

KNOWLEDGE, GROWTH AND DISTRIBUTION:  
STRENGTHENING THE CAPACITY OF INNOVATION SYSTEMS

Closing speech by Minister for Development Cooperation Bert Koenders at  
the Knowledge on the Move Conference,  
Institute of Social Studies, The Hague, 28 February 2008

[check against delivery]

Louk, ladies and gentlemen,

I would like to begin by thanking WOTRO Knowledge for Scientific Development, Nuffic and the Institute of Social Studies for organising this crucial conference. I understand that the conference has been very upbeat. This is a good moment to take stock and look ahead, after the evaluation discussed by you and recently issued by my Ministry's Policy and Operations Evaluation Department - the IOB - of Dutch research policy from 1992 to 2005. We've signed a Pact of Schokland to harness knowledge for development. And publications by Sida in Sweden and DFID in the UK on the future of research for development have now sparked important international discussions. To me, this conference represents a new start in research policy for development. The beginning of an era, hopefully with new zeal. Many of you attended or know the famous Groningen-conferences in 1989 and 1992. We have come a long way since. But the challenges are similar in my view: together, we can find ways to truly blend Northern and Southern perspectives, to mutually strengthen each other's research agendas for the purpose of more effective development strategies. In the past years we have learned that ownership cannot easily be *created*. The MMRP's were an interesting instrument in that respect and I'm happy you discussed that. But we have to think now how we can truly *integrate* research agendas. As IOB rightly stated: it takes *two* to tango.

Knowledge is constantly on the move and the field is in motion. Development is more and more related to knowledge, in combination with finance. Knowledge is power. It is an instrument, also for the poor, and it should work as an equalizer.

*[Our Common Concern]*

Ladies and gentlemen,

Let me first say a few words about the context in which knowledge plays a role, and in very general words some on my priorities as a Minister

Then I will discuss the issue of knowledge on the move in that context.

Let me start with a cliché. We live in an age of rapid change that is having a major impact on the daily lives of people all over the world. Globalisation is making the world both smaller and richer. That has now become a cliché and almost an ideology. People, companies and countries are seizing the opportunities presented to them by new technologies: mobile phones, internet, podcasts, are changing the face of the world. Global wealth has grown to hitherto unknown proportions. But - it is important to note this again- not everyone has an equal chance of sharing in that wealth or of making their voice heard. And not all growth is sustainable. The costs and benefits of globalisation are very unevenly divided. Two and a half billion people in the world still have to live on less than two dollars a day and are excluded. The majority of these poor people are often women. We all know these facts. Lack of decent work and a decent income almost always goes hand in hand with inadequate access to education, health care, safe drinking water and other basic services. Climate change and environmental degradation impact most severely on the poor. In essence a question of distribution. Full, productive employment and effective services are key in sustainable poverty reduction.

Divisions in the world - not only economic, but also political, cultural and religious - are becoming sharper. Development workers are bridge-builders. In the Netherlands we experienced sharp polarisation, with the killings of Theo van Gogh and Pim Fortuijn as dramatic landmarks. The Netherlands is no exception.

Globalisation poses difficult choices for everyone, but especially for development policy since it addresses the three major challenges of our time:

- First, the engines of economic growth and at the same time the distribution of wealth in a more unequal world;
- Second, climate change and the distribution of ecological footprints; and

- Third, conflict and the unequal distribution of security.

Deriving from this analysis, I have chosen four themes on which policy is to be stepped up. Only four. Knowledge plays an essential role in all four of these.

The first priority is economic growth and equity. As I indicated, the opening up of the global market allowed many countries and hundreds of millions of people, particularly in Asia, to break free of poverty. Yet, wealth and income differences are increasing worldwide. The global market places high demands on the quality of products and creditworthiness. The prices of industrial goods have fallen while the rapid growth of China and India raise demand for energy and other resources, pushing up the prices of raw materials and food. Africa runs the risk of losing the competition battle not only because of the extremely low wages in countries like India and China, that are rising now. But also because Asian countries have a much better infrastructure, education systems and research schools. The Asian development model, which is based on export promotion to generate capital for investment in the development of domestic markets, has little chance of succeeding in Africa at the moment. Major investments are needed in agricultural research, infrastructure, and education to enable Africans to exploit market access elsewhere. This was also the plea of the president of Mozambique who is visiting the Netherlands today.

