

## 「農業技術普及分野の社会人教育」

### “Innovative B.Sc. Agricultural Extension Program for Mid-career Extension Staff at University of Cape Coast, Ghana”

University of Cape Coast, Ghana

Professor S. Akuamoah-Boateng

Thank you, Prof. Matsumoto. Good afternoon. Distinguished ladies and gentlemen. I must say that I am very happy to be with you here to share our experience at the University of Cape Coast (UCC) with you with respect to our “Innovative Agricultural Extension Program for Mid-career Extension Staff.” Now before I start, I just want to express my sincere appreciation to Prof. Matsumoto and Prof. Takeya for their kind invitation.

#### **Introduction**

Nowadays, agricultural extension services have really tackled in try to more agriculture developments in most developing countries, including my country, Ghana. I realize there are whole lots of changes going on within the 21st century and this requires that if agriculture plays a major role in sustainable development of country, then agricultural services will have to be looked at critically.

Talking about agricultural services provision, you realize that, a key factor, the agricultural extension agent has a role to play. Without this, it will be very, very difficult to achieve something for development in the agricultural sector. But again, you realize that within the 21st century there is a whole lot of changes taking place, and this extension agents are expected to be able to perform the roles that is expected of them. What means is that there has to be some kind of changes in the curriculum within the Universities in order to meet the need of the clientele. So now you realize that the kind of training the agricultural extension agents were formally getting is not the one that is appropriate for the 21st century. So then the need arises for us to look at innovative ways of training extension staff to make them do the work appropriately, make them meet the needs of the clientele on the market.

#### **Three main factors of the needs for the innovative Extension Education**

When we look at the needs for innovative B.Sc. Agricultural Extension Education, it should read Sub-Saharan African countries (SSA) on three main factors.

The first factor is “dynamic nature of the work environment of agricultural extension agent,” which is characterized by globalization, decentralization, privatization of agricultural extension services, downsizing of public sector support and so on. These characteristics have some kind of implication on the training of agricultural extension agents. We need to train an extension agent who will be able to give the farmers the requisite knowledge, skills and web notes that will help the farmers operate within the rapidly changing environment.

The second factor is “the characteristics of the extension agents.” The characteristics of extension agent, now if you look at Africa, we have approximately over 150,000 extension agents, but most of these extension agents have a low educational levels. This is actually hampering, serving as a challenge, a block between their interaction with the researchers and their interaction with the farmers as they are somewhere in between. So because of their low education levels, they are not able to incorporate participatory approaches in their extension delivery – all along it has been top down approach, but that has not work. The other of the day is to move from the bottom to the top, but because they have the low educational level, this approach to extension delivery is not being practiced.

The third factor leading for the need for this extension, the innovative agricultural extension program, is “the type of training received by the extension trainees.” Now most of these extension trainees receive skills that are irrelevant to their working environments, and what the situation demands. Those skills have little exposure to the human-side of agriculture, talking about sociology communication, because basically when you are talking about extension, it's a kind of interaction between one person and one part, and another person on the other. And it is more or less the human aspect, how you are able to understand him, and how the person is able to understand you, how you understand the culture, how the technology fits into that culture.

The important point is how we should promote that kind of relationship we want. That would be later development, but unfortunately we realize that the type of training agricultural extension trainees, which they have been receiving in the past and presently in some universities in Africa, does not give them those requisite skills by which they can operate efficiently within their society.

Those three factors, therefore, necessitate the need for a new type of training that would make the extension agent to make them more competent to be able to meet the needs of the clientele on the market.

### **The needs of the innovative B. Sc Agriculture Extension**

Now we realize that the extension agents are not performing appropriately. They need to be upgraded in certain skills. So the question we ask ourselves is what kind of training we need to give to the extension agents within the 21st century in order to make them very efficient when they move into the force of work. Of course, technical skills are very important among some factors that have been identified as very essential for the training of extension agents to make them proficient on the help. But, when we talk about technical skills, we should say that the extension agent needs the correct technical skills to be able to extend. Then he also, beyond the technical skills, with the extension agent, must be committed, must have ethics, and must have leadership potential to be able to mobilize the people and take them to where they want to go, which in the end is the development of the agricultural activities.

The extension agent in the 21st century, which would need some human-relation skills, would need to know how to communicate effectively with other agents. He would need to know the language of the people. He would need to be creative – looking at the

environment, what is it that I can put in place to make the whole situation create for the farmers to work effectively.

