DÉBAT

Jean-Michel Severino, président d'Investisseurs & Partenaires

I understand that you are cautious but rather positive, if I can summarize the feeling. Let us turn to the audience to see if there are any questions, comments.

Philippe Chalmin, fondateur du Cercle Cyclope, professeur émérite à Paris-Dauphine

May I say I am a bit surprised because listening to you I had the impression that the food problem was just a technological one and with some money invested in the private sector there would not be any more food problems. You did not talk about the individual called the farmer or public policies, other than a bit our friend from Nigeria. May I remind you that in the 1930s Europe was a net food importer, that in the 1950s PL 480 was created in the United States to send food aid, especially grains, to India. That is the very India that is now threatening the food markets with an embargo because they are an exporter of rice, sugar and wheat. Where are the successes of Europe over India? Perhaps in technologies but at first it was public policies, the Common Agricultural Policy in Europe and what is not studied enough is Indian agricultural policy with a guarantee of remunerative prices for farmers. Do you not think that this is the thing that is important? It is true that Africa is dependent and is importing, and Nigeria and Egypt are the world's biggest wheat importers. In the fifties, Nigeria was a net food exporter, you were the biggest exporter of palm oils, if I remember correctly. Do you not think that the first problem is one of public policy, agricultural policies? Unfortunately, farmers in some of your countries do not vote or their political power is fairly limited.

Jean-Michel Severino

That is well understood, the rebellion of public policy. I may also ask Mrs. Kwon to intervene because we do not have a lot of time left and you will then have a chance to conclude.

Song-Nim Kwon, directeur exécutif de la the World Policy Conference

First, thank you very much for sharing your extraordinary activities with us. After Mr. Chalmin's question I certainly feel my question is not very important. Personally, I am convinced that the technology is of the very important solutions to food insecurity issues and I have a question for Mr. Park. I am very fascinated by this smart farm technology but as someone who really likes to eat very good food my concern is whether the products from a smart farm can contain the same nutritional quality or taste.

Jean-Michel Severino

One last question.

Marie-Roger Biloa, présidente de The Africa International Media Group et MRB Productions

I was surprised to hear that genetically modified, GMOs, have been normalized because they appear to be safe. Is there something official about that now? The gentleman here from the world organization could maybe confirm that it has not really been approved, so can you provide some clarity on that issue.

Jean-Michel Severino

Thank you very much, so GMOs. Maybe two minutes each will stick to our timeframe.

Park Yong-joo, directeur du marketing et responsable des opérations commerciales monde chez PlanTFarm

I think the methods we used in indoor vertical farming or controlled environment agriculture is different from GMO. We do fabricate any of the crops, the only thing we do is we basically use water and nutrients. We do not use soil and soil is something that can hold crops but we use another methodology to hold them and then basically feed them nutrients. When I say that theoretically modifying the taste or ingredients it is mainly done by controlling the climate. For example, the Korean strawberry is very sweet, twice as sweet as a US strawberry. They grow particularly in traditional greenhouses and they are sweet not because they are modified but because of the temperature difference between the day and night. This is the technique we use when I say controlling the climate. If you want to make strawberries sweeter then you should control the difference in the temperatures. Some crops with high levels of functional ingredients are also produced by changing the lighting and the temperature, we do not do any other modifications and normally the crops we produce have the same nutrients as those produce by traditional farming.

Sam Okwulehie, PDG de LATC

First, on the question from Madame Biloa, I think that science has helped to demystify a lot of things and there is genetically modified food and today the improvement in seedlings or the make-up of food that creates better yields. For example, I own an agricultural business and we supply the supermarket chains in Nigeria and today through science and better seedlings, and in a 200 000-squaremeter greenhouse-controlled environment agriculture situation you can produce more food to do this than we could do before on 200 hectares of farmland. The important thing in all this is safety and health and how to prove that the seedlings we use to produce food today are safe. I think that the GMO issues is still out there, I do not know what the official policy is on them, but science has certainly helped to prove that were seen as taboo in the past are actually safe today.

With regards to the other question, yes, it starts with policy. It is very ironic, especially for us coming from Africa, many years ago Nigeria gave the first palm seedling or trees to Malaysia and today palm oil is being imported into Nigeria from Malaysia. It is a very sad situation but it started from public policy and governments realizing that there are big impacts from not doing anything and from doing something. Coupled with that is the fact that the private sector has started to see the economic benefits of ensuring resilience around supply chains. Today, you have a lot of flour mills in Africa starting to see that they have all the machinery and production lines but you need supply chain contributions from places like Ukraine, for example, to get the wheat that ensures the factories are running. The more the private sector starts to realize the impact of this then maybe it will force the hand of governments with regard to public policy. However, you are spot on, it is the truth.