Recent studies of the African Economic Research Council and others indicate how important the point of departure in a country is to generate a genuine take-off. Most processes of economic production, demand a high level of knowledge. Even a tomato is a product of sophisticated knowledge: the seeds, the techniques of growing it, the entrepreneurship, marketing - it requires knowledge 'from farm to fork'. Refinement of techniques to stay competitive. My ministry therefore will intensify the focus on science and innovation, for example in rural development. I will come back to that issue later.

For my second priority -climate, sustainability and energy- *knowledge* is equally important. Developing countries in Africa and Asia are now experiencing extreme

changes in weather patterns, while generally they have contributed least to the pollution that causes climate change. We know this. There is no doubt that their economies will be harmed by climate change and their people will suffer as we already see in for instance Burundi and Bolivia. Developing countries are forced to adapt to climate change. The question is how. During the Climate Summit in Bali last December, the UK, the World Bank and the Netherlands launched a major study, 'The Economics of Adaptation to Climate Change'. Over the next two years, we will be looking at the economic basis for adaptation in six countries. The study is conducted by local experts and western scientists. All of them outstanding. We want to present concrete figures on the cost and effectiveness of adaptation to climate change for each of these countries. And we will specifically look at the world Bank's models in making the arithmetics. Concrete information about adaptation strategies and their cost. This data will allow us to make common policy decisions on adaptation. Applied knowledge is important, as I discussed this morning with the President of Mozambique who likes to see more emphasis on applied research in intermanagement and biomass in Mozambique in the context of climate change.

The value of studies like these is already proved in the field of Sexual and Reproductive Health and Rights: my third priority. I recently came across a successful example a fruitful combination of research and policy in this field. In 2001 UN General Assembly Special Session on HIV/AIDS adopted the target of 50 per cent reduction in mother-to-child HIV transmission (MTCT) by 2010. Most programmes in this field have a narrow focus, attempting only to supply medication, which is available to only 11% of pregnant women with HIV. While the prevention of unwanted pregnancies by the provision of contraception is a most effective method of prevention of mother-to-child transmission of HIV. Recently, the Medical Committee Netherlands-Vietnam in collaboration with the University of Amsterdam have produced evidence that it is feasible to offer HIV-treatment and reproductive health services in an integrated fashion, even in resource-poor settings. The approach adopted by the study team has been a vehicle of empowerment for the participating researchers, clinical staff, NGOs, volunteers, the mothers themselves and their families. The Government of Vietnam

has decided this month to use the evidence and to take and implement it as the model for the National Program for Prevention on Mother to Child Transmission (PMTCT).

This brings me to my fourth and last priority, before I come to the discussion on knowledge and development more in general: human security and development. We know that all over the world, there has been a fall in the number of conflicts between states. Millions of people are however the victims of intrastate conflicts. Fragile states are lagging farthest behind in achieving the Millennium Development Goals. Characterised by political instability and governments that are barely able to function, because of lack of legitimacy or to lack of capacity. These states often relapse after a period of relative progress. The causes of this failure to sustain progress are complex and manifold and there is often lack of political interest. As a result, the basic conditions for development and investment simply do not exist, with all the disastrous consequences that entails. Fragile states have vast spill-over effects in the region and worldwide. It is important therefore that we give fragile states like Afghanistan or Burundi substantial aid to support sensible reconstruction. This is, however, a risky venture that requires detailed knowledge of local situations. To this end we have for instance signed a 'Schokland-agreement' was launched between the Centre for Conflict Studies, Maastricht University, The Hague Centre for Strategic Studies, Rabobank, Red Cross and many others to establish a research-network for Peace, Security and Development. The goal is to improve and integrate the analyses of situations in fragile states. Actionable research, tailor made for specific contexts, ending the one-size-fits-all approach.