With the privatization-taking place within the environment, it requires that the agricultural extension agent after his graduation should be someone who has some kind of entrepreneurial skills, to be able to either join the public sector, or if in the absence of the public sector be able to establish himself in a particular enterprise and be able to move on. He also needs facilitation skills and organization skills. Extension education requires that the extension agent becomes someone who facilitates so that it becomes, more or less, a bottom up approach, not a top down – where he goes and says “this is it, take it”.

We're looking for an extension agent within the 21st century to someone who has the facilitation skills and who will also be able to apply participatory mode of extension rather than top up – work with people together to come up with strategies that would help them. And he has also the ability to be critical and system thinker. The whole pieces within the environment and within the economy operate as a whole. So he has to be able to understand how one sector relates with another and has to be able to put agriculture within that context. In that respect, you realize that the whole lot of skills that the current extension agent would have to have, and these were some of the problems that most African Universities are currently facing because they are producing graduates who do not have most of these skills. So these graduates are out on the form, and they are not able to perform their functions. Then, this brings me to the evolution of the UCC Program. Ghana was facing the same problem by producing graduates who were not meeting the needs of the clientele.

#### **The collaboration with the Sasakawa Africa Association etc.**

The SAFE initiative, the System for Sasakawa African Fund for Extension Education, was launched in 1992. It was a collaborative effort between the Sasakawa Africa Association, a non-government organization based in Tokyo, and the Winrock International Institution for Agricultural Development based in the U.S. This initiative was actually launched to help to correct some of the problems that had been identified. It has four major aims. The first one is to create opportunities for outstanding male and females in mid-career extension staff by providing them with the requisite training in the technical as human relation skills, so when they leave at graduation, they will be able to go and continue to play their roles very well on the field. The second point is to help reform agricultural extension curriculum in selected African countries. Thirdly, to develop agriculture extension leaders for extension organizations in Sub-Saharan Africa. And finally, to foster long-term institutional changes in African universities through the reform of the universities themselves. All these aims were aimed at solving the earlier problems that were mentioned. So that, graduates who would come out, would be very, very efficient. The key word here is collaborative effort, partnership between a developed country and a developing country in launching that program.

The Program in UCC, the extension curriculum reform program at UCC, started a year after SAFE Initiative was launched. And once again, I want to emphasize that it was a collaborative effort. It was a collaborative effort between the Ministry of Food

and Agriculture (MOFA) of Ghana, Sasakawa Africa Association (SAA), and Winrock International.

### **Five factors that led to the start of the Program at UCC**

There were five main factors that led to the successful start of the Program at UCC.

The first factor was that there was a strong partnership among stakeholders. So the point that I want to emphasize is that we were able to start because of the strong partnership. What was the vision of that strong partnership? They were all aiming at having some kind of change. They realized that there was a need for change in the extension system so as to produce graduates who were able to meet the needs of the clientele.

Then secondly, there was the flexibility and accommodating spirit of the Academic Board of University of Cape Coast (UCC). Now most of these mid-career extension agents do not have the requisite qualifications to go through the mainstream admission procedure. So UCC has to devise a way, another approach to allow such individuals who cannot enter through the straight route to come in, also UCC accepted to take the risk in starting such a program. Actually, initially the program collaborators, SAA and Winrock International, had approached one of the other Universities in Ghana, but they said, “No, we cannot take them.” But fortunately for us, the Academic Board of UCC was so accommodative and they accepted the challenge despite the constraints they had to go ahead with the program.

The third factor was the promise of the Ministry of Food and Agriculture (MOFA) to send their staff into the program with full pay.

The fourth point is that SAA and the stakeholders, UCC, which is a partner in the whole business, have some kind of commitment and MOFA, the major stakeholder in terms of the returns, is also committed to the program. Then there was the strong support from SAA in terms of supplying the institution with instructional materials providing extension specialist to help facilitate the start of the whole program.

The fifth point that led to the successful start was the agreement between SAA and Winrock to provide leadership in the development and implementation of the SAFE Human Resource Development Program. So here we see the impact of overseas assistance in developing country. Without the support of SAA and Winrock, I don't think that UCC would have been able to mount the program. So we realize that these five factors actually contributed to the start of the Program at UCC.

