Dr. Berit Olsson

Thank you very much Mr. Chairman for summarizing my speech. That means that you can go and sort of have an after-dinner rest while I'm trying to elaborate a little bit. But the conclusion is very much what Sten just said. So excellencies, distinguished participants, and colleagues. First let me congratulate IIASA for this very interesting event. For me it's a great learning exercise and I must say that I'm extremely impressed by the achievements and not the least by the phenomenal speakers that have spoken before this morning. So I think that maybe at just after lunch it's timely that you should get a rather simple speech this time. I find it a very important opportunity also to challenge this distinguished audience of scientists, scholars, and decision-makers with a very simple question that I have put before you [Can Low Income Countries Develop without their own Scientific Community?] And I will not leave you in suspense very long, I think that you can all guess that my answer to the question I have put here is a loud and clear no.

Countries need to have a scientific community in order to think themselves out of their predicaments. I will spend my minutes by explaining why this question actually is a billion dollar question and not just a simple one even if the answer is quite simple—at least to me. The fact is that in spite of all the rhetoric about the importance of knowledge societies and knowledge-driven development, neither governments of low-income countries, nor development corporation agencies at large actually invest in institutional development for research in low-income countries. And they don't invest in an intellectual community in these countries which I think is something that needs to be repaired. It is indeed very much needed if countries are to frame their own development agendas and if they are to think themselves, as they try to say, out of their predicaments. So, even though this is a time for digesting a rich lunch that we all enjoyed and the chance to have interesting conversations, I will at least do my best to convince you all to take this challenge home and do something about it. And I will return to this type of appeals at the end of my presentation.

I'll start by describing what we aim to achieve in the organization I represent which is the research part of the Swedish Sida and proceed to explain why it's actually difficult to get research going in low-income countries. Then I will turn a little bit to the way forward and this will lead to my plea that I will repeat at the end. The goal for the Swedish Development Corporation is to help in creating conditions for people in poor countries to be in charge and to be subjects in their own development. It's not to do things for them but to make sure that the conditions for their own activities are being improved. And support for research has been an important part of this since 1975. When you look at the mandate of SAREC, which is the organization I head, it looks very straightforward. And if you start by looking at the second objective, I think that you all share this, it is generally accepted that also low-income countries need access to relevant research findings. Many agencies actually do research on development and research for development. Now, Sida as well invests in a series of important research programs in areas such as these. Most of these are in Africa, because as I said a few times, we are convinced that Africa has to think herself out of her predicaments. Lidia Brito before me

this morning talked about the very, very many needs: you have to actually have a thinking community and an entrepreneurial community that can capture the use of knowledge for development. I will talk mostly about the need to have an institutional basis for research. But predicaments, as many have spoken of, are many. Just lack of drinking water, sanitation, and smoke from household fuels, of course, are health hazards, together with the infectious diseases that we are all very, very aware of. The systems' ecosystems are extremely vulnerable and social problems are many, and the list could be made much, much longer; some of this you have heard.

Of course, low income countries are extremely vulnerable to all the impact that could possibly come following climate change and other threats. But Africa has assets—its people, of course—but there's a lot of unutilized potential for hydropower, for oil, minerals, and of course an enormous solar potential as well as underutilized agriculture and economic potential. So the question is – who is going to exploit these resources? Who are going to benefit? Will Africa take charge and benefit and be able to develop all of these for her own development? And will she be able to tackle the predicaments we talked about?

The current push for knowledge does not really include low-income countries. So, getting back to our mission, many are now eager to engage, as I said before, in research which is on development and for development. However, the first ambition, which is the one I'm trying to make a "fertile ear" for here, investing in building a basis for research so that research can also be done in by developing countries themselves, is less widely accepted. In fact, we are fairly alone in our support for an institutional basis for research in such countries. And we wonder why, when everybody talks so about the extreme importance of knowledge for development. Some maintain that low-income countries should make do with research findings produced elsewhere. In a way I share this view, and we share that view in Sweden. Sweden only produces maybe 1% of all the scientific findings that we use for our own development, but we have access to the world of science because we do have a vital scientific community.

In low-income countries, children may die from diseases which easily could have been prevented using internationally available knowledge. In part, this discrepancy can be ascribed to the lack of a research community which is able to identify, adapt, and use this knowledge. National research capacity also facilitates access to informed advice. As you know, decision makers rarely turn to regional research publications to find out about new resistance to life-saving antibiotics or something else like that. You turn to your scientists for advice, scientists who know the current literature and [who in turn] can turn to international colleagues for the latest knowledge and theories. An important role of domestic research community is to formulate relevant questions for research to be carried out by you people or by other people in international research organizations and by themselves of course. To enhance critical thinking is of course important also for democratic development, and critical thinking and higher education benefits from having active researchers at teachers. And I think one very crucial point for countries is to have capacity for research training. When you can do your own research training, you start to have a creative environment for research. You can get guest researchers coming and