Different types of countries have different issues to deal with. They present different questions to scholars, thinkers and policy-makers and they shall also to organisations like the IMF and the World Bank. In our policies we try to distinguish three types of countries, differing in degrees of development and stability. This enables us to develop tailor-made policies, based on a thorough understanding of local situations, working with local research institutes.

*[Knowledge as a concept]*

Ladies and gentlemen,

In short, knowledge is key for development policy. I must admit that when I arrived at the Ministry of Foreign Affairs as a Minister, I was quite shocked by the poor attention present for knowledge-infrastructure and advice on concrete development issues. As I just described, knowledge and research are essential to develop effective policies for the poor. The Dutch author Remco Campert once said: "Politics is far too important a matter to be left merely to politicians." We need researchers too. We have to invest in fundamental research but also in knowledge based on "actionable research". What an awful word by the way that is, actionable research. Yet, it is crucial. Not just for Dutch development policies. Also to development institutions worldwide. I think the World Bank for instance is more and more developed into a knowledge bank, which is why we insist on a stronger poverty-focus and Southern perspectives in the Bank's prominent studies. But more in general, knowledge is a key for any country as a comparative advantage. Investing in research capacity in the LDC's is at least as important as investments in capacity in the North and this has to be done in a predictable way.

I am pleased to see scholars from both the North and the South here today. As the IOB-review pointed out, the Netherlands research policy over the past few years might have been a bit skewed to the Southern-only-perspective, excluding Dutch researchers from studies on development issues. At the same time, the internationalisation of research generally strengthens the attractive force of centres of excellence in the North. Even if it does not actually cause brain drain, it pulls scholars worldwide towards international research agenda that are not necessarily geared to local development priorities. These two conflicting trends seem to move science, development and international cooperation in different if not opposite directions. I think that creating open knowledge networks, without Northern *or* Southern biases, but really looking at interests of local researchers, is

at least as effective as building research institutes. We have to keep knowledge on the move and make sure we move it in the right direction.

Still, I have not provided a definition yet. What is knowledge, actually? According to current definitions, knowledge is 'the personal ability to perform'. And to perform a person needs information as well as experience, skills and certain attitudes. But it is important to realize that knowledge is not locked up in these components. Knowledge is -as the title of this conference rightly states- always 'on the move', continuously 'in the making', as you probably all know from your own experience. Consequently, knowledge is not only much broader than what is derived from science or research, it is also much more dynamic than what is perceived through the lens of the regular knowledge indicators. Knowledge is of multiple types and kinds, and always about context-specific interactions and changes. In this field, where do we stand? Over the past three days you have discussed various themes -components, elements of knowledge- ranging from economic growth to capacity development in the field of research. This afternoon I understand you have tried to put the pieces back together and look at the broader picture.

The broad, dynamic concept of knowledge has important implications.

In the next few minutes I will address three of those implications, which are -to my view- most relevant in relation to developing countries.

- First, access to knowledge is more important than possession of knowledge.
- Second, knowledge-in-use is more important than knowledge-in-stock. And:
- Third, creating open knowledge systems is more effective than building individual research centers.

The position paper published in the run-up to of this conference rightly concludes that "the global context for development and international cooperation is rapidly changing. Yes! A Good start for any article these days. Poverty takes on new forms and is no longer approached as if it is confined to developing countries." "Loss of biodiversity, environmental degradation, migration and its effects on cultural identity, and many other global processes affect people worldwide. A 'Global

South' is emerging, challenging the traditional conceptual framework of development cooperation based on the traditional North-South divide."

Knowledge and innovation are increasingly recognised as basic ingredients of sustainable economic and social development. The growing knowledge intensity of markets and governance demands constant investments in research and development. This is a positive phenomenon. Globalisation of knowledge also has a downside. In principle knowledge is an infinite good: the more of it is used, the better - and its use doesn't stop others from using it too. Yet, the formal global structures governing the ownership of knowledge work out differently, risking to turn the infinite good of knowledge into a scarce good for some. Skills and intellectual property rights are distributed unevenly among various countries and among different groups *within* countries. So, the accumulation of knowledge by groups that already have more information than others can increase inequality within societies. And of course, this should never lead to the conclusion that we should not conduct more research. But it should make us ask: how can we bridge that divide?