### **The Program at UCC and its various components**

The philosophy of the innovative Program at UCC stresses experiential learning, which involves a combination of theory, experience, critical reflection and practice. Students are encouraged and trained to put into practice whatever theories they have learned on campus. To nurture this experiential learning, we have an off-campus farmer-focused Action Oriented Program, which the students embark on. Normally we refer to that action research on-farm farmer-focused as a Supervised Enterprise Project (SEP). This SEP is normally undertaken by trainees after two semesters, of staying on campus. Now during

the two semesters, they are given theoretical explanation for certain things that they were doing on the farm but they did not understand. They are given in more closely technical aspects of the topic of the subject matter. And after the two semesters they go back to the farm to spend between 4 to 6 months trying to put into practice whatever they have learned.

The SEP is a participatory approach. After the two semesters, students go to the farm, identify many problems of the farmers in the various districts where they work with the farmers, find out, come back to the University, go through proposal writing, discuss with specialists, come up with certain strategies, go back and discuss with the farmers, and then implement the strategies that they have generated. That facilitates the linkage between the farmers, extension and research, because having identified the problems on the field, the students come back, they contact the researchers, they contact the extension agents who are working on the area and they go to the field to implement. Actually this is the core. This is the heart of our Program at UCC.

### **Curriculum development**

In order for us to be able to produce a graduate to achieve the desired impact that we wanted, it required us to develop reform our curriculum, and again the whole curriculum development process was done in a participatory and collaborative manner amongst all the stakeholders involved, and it involved 6 major steps.

First of all is the recognition of necessity for change by the stakeholders. Secondly, decisions were made by stakeholders that changes was necessary for mid-career extension staff. And this was followed by informal discussion among stakeholders, and then a formal extension needs assessment to really identify what needs the extension agents have, what needs the farmers have, and what do the farmers expect from the extension agents.

Based on the results of the training needs assessment, a workshop was organized to discuss the needs, and this workshop was open to all the stakeholders involved and to the public, so that would help to develop the appropriate curriculum to meet the needs of clientele. And finally, we developed the curriculum, put it into use, and we established a strong network among the stakeholders, so that at any point in time, we were in regular contact with them, discuss and generate new ideas, as to how to make the program very responsive to the needs of the farmers. So now that is about the curriculum of our program.

### **The structure of the UCC Program**

We have a 2-Tier Program in the B. Sc Agricultural Extension Program at UCC. The basic one is 4-year degree program. Now those students who are enrolled in the 4 years has post-secondary certificate. This spends 4 years. We have the diploma holders who come in to spend 2 years, but somewhere around 1998 after consultation with major stakeholders they realized that 4 years was too longer period for their staff to stay on campus, so what they asked for us was to cut the 4 years into 2 year diploma and after 2 year diploma, they go to work for about 2 years, then they come to continue our program.

In terms for selection and admission of students into the program, once again we

believe in partnership and in participatory approaches because we believe that is the only way we can make head way. So in terms of selection of students for the program, the major stakeholder, that is MOFA, nominates the students. Now the students are operating in various districts, so the district directors will nominate the students based on their performance and based on their academic qualifications. Then this is pass on to UCC. We do the screening and then the final selection. In order to ensure that the female extension agents who have a very important role to play in the development of agriculture in our country are not left behind. It's a policy of the University to ensure that at least 25% of the students' intakes are reserved for qualified female staff.

### **The benefits of the UCC Program**

Now all along, I've been talking about MOFA, UCC, Sasakawa Africa Association, Winrock International and other bilateral agencies. These are the main institutional stakeholders in the program.

Definitely, when you set up a program, we would expect some kind of benefit, and most of the stakeholders would expect some kind of benefit. I'm sure that no one is going to throw money somewhere there is not going to be any mutual benefits. So in terms of benefit, the front line extension staff who prior to the start of this program did not have opportunities to have further educations, who saw themselves coming to the end of their professional development, are the major beneficiaries of this program. The way is open for them, and most of them are getting into the institution, to be able to upgrade themselves and continue with their professional development in the career they have chosen.

In terms of the farmers, the supervised enterprise project, which is the off-campus actual research project that the students undertake between the 4 to 6 months, their projects have empowered the women or the farmers improved farming operations and general standard of living. Through the participatory approaches, farmers are now beginning to accept generating new technologies and they are applying them to their production activities. And this has led to substantial improvements to their farming activities and in some cases, a general improvement to their standard of living.

To UCC itself as an institution, we have enhanced the visibility outside the wall of the University. As a result of this program, now a lot of other countries in Africa have also taken up the same SAFE approach. We have Lamya in Ethiopia, Makerere in Uganda, Sokoine in Tanzania and very soon Ahmadu Bello University in Nigeria is also taking the same concept. In the francophone countries, we have Benin and Burkina Faso also following the same model.

