example, and see clear water despite signs of environmental degradation. Just after a heavy rain, you see some kind of turbidity, slightly different from one river to another. Those are the areas whose upper watersheds have licenses that have been cancelled. Nobody is protecting the area anymore. So we look for water quality as good indicator. I do not have the list of indicators here which is a long one but I will provide with you a copy if you want.

**Academician. EQ Javier:** In fact that is one of the innovations of this framework. Because in the past planning exercises, we have been looking only strictly at the agricultural systems and we usually know what we have in mind. As indicators of progress towards our objectives, since this framework encompasses ecosystem services, it is incumbent if I ask to indicate or define what those measures are and this is the reason why, the clusters are having difficulty because we have not been used to looking at ecosystem services. In the first place, many of us did not even know what it means by that, much less measure. So that's part of the work in progress. We have to agree on those kinds of indicators and be able to measure them. Jun Revilla said water quality at the mouths of major rivers. Yes, those are very good measures of how much soil erosion is happening in the uplands. Using satellite pictures of the forest cover of the country, we have now some indications that in fact maybe our programs are succeeding after all because the cover of the Philippines is improving from the latest satellite picture. This is a part of the continuing challenge for the clusters and the sectors to agree on how do we define ecological services and how we measure them. Thank you.

**Dr. Leo Gonzales:** I am the designated chair of the main report writing panel. My role is to be quiet and get the inputs but I think cannot help but to

speaking now. You see for the first time, we're looking at a holistic approach to sustainable development. This session takes into account the environmental component but it is just one of those that we talk about in the national development goals. We are looking at the interaction effects of the set objectives of 2020 and, therefore, at the end of the day, we would like to look at a logical framework by looking at these things.

But our bread and butter will still be the industry clusters, because that's where the action is taking place. This is also why Dr. Revilla, a member of the writing panel wanted it to be implementable at the community level. Now if you look at the three pillars by which we conceived PA 2020, interaction effects are evident. You cannot isolate just sustaining the environment per se because there are trade-offs with other objectives of food security, global competitiveness and the other major goals of the plan. It would be nice to local trees, forest and air but if the business side of agriculture is not taken care of, that is not sustainable development. We took this into consideration in trying to operationalize for the first time the MA concept or ecosystem medium assessment goal, and that is where we are today. Again as Dr. Javier puts it — this is work in progress, and we need all the help we can get. But the challenge is really to develop the objective verifiable indicators that will indicate the progress at the cluster level. At the cluster level, we estimate that the work is only 60% finished, so we have a lot things to do here and the questions like those posed by Dr. Sebastian are very good input to the planning process. Thank you.