*[Access to knowledge is more important than possession of knowledge: Intellectual Property Rights]*

Ladies and gentlemen,

I already mentioned my first proposition: access to knowledge is more important than possession of knowledge. It is not *knowledge as such* that matters most. The main point is how knowledge is acquired and who benefits from it. To my mind, the acquisition of knowledge, the access to skills and the ownership of intellectual property rights are the key questions that lie before us.

In the past few years, many discussions, in the WTO and OECD, have focused on how to make sure that developing countries gain access to world markets, including the international system of intellectual property rights.

China, Brazil and India are rapidly gaining ground in the global economy. In Africa, awareness of the strategic importance of research and innovation is growing fast. Yet, investments are lagging behind. Moreover, studies show that a too rigid market-based approach to development, and more specifically to intellectual property rights, is keeping Africa and other LDC's from climbing the ladder of development. China, Vietnam and other emerging economies all too some extent shielded their markets, their infant industries and especially their knowledge-base as they were on their way up.

Most of today's rich countries actively used government subsidies and public enterprises to promote new industries. The US has the greatest share of publicly financed research in the world. While practising free trade, the Netherlands and Switzerland refused to recognise patents until the early 20th century. In the 19th century, most countries, including Britain, France, and the US, explicitly allowed patenting of imported inventions. The US refused to protect foreigners' copyrights until 1891. Germany mass-produced counterfeit "made in England" goods in the 19th century.

You can read this in the work of Ha Joon Chang, a famous economist at the University of Cambridge, points out that despite their own history, the rich countries since the 1980s have imposed policies on developing countries that are almost the exact opposite of those they had in the past. These countries' condemnation of tariffs, subsidies, and permissive intellectual property rights are like "kicking away the ladder" they used to reach the top - often against the advice of the countries that were richer *then*.

For instance, China and India, have partially liberalised their economies but refuse to fully embrace neo-liberalism. Growth has fallen short particularly in Latin America and Sub-Saharan Africa, where some of the neo-liberal reforms have been implemented most thoroughly. Under the influence of the Washington Consensus, for example, support for the agricultural sector, including agricultural research has been cut drastically in countries like Ghana and Benin. The weak political and

economic position of small farmers was an important factor in making this possible. Small farmers badly need knowledge, but lack the political clout to place their needs on the agenda. As a result not only have they suffered economically but also their land is misused due to a lack of knowledge. This is leading to exhaustion of their countries' natural resources and to degradation of their soil.

Let me be clear: this is not a plea for protectionism. It is, however, a strong case for the first proposition that *access to* knowledge overtrumps the *possession of* knowledge.

The bottom line is that intellectual property rights should stimulate local creativity and innovation in developing countries. This can be done in many ways, not exclusively or necessarily through the existing, formal intellectual property system, which is primarily tailored to the needs of the more industrialised countries. At global level, knowledge that is relevant for development needs to be accessible and affordable, not locked up behind copyrights or patents. After all, the justification for exclusive intellectual property rights and their international harmonisation lies in the public interests they serve, which include poverty reduction and sustainable development in my view.

At multilateral level, as in the WTO and WIPO, the Netherlands favours agreements that give the least developed countries latitude to build their own innovation systems. This should also apply to bilateral and regional trade agreements, like the European Partnership Agreements, which still tend to push for IP standards higher than the minimum requirements agreed multilaterally in the WTO.

I would also urge Dutch universities and research institutes to adopt institutional IP policies that take account not only of valorisation of knowledge and incentives for researchers, but also the importance of access to knowledge and freedom to operate for development purposes.

*[Knowledge-in-use is more important than knowledge-in-stock; the demand for knowledge]*

Ladies and gentlemen,

Now, when speaking of the possession of knowledge, one could ask whether there is an un-met need for knowledge itself. Here we get to the crux of the matter: the *demand* side. It is there that knowledge needs are articulated, in the context of local problems and opportunities. In this regard, I would like to pose my second proposition, that knowledge-in-use is more important than knowledge-in-stock.