### **Achieving effects of the UCC Program to education and researches**

Yes, we traveled a long way, the program was established in 1993 and since then up to this time we have been able to achieve some major successes, and this I would like to share with you. Now the first and foremost is that program is the major supplier of graduates' competent extensionist to MOFA for their extension activities. Presently when you go to Ghana, most of these bilateral organizations where are looking for some kind of development

in the agricultural sector, you'll find a student representing Ghana government interacting efficiently with other counterparts from the developed countries to develop appropriate strategies that whole the country grow.

In that respect, we have supplied a lot of graduates, and since it's first inception, 153 students have graduated from the program and that composes of 79% males and then approximately 21% females, although we have not been able to make up the target of the 25%, but I think that is quite high for us because initially it was just less than 3% of the women were actually involved.

Now the program has also fostered working relationship between UCC staff, students, and bilateral organizations, now when they go and serve students, the UCC staff go to supervise activities in the field. On the process, we come in very close contact to the bilateral organizations, which are supporting the students. And then we come very close to the farmers to know exactly what their needs are and at this sense a useful input to reforming our curriculum to ensure that whatever we are producing in terms of graduates will be products that we can sell on the market. And there is no point in producing products that cannot sell. So our interaction with the farmers, with the students, on the field, on the real situation, help us in providing valuable input into helping us to produce graduates that can help us.

Now lecturers have also had the opportunity to interact with farmers and extension staff to familiarize themselves with agricultural problems in Ghana. I don't know what the situation in Japan is, but in most developing countries the university lecturers in agricultural sciences, agricultural educations are always sitting in the university doing all their research in the university, at the end of the day they come up with the result and they want the farmers to accept them. You see the problem over here is incompatibility, because normally what would work on the experimental field might not necessarily meet the social background of the farmers and that makes adoption very, very difficult. Ok, but in our case we go to the field, we take direct contact with the farmers and that is opening us up, giving us real problems on the ground, and that is helping us reform our thinking, reform our curriculum in order to produce the appropriate products to meet the need of the farmers. And again through the program, some of my colleagues, like myself have received the opportunity to travel elsewhere and have interaction, share experiences, learn from our colleagues on how to improve agricultural extension education and agricultural development as a whole.

As a result of the cooperative activities and partnership, the university has gained a lot of facilities, now we have student accommodation that can take up to 75 students at any one particular time. This is something that is very, very rare in most African universities, and I am saying this is a result of a very good relationship that was established between the donors and the other stakeholders. We have a conference center, computer laboratory, technology village and a 16-room guesthouse.

I want to introduce little bit on the technology village and it is a small third laboratory there is a setup, so students go out on the field and talk to the farmers, and farmers become interested in the particular project. Students will have to go the food laboratory which

is technology village and learn the skills if they don't know it before they go back to the farmers to extend the knowledge to them. So the technology village plays a very important role in the curriculum.

### **Challenges to the innovative program**

Of course, all these achievements have not been without sweat. There are a few challenges to the innovative program. One is that at the start of the program we have few well qualified agricultural extension staff. There were about three of us, but we have put in certain measures and now with the grace of god there are eight undergrounds presently and currently.

But one of the major challenges was getting qualified agricultural extension staff to actually move the process, take the students through the kind of training we want to give them. And financial constraints due to cutback in budgetary allocation, it's all over the governments of developing countries downsizing budget allocation to most of these institutions and that is a major constraint. But once again we have found a way out, taking about the various facilities that have been provided: conference center, guest house, and so on. Now, we see these as endorsement fund. And this is going to generate enough money for us to be able to run the program. In addition to that, we are in strong collaboration with partners from the private sector who are sponsoring most of the off-campus program and that is quite exciting and it's helping us to get over.

The decentralization program of the unified agricultural extension system also poses another challenge, and now the power has been deferred from the central point to the district levels. This requires, for example, one extension agent to be able to carry out extension in soil, extension in crops, extension in animals, extension in other fields that you can think of. This has some kind of implications for us when it comes to our curriculum development, now formally extension agents were trained in a particular field, so he or she is an extensionist for crop production. So another he or she is an extensionist for animal production, but with this decentralization, you realize that somebody in animal production would find it very difficult to extend information on crop production to help the farmers meet their needs. So this causes a problem for us because now it's telling us that we need to come out of the curriculum, which will meet the needs of all the agents who are being trained. And this we have done by introducing elective courses on our program. So someone who studies crop science alone, at this diploma level can now focus his or her attention on the animal science component in addition to some other core courses.

