

Information and Communications Technology for Philippine Agriculture

ICT THE ENABLER

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One of the things mentioned by the first panelist, Dr. Ponce, is to put more substance, more elaboration in PA 2020. As he explained, ICT is a facilitator. I would like to elaborate on this. I consider ICT as an enabler of many things. Examples of this would include the successful integration of ICT with business processes, decision making, knowledge management, etc. My position is that we can speed things up if we use ICT more effectively. For this afternoon, I would like to focus on how we do these things because different people have different ways of looking at things they want to do and different ways of implementing what they want to do.

Most people, including myself, are already happy with the computer and access to the Internet. If this is all what we will do, the digital divide will continue to exist between us and many of the farmers and fishermen as well as the knowledge workers that provide assistance to this very big segment of our society. Therefore, I propose that we dichotomize the way we look at ICT. One aspect has to do with infrastructure. As an analogy, for example, we ask: who worries about building roads, bridges, farm roads, etc.? Not us! There are other people, other groups who worry about these infrastructures. Therefore, one of my recommendations is, when it comes to setting up ICT infrastructure, let us outsource it to the ICT industry sector so that we can worry about the second aspect – which is, mainly, the applications of ICT. To repeat, I recommend that we dichotomize the way we develop ICT as an enabler of PA 2020 by looking at, on one hand, infrastructure, and on the other hand, applications. We can, therefore, work at the same time — different people working on different things.

Let me explain a bit further what I mean by ICT infrastructure. Infrastructure, just like any kind of infrastructure, is shared by many. It is meant to be developed for all. For example, in our previous analogy, our

roads, our transportation systems are developed for all, not just for agriculture, not just for trade. In the ICT sector, we also need to take a look at infrastructure as infrastructure for all. Agriculture will be one of the many users of this infrastructure in our country.

In the development of this infrastructure we recognize that there is a hierarchy of components. The hard infrastructure is telecommunications. These are installed by the telecommunications companies. On top of this are value-added service providers, and my own field of work belongs to that category; this group of infrastructure builders can be considered soft infrastructure builders. They provide the value-added services. We ought to explain in our plan what the role the value added service providers can play in the acceleration of the development of PA 2020. ICT allows us be flexible and responsive to the needs that change over time.

We all know that PA 2020 will certainly be a dynamic plan. The present version is the way we see things today; it will be different next year, 5 years from now, 10 years from now, and so on. What will be the difference? To me the two factors that will make it different would be the society or the communities that are impacted by this plan, on one hand; on the other hand, we have the tools or the technologies that can provide more effective means to implement what we want to happen. So, we must have flexibility in our plans. To give you an example, there are many people who think that using cell phones will already empower our farmers and fishermen. Of course, it will enable them to communicate with each other? But without other components, such as what they can get from information systems and knowledge systems, they will not be exchanging information towards being more productive, towards being better planners.

Now let me focus more on what, in fact, ICT can do for PA 2020. I have three categories: The first one is providing access to ICT and ICT-enabled applications. There are things we can already do today provided that we have the means to do them. We don't have to wait for the DA, UPLB, or some other institutions, to give information or to broadcast that information to us. Instead, we will be able to access and choose what we need, what we want; these applications are available from many sources. Thus, access is very important and this can be used right away. The only thing we have to do is to teach people on how to access information this makes them ICT literate. The recently held World Summit on Information Systems considers being ICT literate as more important than being information literate. This is the key idea to be able to make use of the information that is available and that can be accessed.

I believe that the next category should address is the empowerment of knowledge workers. Dr. Ponce already indicated this. It is not enough to access information as an individual, do things on your own. We have to work as groups, as teams, as communities, and therefore we must have the means to communicate and we must communicate as informed participants in any group activity. Thus, the empowerment of DA workers is important if we are to help the millions of farmers and fishermen in our country. They must be empowered to do things on their own without having to wait for instructions from above. This empowerment will come from their knowledge and from their being able to cooperate and help each other in doing their work for and with their beneficiaries.

The third category that can be achieved with ICT is being able to modernize existing enterprises and organizations, not just government, not just the private sector, but educational institutions and other entities that are also stakeholders in the agri-business sector.

The above three things are what I think would give us a handle on how to harness ICT in order to improve the way we plan and the way we do things.

One of the things being undertaken by the ICT industry sector is the Community e-Center Program. This multi-sector program is an initiative of the government, the private sector and the academic sector – the idea started during the time of Information Technology and E-Commerce Council of which I was a member then. The main idea in this program is to have nationwide infrastructure which has three components. The first component is to put up Community E-Centers in the barangays. The second is telecommunications that will provide broadband connections to these barangay community e-centers. Anywhere in the Philippines, you can do this already; it is just a question of being able to sustain it or make it viable as a business entity. Let me repeat, you can do this – set up a community e-centers with broadband connectivity — for any barangay. However, to make this worthwhile, you must develop applications and services that can be accessed by these barangays. This is the third component. Many people in the barangays will be willing to pay a small amount, for a service such as voice over Internet protocol (VOIP); if we could lower the cost of international calls to one-tenth of what it costs today, I believe people will be willing to pay for such calls. In my opinion VOIP is an important service that must be available at a community e-center. Some other important services are access to applications provided by education, by health, by the agricultural sector. These applications need to be developed at the national level. Then

we need to teach people in the communities how to make use of these accessible resources. This scheme of implementation will make the Community E-Center Program viable and sustainable.

Let me end with what I think we can do by ourselves with the PA 2020. We have statistical data bases and the information services that we have been discussing in this forum. I think that we need to provide technical and financial assistance, if necessary, to local government and community organizations on how they can make use of these resources through appropriate ICT applications; we need to help acquire the tools that will enable them to do these things at the a community level. For example, nobody can afford to buy licensed Microsoft Word software because it is very expensive for the lower level organizations. Therefore, what we need to do is to develop an equivalent software that is almost free, if not totally free.

This is my last point: We must outsource the development of the ICT infrastructures to people outside of PA 2020. However, we must influence the way how these infrastructures are to be developed. As a document, I believe that PA 2020, when shared with other sectors, will influence what these sectors will have to do.

Thank you.