Where the demand for knowledge is well-organised and backed up by enough political clout, the chances are good that the knowledge needed will somehow be provided, also for the poor. In reality however, the poorest people in the least developed countries often have neither political clout nor purchasing power. And even if they do, they mostly lack the means to acquire the knowledge needed.

Let me illustrate this by the example of our experience with research-based policies in the field of economic growth and development. In that field, the Southern perspective was not included in research nor strategies for many years. Our common aim is to fuel economic growth in a way that contributes to poverty reduction while maintaining social cohesion and ecological integrity. This is a difficult and complex task; I don't believe that there are any one-size-fits-all ways to accomplish it. We have seen that in the past. The Green Revolution, for example, was a purely technological route to economic growth. In spite of its successes elsewhere, it passed Africa by and left major social and ecological problems unresolved. The Washington Consensus gave a purely economic answer. Its track record is not convincing, and a number of Asian governments have rightly chosen alternative routes to success, that have their own adversities. The problem with generic strategies like these is that they ignore local demands and power relations.

We have come to realise that economic transformation is essentially a learning process. Successful economies - successful in terms of creating wealth, or more importantly, nearly full and high-quality employment - are not those that have

followed a particular 'recipe', nor even those that are best endowed with resources or most favoured by geography. Successful economies have the fact in common that they have harnessed and used knowledge - that is, information, experience, skills and attitudes - to identify and take advantage of opportunities. Palm oil originated in Africa under ideal climatic and soil conditions, but nowadays Malaysia is world leader in the industry. Chile has become a market leader in salmon, despite having no natural stocks of this fish. Floriculture may become an African example, provided it gets more embedded in the local economic and scientific environment. And of course provided that the flower sector is not destroyed by conflicts like the one we are now witnessing in Kenya's Rift Valley.

Apparently, for least developed countries, catching up is not a question of the supply or transfer of knowledge, or technology for that matter. It is a question of being able to master steep learning curves. Therefore learning should be our focus. Learning for growth and at the same time for distribution, to make sure that growth is sustainable and not exclusive. This requires strengthening domestic learning capacities. More concretely: making knowledge arenas more inclusive and strengthening domestic abilities to create, access, tap into, absorb, adapt, spread and use knowledge for development.

*[Creating open knowledge systems is more effective than building knowledge or research institutes: the role of research]*

Ladies and gentlemen,

How can we realise these ambitions? And what is the role of research? My third proposition of this afternoon is that creating open knowledge systems is more effective than building knowledge of individuals or building research centers.

The Dutch Ministry of Foreign Affairs' research policy from 1992 to 2005, extensively discussed at this conference, rightly stressed issues of demand-orientation and ownership: who sets and who owns the research agenda? As early as the Groningen conferences in 1989 and 1992, two complications of this approach

were also highlighted. One was the lack of consensus within developing countries on priorities for research: the 'Ganuzza dilemma'. The other was the fact that transfer of decision-making power over research cooperation to developing countries presupposes often scientific capacities - capacities whose lack is precisely the reason for research cooperation in the first place - this is the 'development paradox' formulated by the late Lolle Nauta.

These are still relevant issues today, as the IOB evaluation points out. And unfortunately, the MMRP's did not solve these dilemmas sufficiently. Since the Groningen conferences another important issue has come up: valorisation of research, that is, how knowledge is put to use. This notion obliges us to extend our perspective from demand-orientation to use and from ownership to partnership. It brings the broader development context into the picture, including actors from science as well as practice and policy and their interaction with one another. Together these constitute, in a nice word, 'innovation systems': networks of organisations, enterprises and individuals focused on introducing new products, processes and arrangements, together with the institutions and policies that affect their behaviour and performance. Within these frameworks, learning for solutions takes place where shared problems or opportunities emerge, with research being only one of many sources of knowledge, but not an unimportant one. The knowledge agenda is set by a continuous articulation of needs through negotiations among many stakeholders.