### **The linkage between the UCC Program and NGOs etc.**

We are pursuing to get much strong linkage between the program and the private sector, especially NGOs and the bilateral organizations. We just have a few of them who are very, very committed to the program because they have used our products. Our products have come in contact with them, and they have seen the value of the product we are producing.

Quite interesting enough, there was one young lady who went out to the field for



assessment, worked with this NGO, came back to the campus, completed her course and when she went back, she was seconded to the NGO and within a year, she had risen from the bottom status to the managerial position. This case tells you that these NGOs which have used our products and know their worth are now scrambling for them. What we need to do as university is to go out aggressively and try to strengthen this kind of linkages.

All said and done, we are seeing the achievements that we have gained are not from our own efforts. Certain factors have immensely contributed to those achievements and we believe that if any institution wants to follow a similar program, if any NGOs or any country wants to give support to other countries in terms of agricultural development, then there are certain requirements that need to be taken into cogeneration.

### **The importance of the committed leadership etc.**

The first one is a committed leadership with clear vision. The country or the NGO that is going to go and impact or going to help another country improve upon in agriculture. There must be a clear vision between the leaders of the two countries. In absence of the clear vision, it will be very, very difficult to forge a forward with the development.

In our case, MOFA has a leadership and really understands the problem that there was a need for us to reform our academic program with respect to the training of the extension agent so as to meet the needs of the people on the ground. And the NGOs, SAA also realized that we want people to improve their lot, and the only way to improve their lot is by reforming their curriculum, producing graduates who meet the needs of the clientele. So again we talk of committed leadership, regular dialogue and consultation with stakeholders. I always say that the farmer has certain requirements. And if you are not giving the farmer that requirement, no matter what you do the farmer will not come to you for anything. So you need to establish a dialogue, regular consultation to always be in touch with the farmer to know what the farmers want, to know what they need and that would serve as a useful input into your whole curriculum development process, so that at the end of the day whatever you are producing will meet the need of the farmers, now that is from the farmer's perspective.

As collaborators, NGOs, other organizations and countries are throwing money into your organization, they need to know and understand what the money is being used for. They need to understand that the only way is to continue dialogue and consultation. We have found that is very, very useful and that has led to the success of our program. Partnership with other organizations committed to the same vision, you have to ensure very close partnership with other organizations that have similar missions, so that at the end of the day you can achieve what you want.

Regular monitoring, evaluation and documentation of impact, is also very, very important. I need not to deliver the importance of monitoring, evaluation and documentation of impact apart from providing us with some information that will help improving future programs. It also helps the donors to have some kind of satisfaction or joy; that shows their effort has not been to waste as most of our partners come round. They see the impact on their field and they are very happy, so it is always nice to document

whatever are achievements, whatever are the constraints, so that can go to discussion.

Finally, for such a program to really succeed you need to put in place some sustainability measures. How do you sustain such a program when you have started? Back at home, like I said that, we know the financial constraint is one major issue. As we're moving along in our development process, we realized that we established a dominant farm in terms of construction of facilities which people can hire, and that will generate some money for us. We've also tried aggressively marketing our products to the foreign countries, other Sub-Saharan African countries and that is also helping our cause.

## Conclusion

### Q & A

**Q:**金森です。ポーエンさんのお話の中で、153名の卒業生がいるということでしたが、それで一体、どういう効果があったのか、例えば農産物の収量が増えるとかの効果が見られたのか、お聞きしたいと思います。

**A:** The question is “what has been the impact of the 153 graduates to farmers' output?” You all agree with me that farmers' output depends on annual factors. Farmers' output is those are putting in something and getting an output. It depends on the policy of environmental protecting within the country as it relates to the supply of inputs and availability of markets.

Now what this means is that they need to be in place an appropriate policy that will take care of this aspect of production. Now what these graduates are doing is that now they have assumed leadership position in trying to negotiate and inform policymakers on how to come up with appropriate policies to meet the needs of the farmers, because they work there with the farmers and they now know exactly what the farmers would need. Then as I said in my presentation, most of them are now on the board negotiating with bilateral organizations to come out with appropriate policies.

But then to bring it to the micro level, we realize that as I said most of the interaction between the students, before they graduate, is at the micro level. They are working with groups of farmers in a location and the action research approach, this helps, is location specific. And students have gone out of there, worked with farmers on specific projects, which meets their needs, and there are a lot of results to show.