people like us can do more than invite researchers to our own countries, we can go there and give guest lectures, and we can enjoy a scientific environment. And finally, of course, the great importance for research and links to research in order to engage in entrepreneurial activities and innovation is extremely important. And the list could be made very long here. I think the point I want to stress is that there are many uses of research in addition to the research output per se. Research capacity is a lot more than having individual scientists, important as they may be. It's a range of factors and taken together you can call all these factors that I've put on the slide here a system for research [shows slide]. And we try in our work to support some of these elements, and many of these elements are lacking in low-income countries. In many cases we have found it constructive to direct support to a research university which we see as the hub for research development. The complete outcome here that we think is very important, is actually to be able to graduate your own scientists. I will repeat that because I think that this is a pivotal change when countries can graduate people on post-graduate level and I think this is a very important part. We direct support for individual research within institutions with a view to strengthening domestic capacity for research training as I'm now saying for the third time I think. But support goes to a range of elements depending on the actual situation. However, investments towards building this basis for research remain problematic in many low-income countries and this is not merely due to lack of resources. It also relates to how available resources are being used.

I would turn to two sets of problems. The last decades have witnessed an enormous expansion in higher education. However, much of this has happened without a policy, without accreditation frameworks, and resources have become diluted. Now many countries struggle to regain control of the system so that quality in education can be enhanced, not just numbers. The need to diversify and focus resources on the creation of at least one research-based university remains a challenge, as is the challenge to have professional training on a mass scale to enhance skills. The other trend has to do with the way research funding is being directed. The push for immediate returns on research investments, both from governments and external donors, leads to a very fragmented funding of research. Many low-income countries do not even have a specific budget line for research. Research funded from sector budgets tends to be small, and tends to be extremely applied. Funds for research from development corporations are also directed to specific problems, and international research programs, who benefit from interaction with low-income countries are also very specific in their orientation. However, no basis for research will be built or sustained merely through vertical programs focusing on particular issues or problems.

This picture does not illustrate research funding; it could have done, but it does not. This is a picture of how aid operates in Tanzania in the year 2000 [shows slide]. Each color here represents one aid activity, and you see Sweden in the middle in these days had quite a number of different problems. All of them required their own management, their own framework. And it's said that Tanzania received—to meet the prime minister or president—about 1,000 delegations a year. So in response to this, Tanzania has decided to formulate strategies for how to accept aid in a more concerted way, aid that fits the development strategies that they have formulated themselves. Similarly, some countries

have now formulated strategies for research development, hoping to receive support aligned to such efforts. Here, by the way, I would like to point a very important area for systems research as you all are engaged in this. There is little understanding of how research systems work, and there is a need to find options for countries at different stages of development: what are the systems to strive for and to put into this type of strategies. Anyhow it means that funding agencies, that sometimes are called donors, can strengthen the very basis for research by investing in existing plans as well as agree to accept institutional reporting rather than burden countries with all kinds of frameworks. Hopefully, this will change from fragments, to support and a strengthened basis. You can just think yourself, that if all the research funding is supplied, who is going to make sure that there is competence in statistics, in biology, in physics, in microbiology, epidemiology, sociology, anthropology, and all those basic messages that you need to direct inquiries and research. And similar plans now exist at the regional level, not to mention the consolidated plan for science and technology that NEPA and the African Union are presenting.

This, however, does not mean that researchers in the north should refrain from corporation, quite the contrary. In addressing global issues, interaction with low-income countries is indeed needed. It adds situated perspectives and information. However, as you collaborate with very weak partners, one has to be careful not to distort fragile systems and to realize that a collaborative project does not automatically contribute to the buildup of an institutional basis. It's important to acquire research permits to respect local conditions and rules. And when we fund research, we would demand ethical clearance in collaborating countries whenever that is relevant. I think so far it is very simple; you just do as you always do in research corporation. However, what tends to happen is that engaged researchers from affluent countries, like yourselves, realize this very weak situation and then want to do a lot more. And, we'd like to offer training opportunities and courses and then we turn to the aid organizations to get funding for this. This in itself is of course a very good thing, on the other hand it risks becoming the picture I showed from Tanzania, with a very, very fragmented input into very weak systems. A few local researchers are drawn in different directions and very often out of their own institutions.

So my plea to you now, I am coming to that, has two parts. It is of course important to show collegial solidarity and be engaged in what's happening on the ground, but I don't think that all researchers should become individual aid operators because that would lead to fragmentation. But what I would like all of us to think about is the opportunity to turn to the aid organizations in your countries, the development corporations, and make sure that research is part of their bilateral efforts. Because that would create the basis that would allow us all to collaborate as partners on some type of equal footing. And I think you want colleagues in low-income countries, not just beneficiaries. And this is when I'm going to make my last little note. Somebody who evaluated our activities said: "If we are earnest in our ambitions of supporting developing countries, and in regarding them as equal partners, support for the development of their research community is an important ingredient of Swedish development cooperation." Thank you.