My ministry is working to expand possibilities for alignment with excellent pro poor research and innovation agendas. I think this is very important. Such agendas are currently developed in Africa, like the NEPAD consolidated plan of action for science and technology. It's the Paris-agenda on the move. Hopefully less technocratic and more content-oriented. But alignment never is a one way street. I already quoted IOB: it takes two to tango.

Ladies and gentlemen,

As I said at the beginning, it is not *knowledge as such* that matters most. What matters most is the capacity of whole innovation systems. Our current research and innovation policy addresses this broader dimension. Our strategies concentrate on three interlinked aims:

- first, the knowledge base: a critical mass of skilled people, including researchers;
- second, knowledge circulation: the effective links between science, practice and policy; and
- third, knowledge policies: the enabling environment.

Before concluding, let me say a few words about each of these aims and what we want to attain.

*[Knowledge base]*

Ladies and gentlemen,

Innovation is primarily about people and their knowledge and skills: the knowledge base. Gaps in the knowledge base can block putting knowledge to use. South Africa, for example, has productive, innovative firms in a wide range of product areas, like software, energy and petrochemicals. These firms are in the forefront of high-tech, knowledge-intensive industries. So the cutting-edge knowledge is there. But South African performance in high-tech exports and patent activity is weak. In this aspect South Africa is similar to Argentina, for instance, and forms a contrast with a country like Brazil. The knowledge is hardly valorised. The main reason for this lies in the knowledge base. In South Africa state-of -the-art research is conducted. Yet, the knowledge-base lacks the capacity to sell the results in patents and production alternatives. The economic benefits therefore stay behind.

Investment in access to higher education in developing countries is therefore -and I think correctly so- high on our agenda. The quality of higher education is equally important. It is a major challenge to deliver the type of graduates who are able to

contribute to community development, innovation and growth. This requires a different, more appropriate skill mix than is generally offered.

My Ministry invests in higher education and research capacity through the NFP and NPT programmes. The Netherlands traditionally provides substantial support for agricultural research through the Consultative Group on International Agricultural Research, at regional and national level, and through Wageningen University.

*[Knowledge circulation]*

This brings me to the second aim I just mentioned, knowledge circulation. Besides suffering from an inadequate knowledge base, innovation is often also hampered by barriers to the flow of knowledge: between socioeconomic and cultural groups and institutions, between elites and marginalised and excluded sectors of society, between science and policymakers, and between science and entrepreneurs. The famous European knowledge paradox is an example of this last barrier: cutting-edge research is abundant, but it rarely leads to innovations. Especially in the least developed countries, geographical distance is also a major barrier. Therefore, knowledge systems in least developed countries tend to be seriously failing in all these aspects. Knowledge may indeed be present, but it is often too scattered and isolated and therefore hard to *valorise*.

The challenge is to establish or strengthen the most crucial linkages. In some cases it can be a matter of infrastructure. ICT has improved the situation a lot, but still: if your telephone or internet doesn't work and the road is unusable, it is difficult to connect. It is also a matter of social capital, of balancing power relations, building trust and establishing arrangements: among disciplines, local users, ethnic groups, universities, links in the value chain. An additional challenge is 'brain circulation': making migration contribute to upgrading skills and tapping the expertise of people living in the Diaspora. I think this can be an interesting way of contributing to international knowledge networks.

To establish useful links, regional networks are essential, like AERC and CODESRIA, which exchange knowledge across borders and dig deep into local reality. Global information and communication networks have a similar function. Most knowledge institutes in the Netherlands also play their part as members of international platforms and networks that promote more effective research for development. Although a bit more streamlining in this area might increase efficiency, I consider these initiatives important parts of a broader movement to open up scientific arenas and move towards a global research area. In that respect, the European Research Area should open up to issues and researchers from the South, especially Africa. In Europe's interest as well! I think much more can be done here. We constantly try to remind our European colleagues that this question should stay on the table when we speak of the European Research Area.