There is one particular village where they were actually involved in slave production. They were formally picking it from the wild and then selling. Some students went there and heard them how to culture to grow this news and sell. Hard then to find farmers and now it has become a big business within that area.

There is another example of one of our colleagues who went out to help women have access to learn to increase their production levels with respect to fermented soybean products. I mean there are a lot of examples around within the local areas where the students have worked.

But the most important thing, I think, that graduates are doing now, is the leadership role they are playing in helping to provide the appropriate information to help policymakers formulate appropriate policies that will meet the needs of the farmers, and policy formulation, implementation and then the results take some time to see the effects.

So for now I cannot say specifically our products have helped farmers to increase their products by so many percents, but within the local areas, at least where our graduates have worked, you can see some kind of change in the livelihood of the people.

### Q & A

**Q:**私、田島と申します。長い間、農業教員と普及員の養成をしていたものですから、ポーテン先生のお話を大変面白く聞いた訳です。その中で、いくつか質問があります。1つ目は、非常に単純なことで、25%の女性を採用しているというお話でしたが、それはホームエクステンションの方が、あるいは普通の改良普及員なのかということについての質問です。

**A:** The question is about whether the 25% reserved for female is geared towards home extensionists or general extensionists. As of now, Ghana operates an agricultural extension system known as a unified agricultural extension system where an individual extensionist is supposed to be, all in all, covering all areas. So the 25% allocation for women is just to bring about some kind of gender balance.

If you look at agricultural production in Africa, you realize that most of the activities are carried out by women. But then if you look at the number of extensionist you realize that the majority of the extensionists are male, and I know the cultural background of some African countries, which makes it very difficult for the male to interact effectively with the female. So our effort is to insure that at least we increase the number of female extensionists who would come out and help in the agricultural production.

Q & A

**Q :** (田島) 2つ目の質問は、大学を卒業してから普及員の訓練を受けるということですが、実際に就職する人、あるいは、それを継続してやっている人が非常に少ない、農村に行くのを嫌がる、というようなことが普通の場合よくあると聞きますので、そういう点は、ガーナではどうということになっているのでしょうか。

そして、もし何かされているのなら、そのインセンティブはどういうようなことをやられているのか、教えてください。例えば、ハイヤーサラリーにするとか、何か特別なインセンティブを与えているのかどうか、というようなことです。どうぞよろしくお願いします。

**A :** Concerning to the question about job finding and then the possibility of brain drain or shifting of the graduates, there is not much problem with respect to job finding. Now our program, I mean most of the stuff will come into the program, come on the ticket of the Ministry of Food and Agriculture. They already have their full employment, their full jobs, so they are sponsored, and they come in and after graduation they go back, but then they go to assume higher position.

Now there is some kind of drift, but I wouldn't call that brain drain. We have a lot of NGOs operating in our country. They have a lot of resources. But then the world developed human resource to go ahead and utilize those financial resources to get results is a little bit difficult. So what has happened is that these NGOs are job chances for most of our graduates, because of that expectations that we have.

Now we are very happy because these graduates are still in the country, they are still operating within the agricultural sector and they have not moved out, even though you may see a shift from the public extension service to, let's say, private extension services.

They are still operating within the country, and this, in a way, is a blessing in disguise, because the countries in most Sub-Saharan Africa are turning from public funded extension to private funded extension. So then if we can produce graduates who will readily find jobs in the private sector, we would be helping in solving the unemployment problems that some countries find themselves as a result of giving training to graduates.

I just want to make a comment on the last university teacher's bother if I may. He says their students are graduates without finding jobs. Students are graduates without finding jobs but are well qualified. Well qualified in what sense? They are not finding jobs because the kind of training they got, to my mind, is not meeting the demands of their society.

So what we are saying is that you need to really assess what the state of development of your country, what the country needs at any one particular time, and then should be translated into the curriculum that is going to using producing graduates. For example, in Ghana, you go to the university and learn the knowledge which the curriculum produces and is based on scientists, and we don't have the facility. At the end of the day when you come out you are definitely not going to have a job to do. And that's going to produce a lot of humanities where people will have to be teachers and we don't have expansion and educational facilities and there is one teacher to one classroom and you are producing more teachers. At the end of the day the guy will come out and he will be unemployed.

So the point that most partners in development will have to stress is the need for partnership, and is the need for responsive curriculum, looking at what is in development, and then designing curriculum to meet those needs. And there should be this regular interaction dialoguing consultation to really find out what people need at any one particular time. Thank you.