Kamel Abdallah, directeur général de Canal Sugar

You have raised something very important. At Canal we work with 6 000 farmers and that will reach around 20 000 within another three years and you are right, they do all the work and

they get maybe 10 cents on the dollar. If there is food waste due to supply chain problems the farmers, who are mainly women not men, are the ones who suffer. When it comes to public policy people forget the Treaty of Rome and the EU at the beginning was probably purely an agricultural project. Farmers are suffering all over the world and one of the issues is the lack of development in the public policy and legislation formats. They frequently do not have access to legal papers for their land so they cannot get financing because the land is generally given or inherited or owned by several people, so they have to go to industry, the other parts of private sector who will charge them a lot for funding. There is the same thing on access to technology, seeds, etc. You are right that it is a shame that agriculture remains a relatively much smaller part of most country's GDPs than other sectors. You are also spot on, farmers are now educated people and sooner or later if they do not use their electoral vote they will vote in different ways and it could become a ticking bomb. I appreciated the question, which we did not address in our presentation because it was not part of our brief on the discussion but we need a quick update of public policy, environmental legislative changes that will cater to traditional farmers. What we do is mechanized farming is different but we will not be successful without working with the traditional farmers.

Jean-Michel Severino

I am not forgetting you, Mr. Cullen, because I am sure that as a senior FAO official you will be very happy to address the issue of public policy.

Máximo Torero Cullen, économiste en chef de l'Organisation pour l'alimentation et l'agriculture (FAO), sous-directeur général chargé du département du développement économique et social de la FAO

Sure, thank you so much. I referred to many instances related to policies, for example, repurposing agenda with linked policies, linked to the information of [inaudible] accounting, which will be more defined in [inaudible] the way we align policies. Also, when we talk about innovation and science, which is central, one of the elements we need to have clear is to have the data. Also, with institutions a good policy on innovation and science requires policies behind to set the map for various institutions in place, if not it would be very complex. Certainly, everything we have been talking about, at least everything I talked about is linked to the design of policies but we need to be careful not to repeat historic policies that could have worked in the past but will not necessarily work today. We are in a different environment and we have to be very careful not to create new distortions.

Second, I think it is important to correct some issues. Biofortification does not increase nutrition capacity, the only way you can do that in a crop is through biotechnology, which is not the same. The other element that was incorrect is that GMOs have not been generalized, they are managed and decided by each country and there is a lot of scientific evidence behind them, especially modern GMOs and gene editing in place. However, this is a decision by countries and they need the institutions and policies in place, so we need to be careful with that. Of course, GMOs are not in Europe and there are still discussions on gene editing. There is already a lot of evidence in place that we need to inform people about but we need to access all the different elements.

Finally, on controlled environments, which can be horizontal or vertical, horizontal ones have been cost-effective and the UAE is an extreme example because it is a very costly place to produce food, but they are profitable in China, Vietnam, and Singapore is very profitable. Vertical farms are also starting to be profitable in terms of controlled environments, with very good examples in China and Singapore and other parts of the world, so again it is another way to provide food for urban areas because it brings the production of vegetable and other high value commodities closer. That is not GMO or biotechnology, it is basically agriculture

with a high level of precision, managed properly with micronutrients given to the plants, with water and heat. Again, it is a technological innovation when you are the high-end of high-value commodities, which is starting to evolve rapidly and to give access to everyone, especially probably households.

Jean-Michel Severino

Thank you, Mr. Cullen. With these very interesting comments we are now at the end of this session. I would just like to add that I have now spent three decades of my professional life supporting governments or establishing public agricultural policies in developing countries, Asia, Africa, etc. Building on Philippe's comments, of course it is sobering to see that in many developing countries, not all of course, agriculture has a much lower share of budgets, investment and policy attention than it should if we want to address all the issues we have here. That is why I am particularly grateful to the WPC, Thierry and Mrs. Kwon for insisting on having this discussion on agriculture because it is not only about discussing the substance but also just per se because this discussion around it, whatever we say, shows the importance it has globally, an importance that is really underestimated by many policy players. Thank you very much for allowing us to have this type of discussion and maybe continuing if there is another discussion next year and trying to deepen even more some of these policy dimensions at the global as well as the national level and dig into this agenda.

I think you will have all recognized that we had a fantastic group to address these issues, on the screen and in the room, and that they have enlightened us with their visions on policies, private investments and initiatives, science that is opening new doors into our vision. Please applaud and thank them.