*[Knowledge policies]*

*Ladies and gentlemen,*

Besides an adequate knowledge base and functional knowledge linkages, innovation depends on political choices: who owns the knowledge? Who has access to it and on what terms? What technological applications are allowed? And who benefits or suffers from them? Nonexistent or inadequate policies or favouritism may hinder public and private valorisation of knowledge. Indigenous peoples in Africa, for example, have a wealth of knowledge of local biodiversity, often with significant social and economic potential. But these communities can valorise little of their knowledge, because they are not empowered to claim and protect it properly. I cannot emphasise this issue enough. Consequently, they are unable to benefit from application of their knowledge to foods and medicines, for instance. Another example is the lack of proper bio safety regulations in the least developed countries. This seriously hampers responsible application of modern biotechnologies.

Generally speaking, global advancement in science, technology and innovation tends to move ahead of the necessary local checks and balances: public awareness

and information, proper assessment of implications, protection of local knowledge, preservation of a rich public knowledge domain, broad debates on ethical issues and ecological risks, and rules, regulations and arrangements to manage new techniques. We need to adapt our policies to a wide array of societal interests. Inclusive decision-making on intellectual property, ethical and bio safety matters is essential, as is transposing the resulting consensus into national norms and regulations.

For instance, Taiwan's attempts to use the TRIPS-treaty to produce essential generic medicines is a strong example of making good use of existing property rights structures.

### *[Conclusion]*

Ladies and gentlemen,

Examples like these show us: knowledge is not about ivory towers, but about changing reality. And I can assure you that this in itself is a learning process for us all. We simply do not have any magic formula to 'make innovation systems work for the poor'.

Still, I would like to work with all of you to get a little closer to our goal. First of all by aligning the research agendas, by opening up our knowledge networks. I think that predictability should play a larger role in this respect. In that way, we can move to genuine *partnership*, putting *access* to knowledge first.

On my part, I promise to take concrete measures.

- First, in the future, programmes like the NFP/NPT programme in which my Ministry invests substantially, will be more targeted towards knowledge and skills needed for innovation and development and linked to national policy priorities.

- Second, in order to improve the knowledge base, I will plea to my colleagues that the European Research Area should open up to issues and researchers from the South, especially Africa. There is a world to win here;
- Third, I will do all I can to stimulate inclusive decision-making with regard to intellectual property, not exclusively or necessarily by the existing formal IP system. I will bring this up bilaterally and multilaterally. Arguing for agreements that leave room for least developed countries to build their own innovation systems. And I hope Dutch Universities and Research Institutes will urge for an institutional IP policy that takes into account the importance of access to knowledge and freedom to operate for development purposes.

Ladies and gentlemen,

Concluding, we have come a long way from Ganuza dilemmas to our current research policy and programmes. We no longer focus only on research, but more broadly, on knowledge and innovation. This is easily said, but in reality it has been a long and -let's be honest- difficult process. We are now ready for a new era.

In this respect, I would specifically like to mention the role of the RAWOO, as this conference is also a farewell and a tribute to the work of this Council. The role of the RAWOO in shaping research policy has been very important. RAWOO-thinking has also had a significant impact internationally, in the wider research for development arena. I therefore take this opportunity to thank all who have served RAWOO for their contributions. And I like to emphasize once more that disbandment of RAWOO should not be considered as a denial of the importance of scientific and Southern policy advice. It is rather part of the adaptation of our advisory function to a complex world, in which knowledge needs to be accessed from multiple sources, on various themes and levels. I am taking full responsibility here for a decision taken earlier, by my predecessor. In this context, standing councils have become less effective. What we need instead are more flexible forms of knowledge exchange, with a range of diverse networks. We are establishing that through new arrangements in which our Ministry is involved like the IS-Academy,

knowledge networks with our Embassies on specific themes like migration and Islam, as well as through departmental knowledge management strategies.

My sense is that we are on the right track in reshaping our internal knowledge infrastructure, although I realise that we are not yet there. But then, from a learning perspective. We will never be there and always be 'on the move'. And we should make sure that we are moving in directions that will make a difference to the poor of this world.

Thank you.